

JANUARY 2022

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Learn about ways to lessen the impact
of home-country bias in your portfolio

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In Perspective

THE INTERNATIONAL INVESTING ISSUE



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VOLUME 22 | NO. 1

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A deep look into ETFs, from the basics to the latest in implementation & innovation

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DEPARTMENTS

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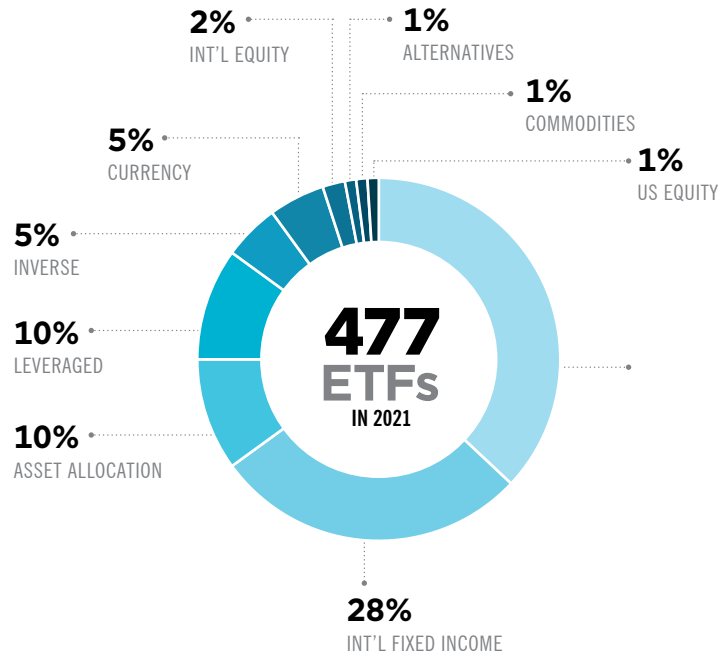
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ETF Launches

Launch Allocation



ETF Launch Activity

U.S. EQUITIES

Alpha Intelligent Large Cap Growth
Alpha Intelligent Large Cap Value B.A.D.
BlackRock Future U.S. Themes
BNY Mellon Sustainable US Equity Cultivar
Donoghue Forlines Yield Enhanced Real Asset
FT Cboe Vest US Eq Enhance/Moderate Buffer - Dec
Genuine Investors
Goldman Sachs Paris-Alligned Climate US LrgCap
Guru Favorite Stocks
InfraCap Equity Income
Motley Fool Capital Efficiency 100
Motley Fool Next
Motley Fool Mid-Cap Growth
Nationwide Dow Jones Risk Managed Income
Nationwide Russell 2000 Risk Managed Income
Nationwide S&P 500 Risk Managed Income
Roundhill MEME
Sterling Capital Diverse Multi-Manager Active
UBC Algorithmic Fundamentals

Valkyrie Balance Sheet Opportunities
V-Shares US Leadership Diversity

U.S. FIXED INCOME

IQ MacKay California Municipal Intermediate
John Hancock Preferred Income

INTERNATIONAL EQUITY

ARK Transparency
BNY Mellon Concentrated International
BNY Mellon Sustainable Global Emerging Markets
BNY Mellon Sustainable International Equity
Defiance Digital Revolution
Direxion mRNA
ETFB Green SRI REITs
FPA Global Equity
Global X MSCI Vietnam
Grizzle Growth
Harbor Disruptive Innovation
JPMorgan Climate Change Solutions
Motley Fool Global Opportunities
Rayliant Quantamental Emerging Market Equity

Rayliant Quantitative Developed Market Equity
The Generation Z
VanEck Future of Food
VegTech Plant-based Innovation & Climate
WisdomTree Artificial Intelligence & Innovation

INT'L FIXED INCOME

Federated Hermes Short Duration Corporate
Federated Hermes Short Duration High Yield
Kingsbarn Tactical Bond
PGIM Total Return Bond

ASSET ALLOCATION

Amplify BlackSwan Tech & Treasury
AXS Astoria Inflation Sensitive
Strategy Shares Nasdaq 5HANDL
WealthTrust DBS Long Term Growth
WisdomTree Efficient Gold Plus Gold Miners

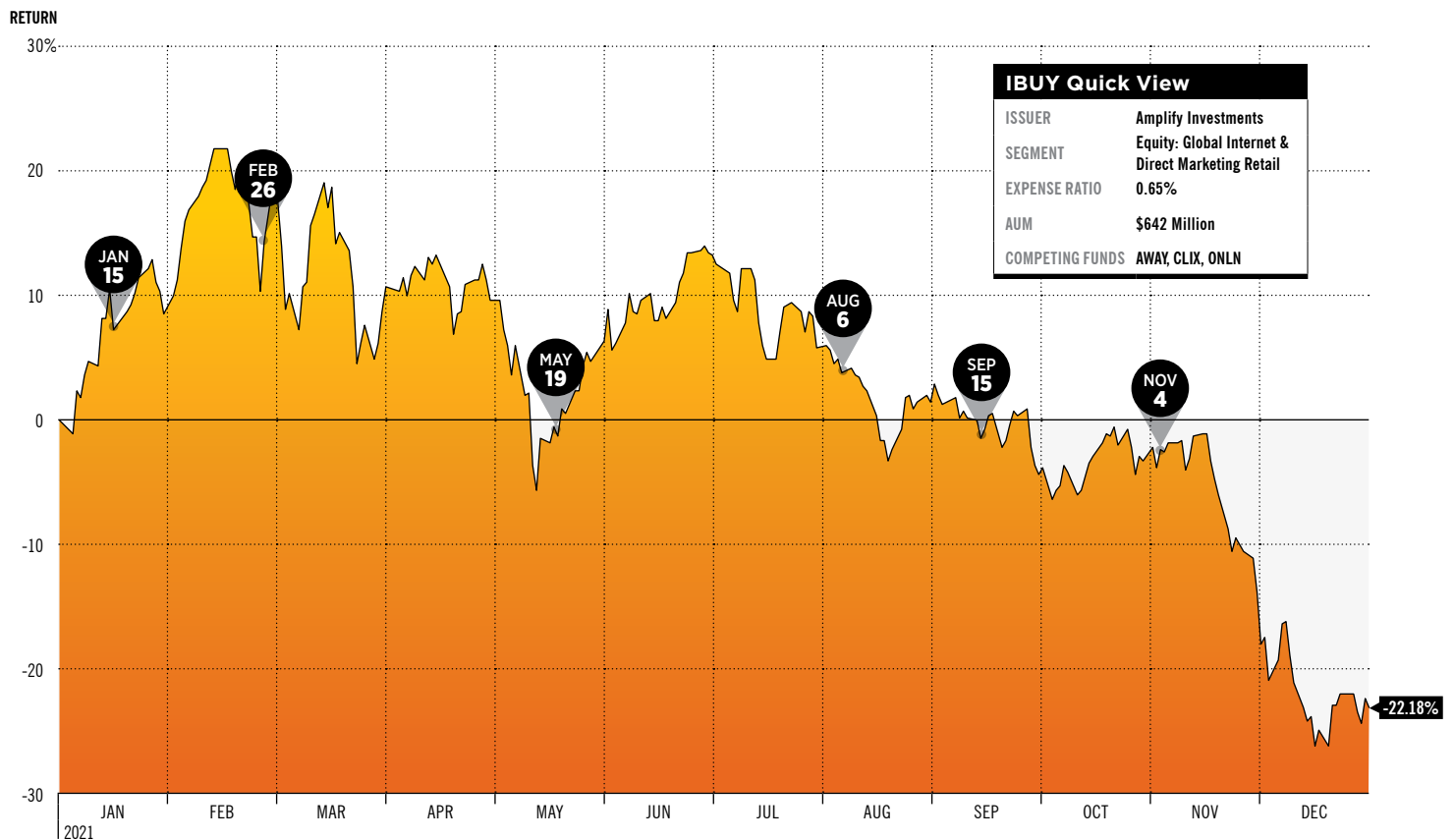
LEVERAGED

Direxion Daily Metal Miners Bull 2X
Direxion Daily Software Bull 2X

Source: ETF.com. Data and information as of 12/31/2021.
The above sidebar covers launches for the month of December 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 \$642 million [Amplify Online Retail ETF \(IBUY\)](#), which had a rough year in 2021. All the companies mentioned below are holdings in IBUY.



JAN 15 A lawsuit accuses Amazon and major print publishers of conspiring to manipulate e-book prices. The same firm sued the companies a decade before regarding the same issue and won.

FEB 26 Shares of Etsy jump nearly 12% on strong fourth-quarter earnings and revenue results, surpassing consensus expectations.

MAY 19 Newegg goes public in a rather complicated reverse merger with a SPAC and changes its name to Newegg Commerce. The new company adopts the ticker NEGG.

AUG 6 Groupon stock falls into a sharp and prolonged slump sparked by disappointing quarterly revenue results and a consumer protection investigation in the United Kingdom.

SEP 15 Shutterstock shares get a boost after it rolls out a national TV advertising campaign, 100% Shutterstock, created entirely from the platform's content.

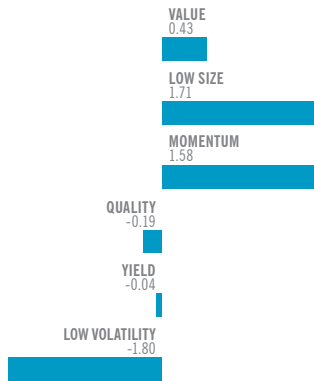
NOV 4 Expedia Group reports third-quarter net income and adjusted EBITDA on par with prepandemic results, beating estimates and sending the stock on a sharp upward trajectory.

Source: Bloomberg; data for 12/31/2020-12/31/2021

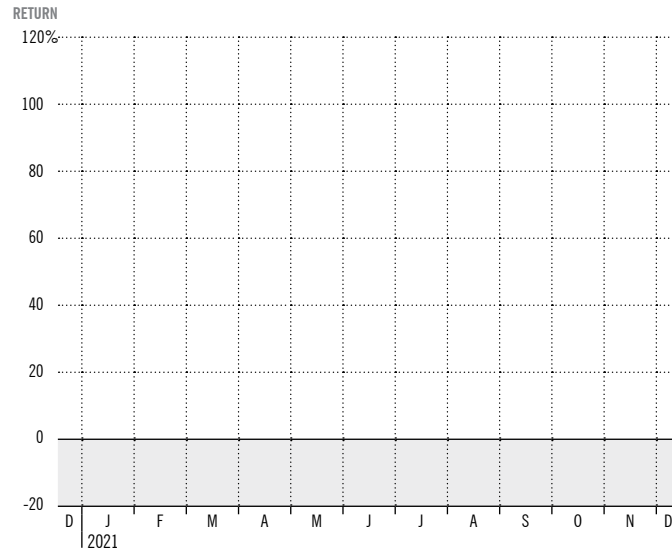
The ETF.com Comparison Tool allows investors to make one-to-one comparisons on a variety of features and metrics between any two ETFs

ETF Comparison Tool

MSCI **PXI** Factors

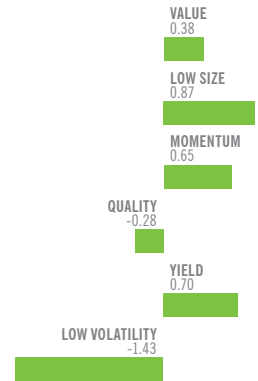


Performance



Source: Bloomberg, 12/18/20-12/17/21

MSCI **FXN** Factors



Sources: ETF.com and Bloomberg, Data and information as of 12/18/2021.

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.

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

This month, we highlight [Cloudflare Inc Class A \(NET\)](#), [Dollar General Corporation \(DG\)](#) and [Ford Motor Company \(F\)](#).

Source: ETF.com. Data and information as of 12/18/2021.

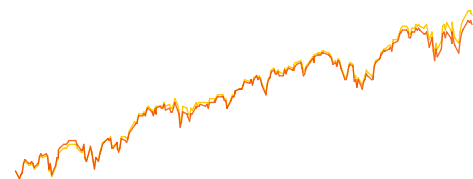
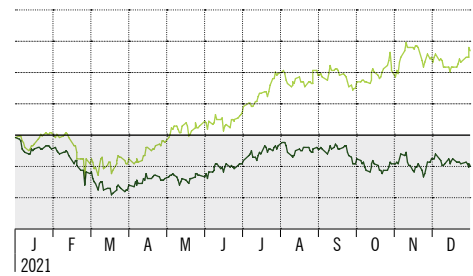
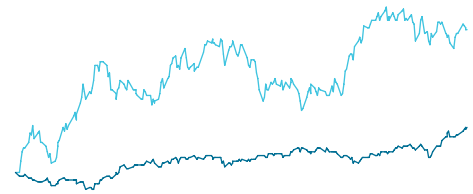
Data At A Glance

Monthly Flows

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

Interesting Charts Of Past 12 Months

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



Sources: FactSet, Bloomberg. Data as of 12/31/2021

Countries

December was a strong month for country ETFs, with only a few exhibiting negative performance. The [iShares MSCI Mexico ETF \(EWW\)](#) led the way, with a return of 13.26% for the month, as Mexico's stock market saw its best year in terms of performance since 2009. It was followed by the [iShares MSCI Ireland ETF \(EIRL\)](#) and the [Global X MSCI Argentina ETF \(ARGT\)](#), up 8.97% and 8.38%, respectively. At the other end of the spectrum, the [iShares MSCI Chile ETF \(ECH\)](#) was down more than any other country ETF, with a return of -5.73%, largely due to the election of leftist Gabriel Boric as president. That was followed by the

[iShares China Large-Cap ETF \(FXI\)](#), down 3.11% and the [Global X MSCI Nigeria ETF \(NGE\)](#), which dropped by 1.74%. Meanwhile, flows were extremely lopsided, with the [SPDR S&P 500 ETF Trust \(SPY\)](#) pulling in a stunning \$23.6 billion in assets, the [iShares MSCI Brazil ETF \(EWZ\)](#) gaining \$447.6 million and FXI adding just \$145.9 million. In terms of outflows, the [iShares MSCI Japan ETF \(EWJ\)](#) lost \$478.2 million, the [iShares MSCI South Korea ETF \(EWY\)](#) saw outflows of \$192.1 million and the [VanEck Russia ETF \(RSX\)](#) decreased by \$72.6 million.



TOP INFLOWS

TICKER	FUND	NET FLOWS (\$M)	AUM (\$M)
SPY	SPDR S&P 500 ETF Trust	23,558.0	455,030.9
EWZ	iShares MSCI Brazil ETF	447.6	4,693.6
FXI	iShares China Large-Cap ETF	145.9	4,779.6
EWW	iShares MSCI Mexico ETF	119.2	931.2
EWU	iShares MSCI United Kingdom ETF	84.6	2,966.4

TOP OUTFLOWS

TICKER	FUND	NET FLOWS (\$M)	AUM (\$M)
EWJ	iShares MSCI Japan ETF	-478.2	11,887.8
EWY	iShares MSCI South Korea ETF	-192.1	4,586.8
RSX	VanEck Russia ETF	-72.6	1,354.6
EWA	iShares MSCI Australia ETF	-69.5	1,377.1
EWG	iShares MSCI Germany ETF	-59.1	2,496.2

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

Cryptocurrency Corner

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

(Data as of 12/31/2021)

Data Provided By
COINMETRICS

By James Butterfill, CoinShares

By Dan Mika

By Heather Bell

Cryptos See Largest Weekly Outflow

Digital asset investment products saw outflows totaling \$142 million for the week ended Dec. 17, the first outflow following a 17-week run of inflows, and the largest weekly outflow on record. The largest previous outflow on record was in early June 2021, where weekly outflows totaled \$97 million.

While this outflow appears alarming, there are several points to consider. First, it came at a time during which there had been considerable outflows across all risk assets following the recent U.S. Federal Reserve statement on tapering. Second, those outflows represent only 0.23% of total AUM, and from a historical perspective, they're small relative to the outflows in early 2018, when weekly outflows represented up to 1.6% of AUM. Finally, the outflows came at a time of record yearly inflows peaking at \$9.5 billion, relative to inflows totaling \$6.7 billion in 2020.

Bitcoin saw outflows totaling \$89 million, well below the outflows seen in June, when they were as much as \$150 million.

Ethereum saw record outflows totaling \$64 million, and has, in the past, countered Bitcoin's outflows. Other altcoins softened the blow, with Solana, Polkadot and multi-asset investment products seeing inflows totaling \$6.7 million, \$2.5 million and \$1.5 million, respectively.

2 More Spot Bitcoin ETFs Rejected

The Securities and Exchange Commission shot down two more attempts by ETF issuers to establish the first spot bitcoin exchange-traded product in the U.S. on Dec. 22, adding to the ongoing list of denials.

Regulators issued denials for the Krypton Bitcoin ETF Trust, which was due for a final decision on Christmas Eve, and the Valkyrie Bitcoin Fund, which was due for a decision on Jan. 7.

Valkyrie launched the second bitcoin futures-based ETF in the U.S. with its Valkyrie Bitcoin Strategy ETF (BTF), and has the Valkyrie Balance Sheet Opportunities ETF (VBB), which tracks companies that have bitcoin and other cryptocurrencies on their balance sheets.

The SEC said both funds' arguments that Bitcoin prices are inherently resistant to price manipulation due to the asset being traded on multiple exchanges at once were insufficient, and reiterated its stance that a surveillance-sharing agreement be put in place before approval of a fund.

The SEC used that line of reasoning to deny both VanEck's and WisdomTree's attempts to launch a spot product earlier in 2021.

The Wise Origin Bitcoin Trust and the First Trust SkyBridge Bitcoin ETF Trust are the next proposed funds in line, with the SEC required to issue decisions by Jan. 22.

1st NFT-Focused ETF Debuts

In early December, Defiance ETFs launched the first fund to specifically target the nonfungible token (NFT) space. The Defiance Digital Revolution ETF (NFTZ) tracks the BITA NFT and Blockchain Select Index and trades on the NYSE Arca. It comes with an expense ratio of 0.65%.

NFTs are basically unique digital assets for which the ownership and authenticity can be verified through the blockchain. Defiance's website notes that in the first quarter of 2021, more than \$2 billion was spent on NFTs.

NFTZ doesn't invest in cryptocurrencies or derivatives related to them, though cryptocurrencies are generally used in transactions involving NFTs. Companies included must generate at least half of their revenues from business activities related to the blockchain or cryptocurrencies or offer exposure to the NFT space. The covered categories include crypto asset management and trading companies; crypto banking, payments and services companies; crypto mining companies; crypto mining hardware companies; and blockchain technology companies, according to NFTZ's prospectus.

On its day of launch, the fund's top holdings included Silvergate Capital (6.74%), Playboy Group (5.27%) and Cloudflare (5.17%).

DETERMINING EX-US INTERNATIONAL EXPOSURE CAN BE HELPFUL IN TERMS OF A PORTFOLIO'S PERFORMANCE

ALLOCATIONS



By Debbie Carlson

Contributor to ETF.com
& ETF Report



Although the U.S. large cap equity market continues its dominance over the rest of the world, financial advisors are starting to add ex-U.S. allocations to portfolios.

In its 2022 outlook, UBS summed up what a number of financial advisors are thinking: U.S. outperformance over global peers is unlikely to continue into the next decade because of valuations, making now the time to diversify.

“We believe a globally diversified equity allocation will be a key contributor to both portfolio growth and income in the years ahead,” the bank stated.

UBS isn't alone. Morgan Stanley advocates overweighting Japanese and European equities. Japan's stocks, the bank suggests, are “on a journey of return on equity convergence with the rest of the world,” while in Europe, Morgan Stanley forecasts double-digit total return based on potentially “higher earnings per share, currency tailwinds ... low investor positioning and limited valuation downside.”

ADVISORS ADDING EX-US ALLOCATIONS

Several financial advisors say they've started adding international equity allocations to

Source: FactSet, data as of 12/8/2021

tactical positions for the first time in a few years for the above reasons, and some are including ex-U.S. fixed income holdings to boost yield.

Portfolio weightings depend on the client's time horizon and risk tolerance, they say. It's not always easy to convince clients though, even when advisors explain the U.S. represents only 15% of the global economy. Part of it is a reluctance to sell winners—in this case, U.S. large cap equities—and another part of it is unfamiliarity with foreign markets.

Robert Gilliland, managing director and senior wealth advisor at Concenture Wealth Management, says investors might think international investing means investing in obscure companies: “We remind them it's companies like Nestle and Unilever, products that they're buying every day.”

Curtis Congdon, president, XML Financial Group, concurs. His clients tolerate 5-10% in international holdings, but expanding beyond that level can be difficult.

Gilliland generally prefers putting at least 8% of the equity portfolio in international holdings, but if clients are willing, he'll target weights closer to 15-20% in a portfolio that's

60-65% stocks. The easiest way to start adding ex-U.S. holdings is systematically, such as through dollar cost averaging, he adds.

BIG & LIQUID

To add core international exposure, many of the advisors say they use two of the biggest ETFs by assets under management and best-known foreign stock index funds: the [iShares Core MSCI EAFE ETF \(IEFA\)](#), and the [iShares Core MSCI Emerging Markets ETF \(IEMG\)](#).

David McGranahan, financial advisor at Relative Value Partners, says his firm uses IEFA and IEMG in their static allocation strategies. This strategy earmarks 20% to international as part of the overall equity position. For context, their broadest allocation across their balanced accounts is 60% equities, 40% bonds.

These funds are broadly diversified and low cost. “Our allocations are modest enough that it's really going to offer exposure to the markets, exposure to their GDP growth, their productivity growth and currencies,” he noted.

Gilliland also uses IEFA and IEMG for index-based non-U.S. exposure, but likes some specialized exposure. For that, he'll use the

[American Century Quality Diversified International ETF \(QINT\)](#) and the [First Trust S&P International Dividend Aristocrats ETF \(FID\)](#).

Dividend ETFs can offer a hedge against inflation, he notes, although many people don't equate international exposure and dividends: “I think you're going to find that dividends will become increasingly important, especially to investors here in the U.S. You have to have that international exposure, but you don't necessarily have to give up that income.”

Relative Value Partners also runs a tactical allocation strategy where exposure can rise or fall, and that strategy now has international positions versus none a few years ago, says Greg Neer, partner and portfolio manager at the firm. The tactical allocation now holds 12% developed non-U.S. and 6% emerging markets, using the iShares ETFs.

Daniel Milan, managing partner of Cornerstone Financial Services, says five of his firm's model portfolios always keep some sort of international holdings, although in the last few years, the models were underweight international versus benchmarks.

For his aggressive-growth models that have 85% equities, 5% alternatives and 10%

‘You want companies that are going to have the strongest balance sheets, the most stability in uncertain times from a business or economic standpoint’

fixed income, 18% of the equity sleeve is earmarked ex-U.S., with 10% of that figure focused on Europe and 8% slated to other diversified large foreign markets.

Milan settled on that mix based on vaccine rates, which were higher in Europe and Great Britain than other parts of the non-U.S. globe. To express his view, Milan uses the [First Trust Europe AlphaDex Fund \(FEP\)](#) and the [iShares MSCI Intl Quality Factor ETF \(IQLT\)](#).

He wants to be overweight quality in the current economic environment. “You want companies that are going to have the strongest balance sheets, the most stability in uncertain times from a business standpoint or economic standpoint,” he pointed out.

Currency exposure is another facet of international investing, Congdon says. If he expects the U.S. dollar to weaken against a basket of foreign currencies, he may use a fund that has no currency hedge, such as the [iShares MSCI EAGE ETF \(EFA\)](#). If he doesn’t want currency to impact performance, he might consider the [iShares Currency Hedged MSCI EAFE ETF \(HEFA\)](#).

EM STILL IFFY FOR EQUITIES

Not all advisors are ready to jump into emerging market equities. Milan says the dollar is currently too strong for him to allocate to the sector in equities.

When weighing between U.S., international developed and emerging markets, Congdon considers several factors, including earnings growth, valuations, economic growth within the home country and yield. Specific to emerging markets, he studies the policy climate, meaning how favorable policy is to innovation, property rights and the ease of doing business.

Relative Value Partners uses the [SPDR S&P Emerging Markets Dividend ETF \(EDIV\)](#) for emerging markets, Neer says, noting

the ETF screens firms for dividend growth, stability and profitability. Companies with those types of attributes “make us feel more comfortable in the [firm’s] underlying accounting,” he explains.

The ETF gives exposure to traditional commodity-based emerging market firms, rather than the “growthier” areas of emerging markets, such as in tech. The dividend-paying firms “also tend to have a value bias, which is how we like to position ourselves,” he adds.

FIXED INCOME IDEAS

A few advisors are using emerging market debt to boost yield and for diversification.

Gilliland uses the [Invesco Emerging Markets Sovereign Debt ETF \(PCY\)](#), a U.S.-dollar-based index, and he’s also evaluating the [First Trust TCW Emerging Markets Debt ETF \(EFIX\)](#). He admits the latter ETF is riskier, as it’s an actively managed fund investing in lower quality bonds.

The advisors who use emerging market debt vehicles keep them to 5-7% of the total fixed income sleeve, depending on a client’s risk tolerance.

Congdon and Milan will sometime use the [First Trust Emerging Markets Local Currency Bond ETF \(FEMB\)](#), a local currency ETF, and Congdon also uses the [SPDR Bloomberg International Treasury Bond ETF \(BWX\)](#), which he says holds investment-grade sovereign debt.

Congdon explains that, for advisors venturing into this sector, keep in mind it’s riskier than domestic markets. He views the space as a hybrid between stocks and bonds.

“The return profile isn’t going to exactly meet either one of those two categories, but could fit between them and have a place within the portfolio,” he noted. ●

EUROPE & ITS STANDOUT COUNTRIES

Investors should not
overlook Europe's
potential



By Sumit Roy

Editor & ETF Analyst
for ETF.com and ETF Report

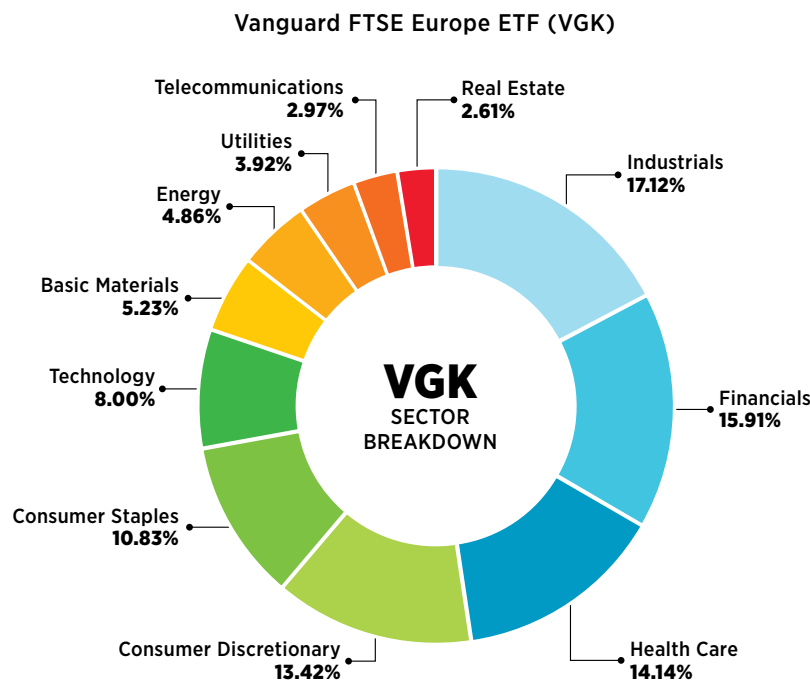
U.S. investors don't pay a lot of attention to Europe. The continent pops up on investors' radars every few years—usually when something bad is happening, like the eurozone sovereign debt crisis of the early 2010s or the Brexit saga of a few years ago. Other than those examples, there's not much talk about Europe by investors.

There are reasons for that. The most obvious is home country bias; people strongly prefer to invest in stocks of companies in their own country. But there's also the narrative that Europe is a slow-growing region with a lack of innovative firms.

To some extent, this narrative is true. Between 2010 and 2020, GDP growth for the European Union averaged 0.9% per year—nearly half the growth rate of the U.S. economy in the same period.

There's also been a distinct lack of big tech companies in Europe, a category that's powered innovation in the U.S. and fueled the country's stock market to incredible gains.





Source: Vanguard, data as of 11/30/2021

In fact, of the 20 largest publicly traded companies in the world, only one is European—LVMH, a French luxury goods conglomerate. And if you look at the [Vanguard FTSE Europe ETF \(VGK\)](#), the largest Europe-focused ETF in the U.S., with \$21.6 billion in assets under management, less than 10% of its portfolio is in technology stocks.

It's no surprise then that U.S. investors aren't flocking to invest in Europe, with the 71 Europe-focused equity ETFs listed in the U.S. having combined assets of only \$70.2 billion—not a lot in the context of a \$7.1 trillion U.S. ETF market.

STARTUP HOT SPOT

But even if Europe's staid reputation has been warranted up until now, things are rapidly changing. A combination of cloud computing, abundant capital and the work-from-anywhere phenomenon has sparked a boom in funding for European startups.

Venture capitalists are on track to allocate more than \$100 billion to European firms this year, according to Crunchbase, nearly a fifth of all VC funding globally.

Some of these startups will likely grow to become powerful tech companies, eventu-

ally landing in the public markets and fueling returns for anyone invested in European ETFs.

At least that's the bull case. Because Europe hasn't produced many tech giants in recent years, it takes some imagination to believe that could change in the coming years. But it's absolutely a possibility, and we've actually seen it before. Look no further than China to see a stagnant economy turbocharged by a robust tech industry.

SEMICONDUCTOR POWERHOUSE

It's also important to note that Europe is no monolith. There's a big dispersion in the outlook for certain European countries versus others.

The Netherlands, for instance, has become something of a semiconductor powerhouse thanks to Dutch company ASML, a \$300 billion giant, and one of the most important technology companies in the world. ASML's lithography machines are essential to the manufacturing of the most-cutting-edge chips used in everything from iPhones to computers running artificial intelligence algorithms.

Adyen, a Dutch payments company, is a big tech winner from the Netherlands. Today

the company processes payments for eBay, a role the firm stole from U.S. payments juggernaut PayPal.

Unsurprisingly, the [iShares MSCI Netherlands ETF \(EWN\)](#) is the second-best-performing U.S.-listed European ETF over the past five years, with an 18.1% compound annual growth rate. EWN's 39% weighting in tech—22% in ASML alone—has certainly juiced its returns.

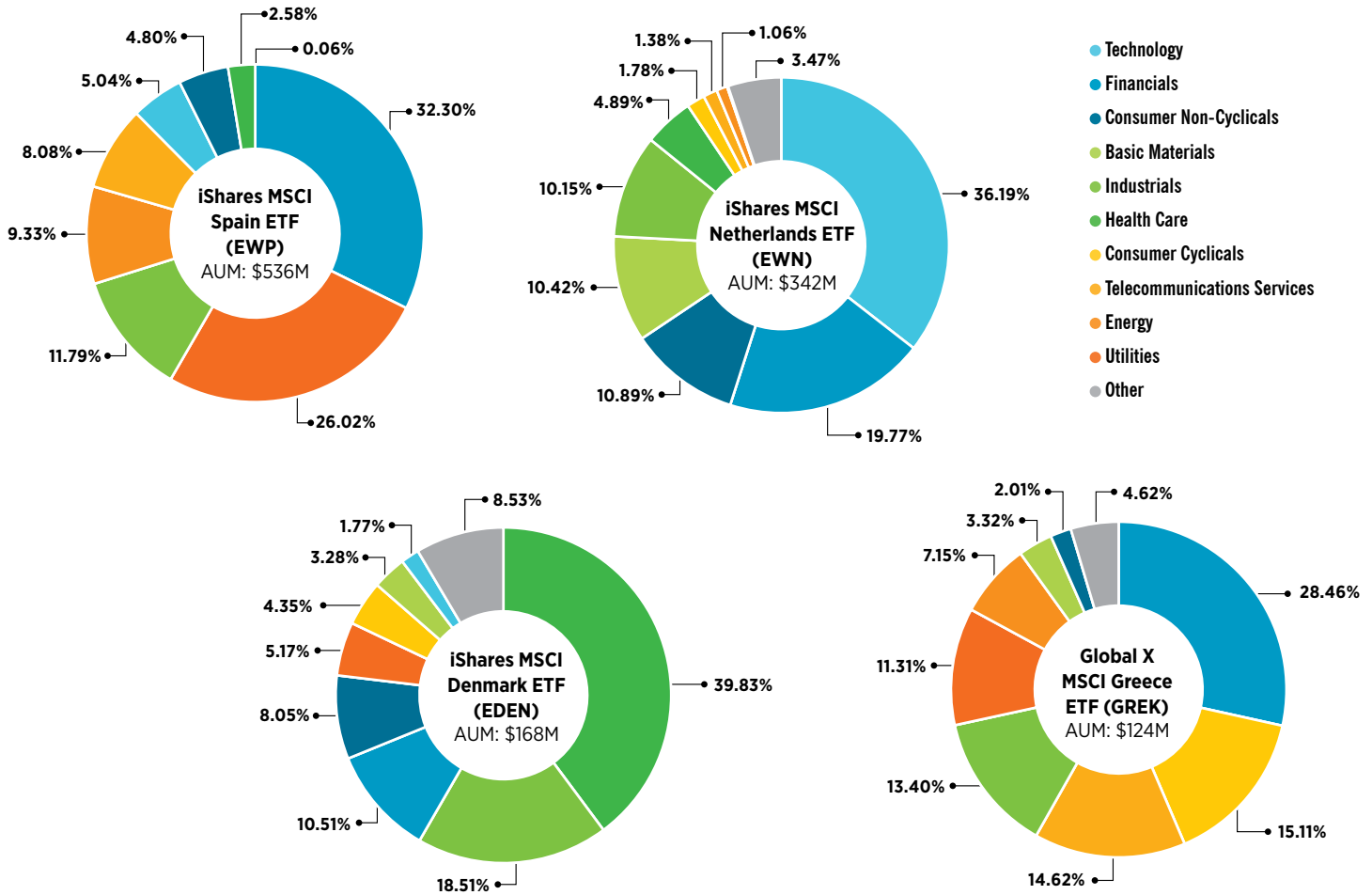
The only Europe-focused ETF to beat it over the past five years is the [iShares MSCI Denmark ETF \(EDEN\)](#), with an 18.9% CAGR in the period.

The Denmark ETF took a completely different path to outperformance, with only 2% of its portfolio allocated to technology. Instead, the Denmark portfolio is heavy on health care stocks, which make up 39% of the fund. Danish pharma giant Novo Nordisk alone makes up a quarter of the ETF, and has more than tripled over the past five years.

FINANCIALS WEIGH

It's some of the smaller, industrious European countries that have seen the greatest outperformance in their stocks over the past

Notable Single-Country European ETFs



Source: FactSet, data as of 12/15/2021

several years. As in the case of the Netherlands and Denmark, these portfolios can tilt quite heavily toward a single stock or a handful of stocks.

When those stocks are working, that can be a boon. But when they're not, it can be a real drag. For instance, the big banks that make up nearly a third of the [iShares MSCI Spain ETF \(EWP\)](#) are a large part of why the fund has lagged so much over the past five years, delivering a CAGR of only 3.6%.

It's the same for the [Global X MSCI Greece ETF \(GREK\)](#). Financials have weighed heavily on the fund, leading to only a 3.8% CAGR over the past five years.

FACTORS TO CONSIDER

What's clear is that sector allocations are an important determinant in ETF performance, and those allocations can vary widely from country to country. Tech has outperformed significantly in recent years. That may not always be the case, but what *will* likely be the case is that the most innovative companies will tend to come from technology, biotech and adjacent industries.

Especially in today's fast-changing, digital world, companies need the best technology if they want to compete.

Tech stocks have tended to be the most innovative, but there's also the argument espoused by some that old-school industries

and value stocks will come back in vogue. If that's your thesis, then perhaps some of the financials-heavy or industrials-heavy European markets are a better option for you.

In any case, looking under the ETF hood is a must when wading into the single-country ETF pool.

In addition to analyzing sector allocations and individual holdings, zoom out and take a look at the macro picture as well. GDP growth rates, demographics and startup funding all paint a picture of the growth potential of a given country.

Europe is not a monolith, and it could be time for U.S. investors to start paying more attention to stocks across the pond. ●

The government crackdown on certain types of companies in China has made many investors nervous



By Gerrard Cowen
Contributor to ETF.com
& ETF Report

CHINA IN PERSPECTIVE

2021 was a tough year for China-focused equity ETFs amid regulatory crackdowns, strained U.S. relations and concerns regarding human rights and foreign policy. Still, the country remains a massive market with a range of growth prospects. So how can investors navigate this complex environment?

As of Nov. 30, 2021, most of the 10 biggest U.S.-listed China equity funds were down anywhere from almost 4% to more than 40%, with even the nearly \$5 billion [iShares China Large-Cap ETF \(FXI\)](#) down 13%. However, there were some relative bright spots, such as the [VanEck ChinaAMC SME-ChiNext ETF \(CNXT\)](#), up more than 11% year-to-date.

Meanwhile, the [iShares MSCI China A ETF \(CNYA\)](#) was up more than 2%, and the [KraneShares Boser MSCI China A Share ETF \(KBA\)](#) was up almost 2%. Funds focused on China A-shares are less dependent on the consumer discretionary sector, which has been under pressure, says Todd Rosenbluth, head of ETF and mutual fund research at CFRA.

Many investment analysts are growing warier of the giant market. Rosenbluth sees “the risk being elevated given the increased volatility.” Many investors are already getting hefty exposure to China via broader emerging market or regionally focused ETFs, he says, which may be enough for now.

“We wouldn’t be overweighting,” he noted. “We’d certainly look to find other areas in which to invest in emerging markets.” Rosenbluth highlights India and Taiwan, both of which are “better positioned, with fewer regulatory risks and thus more upside potential, in our opinion.”

COMPLICATED SCENARIO

But it’s a complex picture, according to Ben Johnson, director of global ETF research for Morningstar. The largest China-focused equity fund by AUM is the [KraneShares CSI China Internet ETF \(KWEB\)](#), with assets of about \$8.9 billion and negative returns year-



KEY CHINA-RELATED ETFs						
TICKER	FUND	EXPENSE RATIO	AUM	INCEPTION	SEGMENT	1-YR RETURN
FXI	iShares China Large-Cap	0.74%	\$4.91B	10/5/2004	Equity: China - Large Cap	-20.05%
GXC	SPDR S&P China	0.59%	\$1.48B	3/19/2007	Equity: China - Total Market	-19.68%
KWEB	KraneShares CSI China Internet	0.76%	\$6.95B	7/31/2013	Equity: China Internet	-48.88
ASHR	Xtrackers Harvest CSI 300 China A-Shares	0.65%	\$2.78B	11/6/2013	Equity: China - Total Market	-1.56%
KBA	KraneShares Boser MSCI China A Share	0.60%	\$740.63M	3/5/2014	Equity: China - Total Market	3.31%
EMQQ	Emerging Markets Internet & Ecommerce	0.86%	\$1.02B	11/13/2014	Equity: Emerging Markets Internet	-32.53%
CNYA	iShares MSCI China A	0.60%	\$933.22M	6/13/2016	Equity: China - Total Market	3.53%
FRDM	Freedom 100 Emerging Market	0.49%	\$108.3M	5/23/2019	Equity: Emerging Markets - Total Market	6.12%
CNXT	VanEck ChiNext	0.65%	\$41.92M	7/23/2021	Equity: China - Large Cap	9.00%
FMQQ	FMQQ The Next Frontier Internet & Ecommerce	0.86%	\$8.4M	9/27/2021	Equity: Global Internet	-

Source: FactSet, data as of 12/31/2021

to-date of just over 42%. However, KWEB attracted large inflows in 2021. While “at face value, that seems somewhat counterintuitive,” Johnson says, it suggests U.S. investors still see potential in the Chinese internet domain.

KraneShares specializes in the Chinese market. Its Chief Investment Officer, Brendan Ahern, thinks it’s a mistake to view China “as this singular entity.” For example, regulatory actions are being pursued by different regulators moving at different speeds, he says. That can feel somewhat ad hoc to outsiders, he notes, sometimes pushing them to the sidelines because they don’t understand what’s happening. However, at least when it comes to the internet sector, Ahern feels “we might even be done with this regulatory cycle ... there are green shoots that indicate the worst is likely behind us.”

For example, Ahern pointed to a recent speech by Vice Premier Liu He in which the senior official highlighted the importance of the private economy, which he said accounts for 50% of tax revenue, 60% of GDP and 80% of urban employment. “We believe this was really messaging,” Ahern said.

State Street Global Advisors (SSGA) operates the [SPDR S&P China ETF \(GXC\)](#), a \$1.6 billion fund that’s down just over 17% year-to-date. Matt Bartolini, SSGA’s head of SPDR Americas Research, says Chinese stocks have faced a range of headwinds.

Additionally, the country’s growth expectations, while still above those of the U.S., are lower than in the previous years, he notes.

Still, exposure to China is hard to avoid, Bartolini suggests, and “definitely warrants consideration, even as part of a broader EM strategy.” The country’s GDP is about six times bigger than that of India, the next-largest EM economy. “Just because of the sheer size alone, I think it continues to warrant an allocation, in some cases a stand-alone allocation,” he said.

MULTIFACETED MARKET

Despite all the concerns, “investors are helped by the fact that it’s such a large market,” noted William Sokol, product manager for ETFs at VanEck, which operates funds like CNXT.

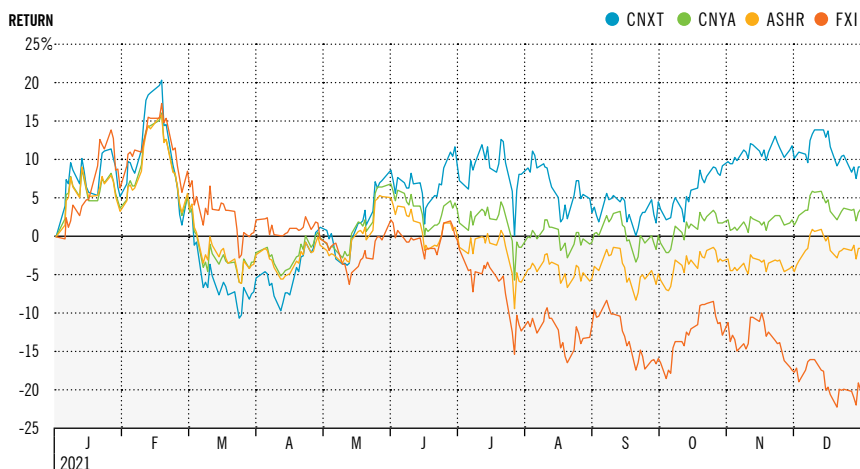
“You can be selective,” he said. “You can slice and dice the opportunity set.” For example, investors could focus on sectors according to the perceived regulatory risk, or look more to balance sheet fundamentals.

The [Emerging Markets Internet & Ecommerce ETF \(EMQQ\)](#)—a \$1.1 billion fund that’s down about 27% year-to-date—offers exposure to the growing internet and ecommerce sectors in emerging markets. The fund is naturally dominated by Chinese companies, which comprise about 60% of holdings by weighting.

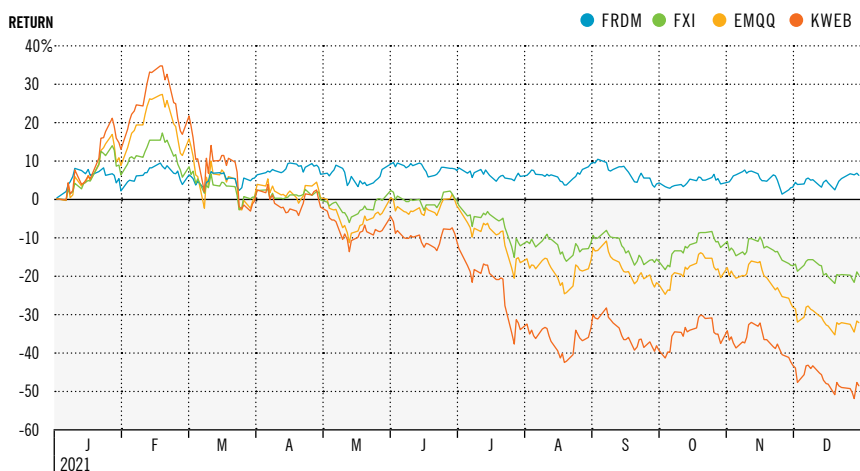
In September, the team behind EMQQ launched the [Next Frontier Internet & Ecom-](#)

The country’s growth expectations are lower than in previous years

FXI Vs. Core China ETFs



FXI Vs. Other Emerging Market ETFs



Source: Bloomberg,12/31/2020-12/31/2021

merce ETF (FMQQ), which focuses on similar themes but excludes China. However, EMQQ and FMQQ Founder Kevin Carter insists the new launch doesn't stem from concerns about China, but simply provides access to "a different sort of opportunity set," focused on markets at a much earlier stage of development.

Indeed, Carter thinks many of the fears about China are unfounded, noting other countries are also increasingly focused on regulating their internet sectors, for example.

"They understand capitalism, they've benefited from it more than anybody," Carter explained. "They're unlikely to move away from capitalism in spite of what the headlines might have you think."

EXCLUDING CHINA

Other funds look beyond the Chinese market and see potential financial benefits to that approach. Perth Tolle is founder of Life & Liberty Indexes, which built the index behind the **Freedom 100 Emerging Market ETF (FRDM)**, a fund that invests in companies with high scores for personal, political and economic freedom. That means China is excluded.

The fund was launched in May 2019, so had its first full year during COVID-19. "Our thesis that freer markets recover faster played out," explained Tolle. "The assets came in faster after that, but they really accelerated in 2021, after the Chinese government's actions against their tech,

education, and real estate sectors." The fund's assets have more than doubled in the second half of 2021, she says, sitting at about \$105 million today. It's seen returns of just under 3% this year.

"Investors can better capture growth in the stock markets of freer countries, due to rule of law and private property rights, including shareholder rights," she argued. "The freer EMs are where we'll find and capture the growth stories of the next decade."

Arne Noack is head of systematic investment solutions, Americas at DWS Group, which operates the **Xtrackers Harvest CSI 300 China A-Shares ETF (ASHR)**, a \$2.3 billion fund that's down almost 4% year-to-date. For those interested in longer-term investments, he posits that, "the China equity market is something to always consider."

While he recognizes the concerns regarding geopolitical and economic risks, Noack stresses the need for investors to attempt a careful balance: "Consider it with some caution, but don't dismiss it outright. In dismissing it outright, you're likely to forgo significant opportunities in the long run."

FINDING A BALANCE

In the grand scheme of things, China-focused ETFs are a fraction of the overall universe of U.S.-listed ETFs, says Morningstar's Johnson. ETFs belonging to Morningstar's China region category held a combined \$38 billion in assets as of the end of October, compared with just over \$7 trillion in U.S.-domiciled exchange-traded products.

Most investors likely gain their China exposure through a more diversified portfolio, such as an emerging market stock index ETF. The majority also continue to favor their home markets, whether they're based in the U.S. or any other country, Johnson says, adding that, in most cases, they'll likely be best served through an allocation to emerging markets at large: "For many investors, what's going on in Chinese stocks on any given day or week or month or year probably isn't keeping them up at night." ●



ETF DATA

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

- Data as of 12/31/2021
- 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 \$180 million and above
- Source: ETF.com

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
U.S. EQUITY: TOTAL MARKET						
Cambria Shareholder Yield	SYLD	0.59	347.5	48.30	28.82	17.26
Vident Core US Equity	VUSE	0.48	461.5	35.47	20.41	11.53
Invesco BuyBack Achievers	PKW	0.64	1,541.2	32.62	24.47	15.23
Schwab Fundamental US Broad Market	FNDB	0.25	417.7	31.55	22.87	14.77
iShares ESG MSCI USA Leaders	SUSL	0.10	4,324.0	31.53	-	-
Xtrackers MSCI USA ESG Leaders Equity	USSG	0.10	4,153.0	31.49	-	-
iShares MSCI KLD 400 Social	DSI	0.25	4,212.6	31.32	27.71	19.34
VictoryShares MSCI USA Value Momentum	ULVM	0.20	375.3	31.16	18.35	-
FCF US Quality	TTAC	0.59	204.2	30.70	24.91	17.98
iShares MSCI USA ESG Select	SUSA	0.25	4,829.0	30.45	29.04	19.96
IQ Candriam ESG US Equity	IQSU	0.09	515.3	29.74	-	-
Avantis US Equity	AVUS	0.15	1,863.1	28.74	-	-
SPDR Portfolio S&P 1500 Composite	SPTM	0.03	6,099.3	28.58	25.83	17.98
FlexShares STOXX US ESG Select	ESG	0.32	201.0	28.49	26.92	18.94
Vanguard US Quality Factor	VFQY	0.13	193.4	27.96	23.47	-
Global X Conscio US Companies	KRMA	0.43	675.6	27.71	24.98	18.19
FlexShares Morningstar US Market Factor Tilt	TILT	0.25	1,708.6	27.62	24.10	15.55
Global X Adaptive US Factor	AUSF	0.27	183.9	27.46	16.99	-
iShares ESG Advanced MSCI USA	USXF	0.10	584.0	27.14	-	-
Goldman Sachs MarketBeta US Equity	GSUS	0.07	471.0	27.12	-	-
JPMorgan BetaBuilders US Equity	BBUS	0.02	896.6	27.12	-	-
American Century STOXX US Quality Value	VALQ	0.29	209.1	27.05	16.75	-
iShares MSCI USA Quality Factor	QUAL	0.15	25,487.0	26.93	25.76	18.06
iShares ESG Aware MSCI USA	ESGU	0.15	25,768.8	26.89	26.99	18.88
Legg Mason Low Volatility High Dividend	LVHD	0.27	778.0	26.89	15.46	10.67
Invesco PureBeta MSCI USA	PBUS	0.04	2,620.5	26.78	26.65	-
SPDR MSCI USA StrategicFactors	QUS	0.15	1,071.4	26.73	23.57	17.20
FlexShares Quality Dividend	QDF	0.37	1,721.7	26.67	18.66	12.55
iShares Core Dividend Growth	DGRO	0.08	22,968.0	26.64	21.66	16.69
Vanguard ESG US Stock	ESGV	0.09	6,421.8	26.56	28.49	-
Dimensional US Core Equity Market	DFAU	0.12	1,667.1	26.56	-	-
iShares Dow Jones US	IYY	0.20	1,884.9	26.38	25.67	17.97
WisdomTree US Total Dividend	DTD	0.28	1,051.6	26.24	18.35	12.72

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
FlexShares Quality Dividend Defensive	QDEF	0.37	465.0	26.06	17.56	12.78
Schwab US Broad Market	SCHB	0.03	24,145.0	25.83	25.73	17.93
iShares Core S&P Total US Stock Market	ITOT	0.03	46,839.6	25.68	25.62	17.90
Vanguard Total Stock Market	VTI	0.03	299,802.7	25.67	25.73	17.96
iShares MSCI USA Equal Weighted	EUSA	0.09	514.9	25.59	23.55	15.47
iShares R USsell 3000	IWW	0.20	13,069.7	25.54	25.51	17.74
Vanguard R USsell 3000	VTHR	0.10	1,270.7	25.50	25.67	17.78
Motley Fool 100	TMFC	0.50	580.3	25.29	33.82	-
iShares MSCI USA Size Factor	SIZE	0.15	542.9	25.05	23.31	15.78
iShares MSCI USA Multifactor	LRGF	0.20	1,281.9	25.01	20.55	13.91
American Century STOXX US Quality Growth	QGRO	0.29	254.2	24.57	32.42	-
WisdomTree US Quality Dividend Growth	DGRW	0.28	7,096.3	24.45	22.44	17.13
VanEck Morningstar Wide Moat	MOAT	0.47	7,177.3	24.13	24.32	18.51
iShares Morningstar US Equity	ILCB	0.03	946.0	24.07	25.26	17.04
Vanguard Dividend Appreciation	VIG	0.06	69,741.4	23.76	22.79	17.25
Invesco Dividend Achievers	PFM	0.53	748.5	23.08	19.43	13.85
Virt US Real Asset Income	VRAI	0.55	189.5	22.62	-	-
LeaderShares AlphaFactor Tactical Foc US Sed	LSAT	0.99	248.5	22.37	-	-
Etho Climate Leadership US	ETHO	0.48	201.4	22.12	27.29	19.44
Fidelity NASDAQ Composite	ONEQ	0.21	4,908.7	22.11	34.38	24.88
iShares MSCI USA Min Vol Factor	USMV	0.15	30,524.0	20.84	17.69	14.46
SPDR SSGA US Sector Rotation	XLSR	0.70	196.4	20.47	-	-
Vanguard US Momentum Factor	VFMO	0.13	200.9	19.35	26.20	-
iShares MSCI USA Momentum Factor	MTUM	0.15	14,846.8	13.37	23.27	20.43
Innovator IBD 50	FFTY	0.80	237.6	11.92	18.48	13.76
Goldman Sachs Hedge Ind UStrategy VIP	GVIP	0.45	220.4	11.86	27.71	19.54
Invesco DWA Momentum	PDP	0.62	2,213.4	7.72	25.12	17.83
First Tr US US Equity Opportunities	FPX	0.57	1,862.2	3.69	25.97	18.41
Renaissance IPO	IPO	0.60	395.0	-10.31	35.82	23.25
Dimensional US Core Equity 2	DFAC	0.19	15,234.7	-	-	-
Dimensional US Equity	DFUS	0.11	6,262.3	-	-	-
U.S. EQUITY: TOTAL MARKET GROWTH						
iShares Core S&P US Growth	IUSG	0.04	14,169.1	31.26	31.51	23.44
iShare Morningstar Growth	ILCG	0.04	2,253.7	24.33	31.90	25.06
First Trust Multi Cap Growth AlphaDEX	FAD	0.63	262.9	21.17	27.45	19.49
American Century Focused Dynamic Growth	FDG	0.45	212.0	8.52	-	-
Janus Henderson Small/Mid Cap Growth	JSMD	0.30	216.9	8.41	22.94	17.11
U.S. EQUITY: TOTAL MARKET VALUE						
Vanguard US Value Factor	VFVA	0.14	493.7	36.94	20.67	-
Alpha Architect US Quantitative Value	QVAL	0.49	247.5	34.40	16.20	10.27
SPDR S&P 1500 Value Tilt	VLU	0.12	236.6	30.96	22.04	14.50
iShares MSCI USA Value Factor	VLUE	0.15	16,122.7	28.94	17.84	12.15
iShares Morningstar Value	ILCV	0.04	821.0	26.71	16.31	11.16
iShares Core S&P US Value	IUSV	0.04	12,019.9	25.21	18.68	11.81
Dimensional US Targeted Value	DFAT	0.34	6,679.3	-	-	-
U.S. EQUITY: EXTENDED CAP						
First Trust SMID Cap Rising Dividend Achievers	SDVY	0.60	447.1	29.11	21.91	-
Invesco FTSE RAFI US 1500 Small-Mid	PRFZ	0.39	1,912.3	28.27	20.49	12.01
iShares Russell 2500	SMMD	0.15	407.8	18.30	22.03	-
Vanguard Extended Market	VXF	0.06	17,643.2	12.30	23.92	15.29
U.S. EQUITY: LARGE CAP						
Pacer Lunt Large Cap Alternator	ALTL	0.60	351.4	45.30	-	-
Pacer US Cash Cows 100	COWZ	0.49	1,270.6	42.55	25.27	16.28
Pacer Lunt Large Cap Multi-Factor Alternator	PALC	0.60	193.4	41.02	-	-
Invesco S&P 500 High Beta	SPHB	0.25	1,486.9	40.58	33.25	18.69
HCM Defender 500	LGH	1.15	373.8	39.92	-	-
SPDR Russell 1000 Yield Focus	ONEY	0.20	737.8	37.13	21.35	13.51
VictoryShares US Lrg Cap High Div Vol Wtd	CDL	0.35	240.6	33.12	17.10	11.95
VictoryShares US EQ Income Enh Vol Wtd	CDC	0.35	1,103.4	33.02	21.30	14.21
SPDR Portfolio S&P 500 High Dividend	SPYD	0.07	5,274.5	32.80	12.50	8.81
Overlay Shares Large Cap Equity	OVL	0.80	240.2	32.39	-	-
Invesco RAFI Strategic US	IUS	0.19	199.9	32.18	25.12	-
Fidelity Quality Factor	FQAL	0.29	260.5	32.14	25.30	18.27

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
ProShares Large Cap Core Plus	CSM	0.46	521.3	31.98	22.47	15.05
Schwab Fundamental US Large Company	FNDX	0.25	8,872.0	31.73	22.75	14.96
SPDR S&P 500 ESG	EFIV	0.10	452.7	31.72	-	-
Invesco FTSE RAFI US 1000	PRF	0.39	5,788.0	31.13	21.68	13.80
First Trust Rising Dividend Achievers	RDVY	0.50	8,019.0	31.13	26.99	17.76
Xtrackers S&P 500 ESG	SNPE	0.10	853.3	31.07	-	-
Invesco S&P 500 Top 50	XLG	0.20	2,522.0	30.77	28.94	20.53
Invesco S&P 500 Revenue	RWL	0.39	1,131.6	30.30	21.86	14.97
Invesco S&P 500 Equal Weight	RSP	0.20	32,026.3	29.41	23.43	15.48
ALPS Sector Weight	EQL	0.28	221.6	29.32	22.39	15.30
SPDR Russell 1000 Low Volatility Focus	ONEV	0.20	627.7	29.20	21.67	15.03
iShares ESG Screened S&P 500	XVV	0.08	425.6	29.19	-	-
iShares S&P 100	IEF	0.20	9,545.9	29.18	27.34	19.25
JPMorgan Diversified Return US Equity	JPLS	0.18	698.5	29.08	20.30	14.54
Invesco Russell 1000 Dynamic Multifactor	OMFL	0.29	2,070.9	28.95	28.11	-
Global X S&P 500 Catholic Values	CATH	0.29	649.7	28.87	26.32	18.46
Main Sector Rotation	SECT	0.78	1,094.1	28.87	24.04	-
Distillate US Fundamental Stability & Value	DSTL	0.39	587.0	28.86	27.71	-
SPDR Portfolio S&P 500	SPLG	0.03	13,769.1	28.78	26.30	18.40
Vanguard S&P 500	VOO	0.03	280,565.8	28.78	26.01	18.40
iShares Core S&P 500	IVV	0.03	335,578.6	28.76	26.01	18.41
SPDR S&P 500 Trust	SPY	0.09	456,399.0	28.75	25.99	18.36
JPMorgan US Quality Factor	JQUA	0.12	432.6	28.67	24.42	-
SPDR S&P 500 Fossil Fuel Reserves Free	SPYX	0.20	1,400.9	28.06	26.43	18.98
Invesco S&P 500 Quality	SPHQ	0.15	3,595.5	28.03	26.01	17.23
Day Hagan/Ned Davis Research Smart Sector	SSUS	0.81	384.5	28.02	-	-
SPDR SSGA US Large Cap Low Volatility	LGLV	0.12	682.6	27.98	21.62	16.29
Pacer Trendpilot US Large Cap	PTLC	0.60	2,072.6	27.90	14.13	12.87
iPath Shiller CAPE ETN	CAPE	0.45	496.2	27.80	26.51	18.85
iShares Russell Top 200	IWL	0.15	1,029.4	27.79	27.05	19.51
Vanguard Mega Cap	MGC	0.07	4,561.4	27.57	26.68	19.21
Gotham Enhanced 500	GSPY	0.50	264.2	27.53	-	-
WisdomTree US LargeCap	EPS	0.08	696.8	27.46	23.66	16.51
Invesco QQQ Trust	QQQ	0.20	217,398.0	27.42	38.06	28.38
Vanguard Large-Cap	VO	0.04	28,223.9	27.40	26.47	18.72
Hartford Multifactor US Equity	RVUS	0.19	406.7	27.31	18.92	13.32
Invesco NASDAQ 100	QQQM	0.15	3,885.9	27.30	-	-
John Hancock Multifactor Large Cap	JHML	0.29	803.3	26.89	24.81	17.19
Schwab US Large-Cap	SCHX	0.03	35,390.6	26.81	26.21	18.54
Goldman Sachs ActiveBeta US Large Cap Equity	GSLC	0.09	14,913.1	26.75	24.99	18.07
SPDR Russell 1000 Momentum Focus	ONEO	0.20	334.4	26.73	21.11	13.51
Franklin LibertyQ US Equity	FLQL	0.15	1,001.7	26.57	21.84	-
Vanguard Russell 1000	VONE	0.08	2,994.7	26.49	26.10	18.32
First Trust Large Cap Core AlphaDEX	FEX	0.59	1,241.5	26.42	21.22	13.74
Xtrackers Russell US Multifactor	DEUS	0.17	188.0	26.32	20.99	14.10
iShares Russell 1000	IWB	0.15	32,811.8	26.32	25.98	18.24
First Trust Capital Strength	FTCS	0.56	9,480.3	26.31	21.30	16.12
Principal US Mega-Cap	USMC	0.12	1,870.1	26.29	23.15	-
Schwab 1000	SCHK	0.05	2,369.5	26.17	26.01	-
VictoryShares US 500 Enhanced Volatility Wtd	CFO	0.35	1,067.3	26.01	22.39	15.44
BNY Mellon US Large Cap Core Equity	BKLC	0.00	449.2	25.88	-	-
VictoryShares US 500 Volatility Wtd	CFA	0.35	686.7	25.88	22.42	15.48
IQ Chaikin US Large Cap	CLRG	0.25	342.9	25.86	21.18	-
Goldman Sachs JUST US Large Cap Equity	JUST	0.20	299.4	25.81	24.97	-
WisdomTree US LargeCap Dividend	DLN	0.28	3,359.1	25.58	19.18	13.52
JPMorgan US Momentum Factor	JMOM	0.12	265.4	25.02	27.48	-
Invesco S&P 500 High Dividend Low Volatility	SPHD	0.30	3,094.1	24.98	10.62	7.29
Invesco Defensive Equity	DEF	0.53	296.9	24.94	19.84	14.98
FT Choe Vest S&P 500 Div Aristocrats Target Inc	KNG	0.75	382.7	24.74	19.21	-
ProShares S&P 500 Dividend Aristocrats	NOBL	0.35	9,685.3	24.63	18.78	13.48
ALPS Sector Dividend Dogs	SDOG	0.40	1,195.3	24.60	15.47	8.97

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
WisdomTree US Dividend ex-Financials	DTN	0.38	548.3	24.28	13.33	8.42
Simplify US Equity PLUS Downside Convexity	SPD	0.29	459.0	24.15	-	-
Invesco S&P 500 Low Volatility	SPLV	0.25	9,036.5	24.13	16.12	12.89
Goldman Sachs Equal Weight US Large Cap	GSEW	0.09	934.0	24.02	23.11	-
Fidelity Low Volatility Factor	FDLO	0.29	507.8	24.01	22.19	16.99
Q?Shares US Quality Dividend	OUSQ	0.48	825.6	23.74	18.28	13.75
Invesco Russell 1000 Equal Weight	EQAL	0.20	696.9	23.14	21.38	13.76
Amplify CWP Enhanced Dividend Income	DIVO	0.55	935.9	22.90	19.95	15.20
VictoryShares Dividend Accelerator	VSDA	0.35	354.1	21.94	21.59	-
LHA Market State Tactical Beta	MSTB	1.15	342.3	21.85	-	-
JPMorgan Equity Premium Income	JEPI	0.35	5,864.3	21.50	-	-
First Trust Lunt US Factor Rotation	FCTR	0.65	664.7	20.98	26.83	-
SPDR Dow Jones Industrial Average Trust	DIA	0.16	30,452.0	20.84	18.30	15.34
Aptus Drawdown Managed Equity	ADME	0.79	348.3	20.24	15.82	11.41
Global X S&P 500 Covered Call	XYLD	0.60	903.7	19.59	13.04	9.59
ETC 6 Meridian Hedged Equity-Index Option	SIXH	0.87	259.7	18.11	-	-
Aptus Collared Income Opportunity	ACIO	0.79	374.2	18.03	-	-
Davis Select US Equity	DUSA	0.62	389.0	17.71	20.63	-
First Trust Nasdaq-100 Equal Weighted	QQEW	0.58	1,398.8	17.64	29.53	20.76
Direxion NASDAQ-100 Equal Weighted	QQQE	0.35	428.7	17.40	29.57	20.76
FT Choe Vest US Equity Buffer - February	FFEB	0.85	252.6	16.26	-	-
Invesco S&P 500 Downside Hedged	PHDG	0.40	350.8	15.67	14.33	11.06
SPDR SSGA Gender Diversity	SHE	0.20	289.6	15.18	18.88	14.17
Pacer Trendpilot 100	PTNQ	0.65	821.6	13.16	21.99	21.19
FT Choe Vest Fund of Buffer	BUFR	1.05	581.0	11.88	-	-
FT Choe Vest US Equity Buffer - August	FAUG	0.85	205.6	11.54	-	-
FT Choe Vest US Equity Buffer - November	FNOV	0.85	275.7	10.77	-	-
Global X NASDAQ 100 Covered Call	QYLD	0.60	5,910.6	10.42	13.78	10.78
Nationwide Nasdaq-100 Risk-Managed Income	NUSI	0.68	900.9	9.75	-	-
Invesco NASDAQ Next Gen 100	QQQJ	0.15	1,237.8	9.68	-	-
Innovator US Equity Power Buffer - December	PDEC	0.79	222.9	9.59	-	-
Innovator US Equity Power Buffer - October	POCT	0.79	209.8	9.46	10.88	-
Innovator US Equity Power Buffer - September	PSEP	0.79	273.0	8.85	-	-
FT Choe Vest US Equity Deep Buffer - February	DFEB	0.85	248.9	8.83	-	-
Innovator US Equity Power Buffer - January	PJAN	0.79	286.0	8.80	-	-
Inspire 100	BIBL	0.35	323.7	8.62	19.99	-
Innovator US Equity Power Buffer - May	PMAY	0.79	225.8	7.80	-	-
Innovator US Equity Power Buffer - August	PAUG	0.79	180.8	7.58	-	-
Innovator US Equity Power Buffer - April	PAPR	0.79	206.8	7.51	-	-
Innovator US Equity Power Buffer - July	PIJUL	0.79	205.4	7.20	9.03	-
Innovator S&P 500 Power Buffer - November	PNOV	0.79	233.6	7.12	-	-
Nuveen Growth Opportunities	NUGO	0.55	3,338.2	-	-	-
Invesco S&P 500 QVM Multi-Factor	QVML	0.11	845.3	-	-	-
FT Choe Vest Fund of Deep Buffers	BUFD	1.05	312.8	-	-	-
Engine No. 1 Transform 500	VOTE	0.05	282.7	-	-	-

U.S. EQUITY: LARGE CAP GROWTH

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
Invesco S&P 500 GARP	SPGP	0.36	872.0	35.72	29.86	24.86
SPDR Portfolio S&P 500 Growth	SPYG	0.04	16,406.5	32.01	32.11	23.99
Vanguard S&P 500 Growth	VOOG	0.10	7,998.0	31.95	32.06	23.92
iShares S&P 500 Growth	IWV	0.18	40,820.4	31.80	31.92	23.86
iShares Russell Top 200 Growth	IWY	0.20	4,973.4	31.05	35.38	26.54
Invesco S&P 500 Pure Growth	RPG	0.35	3,620.3	29.40	29.03	20.95
Vanguard Mega Cap Growth	MGK	0.07	14,476.1	28.58	35.55	25.65
Nuveen ESG Large-Cap Growth	NULG	0.25	957.9	28.19	35.55	25.44
Schwab US Large-Cap Growth	SCHG	0.04	17,941.6	28.11	34.34	25.09
Sofi Select 500	SFY	0.00	393.0	28.03	-	-
Vanguard Russell 1000 Growth	VONG	0.08	8,319.9	27.60	33.90	25.18
iShares Russell 1000 Growth	IWF	0.19	79,536.8	27.43	33.77	25.06
Vanguard Growth	VUG	0.04	90,981.9	27.34	34.75	24.75
First Trust Large Cap Growth AlphaDEX	FTCG	0.60	1,318.0	24.43	28.55	20.13
Invesco Dynamic Large Cap Growth	PWB	0.56	842.4	19.56	25.28	20.99

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
U.S. EQUITY: LARGE CAP VALUE						
Invesco S&P 500 Pure Value	RPV	0.35	2,802.2	34.25	15.26	9.51
JPMorgan US Value Factor	JVAL	0.12	459.5	31.30	21.46	-
Fidelity Value Factor	FVAL	0.29	459.7	30.35	22.84	15.91
Invesco Dynamic Large Cap Value	PWV	0.58	815.6	29.07	17.29	10.15
First Trust Large Cap Value AlphaDEX	FTA	0.60	1,172.0	28.54	15.16	8.54
Vanguard Value	VTV	0.04	92,653.3	26.51	17.58	12.48
Vanguard Mega Cap Value	MGV	0.07	4,992.2	25.90	17.43	12.66
Schwab US Large-Cap Value	SCHV	0.04	10,463.5	25.58	17.53	11.89
Vanguard Russell 1000 Value	VONV	0.08	7,066.0	25.27	17.60	11.08
iShares Russell 1000 Value	IWD	0.19	59,974.6	24.95	17.42	10.96
SPDR Portfolio S&P 500 Value	SPYV	0.04	12,972.0	24.92	18.62	12.00
Vanguard S&P 500 Value	VOOV	0.10	2,592.0	24.85	18.51	11.76
iShares S&P 500 Value	IVE	0.18	23,957.6	24.72	18.44	11.70
Nuveen ESG Large-Cap Value	NULV	0.25	1,271.8	23.43	16.96	11.94
iShares Russell Top 200 Value	IWX	0.20	1,255.2	23.32	16.33	10.92
American Century Focused Large Cap Value	FLV	0.42	237.4	17.27	-	-
U.S. EQUITY: MID CAP						
Invesco S&P MidCap 400 Revenue	RWK	0.39	399.0	34.32	24.03	12.99
WisdomTree US MidCap	EZM	0.38	834.3	30.99	19.82	12.09
WisdomTree US MidCap Dividend	DON	0.38	3,160.4	30.27	14.95	9.87
JPMorgan Diversified Return US Mid Cap Equity	JPME	0.24	238.3	28.89	20.71	13.79
Invesco Zacks Mid-Cap	CZA	0.69	227.2	27.43	19.15	13.45
SPDR Portfolio S&P 400 Mid Cap	SPMD	0.05	5,623.1	24.77	21.03	12.84
iShares Core S&P Mid-Cap	IJH	0.05	68,252.8	24.71	21.33	13.03
Vanguard Mid-Cap	VO	0.04	57,814.8	24.69	24.46	15.86
Vanguard S&P Mid-Cap 400	IVOO	0.10	1,578.6	24.59	21.32	13.00
SPDR S&P Midcap 400 Trust	MDY	0.23	21,993.0	24.54	21.16	12.84
First Trust Mid Cap Core AlphaDEX	FNX	0.60	1,059.0	24.54	21.39	12.90
John Hancock Multifactor Mid Cap	JHMM	0.41	2,632.4	24.53	23.45	15.34
Invesco S&P MidCap Low Volatility	XMLV	0.25	1,368.2	23.00	11.74	9.64
iShares Morningstar Mid-Cap	IMCB	0.04	899.7	22.81	22.32	14.15
iShares Russell Mid-Cap	IWR	0.19	31,639.1	22.44	23.07	14.92
Invesco S&P Midcap Quality	XMHQ	0.25	315.8	20.99	24.90	15.43
ProShares S&P MidCap 400 Div Aristocrats	REGL	0.41	1,048.5	19.39	13.75	8.62
Schwab US Mid-Cap	SCHM	0.04	10,332.4	19.35	20.59	13.85
JPMorgan BetaBuilders US Mid Cap Equity	BBMC	0.07	1,584.5	17.63	-	-
Invesco S&P MidCap Momentum	XMMO	0.33	965.5	16.70	27.17	24.53
Pacer Trendpilot US Mid Cap	PTMC	0.60	447.4	12.41	6.58	7.36
Invesco S&P MidCap 400 QVM Multi-Factor	QVMM	0.15	212.9	-	-	-
U.S. EQUITY: MID CAP GROWTH						
Vanguard Mid-Cap Growth	VOT	0.07	12,814.0	20.50	29.42	20.05
Vanguard S&P Mid-Cap 400 Growth	IVOG	0.15	954.8	18.84	22.48	14.53
iShares S&P Mid-Cap 400 Growth	IJK	0.17	8,621.3	18.68	22.33	14.40
SPDR S&P 400 Mid Cap Growth	MDYG	0.15	1,777.5	18.47	22.34	14.42
iShares Morningstar Mid-Cap Growth	IMCG	0.06	1,427.3	15.39	31.63	22.50
Invesco S&P MidCap 400 Pure Growth	RFG	0.35	393.0	13.74	20.95	12.89
First Trust Mid Cap Growth AlphaDEX	FNK	0.70	452.6	13.46	27.24	18.97
iShares Russell Mid-Cap Growth	IWP	0.23	16,314.4	12.60	27.17	19.57
Nuveen ESG Mid-Cap Growth	NUMG	0.30	385.0	12.58	30.28	19.85
Motley Fool Mid Cap Growth	TMFM	0.85	305.7	-	-	-
U.S. EQUITY: MID CAP VALUE						
Invesco S&P MidCap Value with Momentum	XMVM	0.39	205.5	35.17	23.06	11.61
iShares Morningstar Mid-Cap Value	IMCV	0.06	486.0	33.55	16.88	9.88
First Trust Mid Cap Value AlphaDEX	FNK	0.70	209.2	32.94	15.98	7.61
Nuveen ESG Mid-Cap Value	NUMV	0.30	284.1	31.15	19.77	11.63
SPDR S&P 400 Mid Cap Value	MDYV	0.15	1,586.7	30.52	19.46	11.01
iShares S&P Mid-Cap 400 Value	IJ	0.18	8,962.9	30.45	19.28	10.84
Vanguard S&P Mid-Cap 400 Value	IVOV	0.15	842.3	30.44	19.42	10.93
Vanguard Mid-Cap Value	VOE	0.07	16,022.4	28.76	19.09	11.60
iShares Russell Mid-Cap Value	IWS	0.23	15,405.4	28.10	19.38	11.01

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
U.S. EQUITY: SMALL CAP						
Invesco S&P SmallCap 600 Revenue	RWF	0.39	737.5	52.84	30.49	14.16
Pacer US Small Cap Cash Cows 100	CALF	0.59	618.9	40.66	24.67	-
WisdomTree US SmallCap	EES	0.38	668.0	34.36	18.98	11.22
Principal US Small-Cap Multi-Factor	PSC	0.38	1,236.7	32.55	21.33	12.91
Schwab Fundamental US Small Company	FNDA	0.25	5,017.1	31.11	20.92	11.86
Invesco S&P SmallCap Low Volatility	XSLV	0.25	1,229.2	29.34	9.37	6.09
JPMorgan Diversified Return US Small Cap	JPSE	0.29	184.0	29.29	21.36	13.32
Invesco Russell 2000 Dynamic Multifactor	OMFS	0.39	187.0	28.61	23.31	-
SPDR SSGA US Small Cap Low Volatility	SMLV	0.12	219.8	27.69	16.00	9.01
SPDR S&P 600 Small Cap	SLY	0.15	1,853.8	26.82	20.10	12.36
First Trust Small Cap Core AlphaDEX	FYX	0.63	984.5	26.74	21.68	12.62
Vanguard S&P Small-Cap 600	VIOO	0.10	2,007.0	26.74	20.12	12.37
SPDR Portfolio S&P 600 Small Cap	SPSM	0.05	4,601.5	26.69	21.13	12.76
VictoryShares US Small Cap High Div Vol Wtd	CSB	0.35	251.4	26.60	19.53	12.04
iShares Core S&P Small-Cap	IJR	0.06	75,618.3	26.60	20.05	12.37
iShares MSCI USA Small-Cap Multifactor	SMLF	0.30	1,132.1	26.54	18.57	11.47
IQ Chaikin US Small Cap	CSML	0.35	216.4	26.53	19.33	-
WisdomTree US SmallCap Dividend	DES	0.38	1,912.3	26.49	13.35	6.64
VictoryShares MSCI USA SmCap Val Mom	USVM	0.25	294.8	24.42	18.79	-
WisdomTree US Smallcap Qual Div Growth	DGRS	0.38	217.6	23.09	18.14	9.60
Goldman Sachs ActiveBeta US Small Cap Equity	GSSC	0.20	479.1	23.08	20.39	-
Global X Russell 2000 Covered Call	RYLD	0.60	813.6	22.14	-	-
Invesco DWA SmallCap Momentum	DWAS	0.60	493.4	19.75	27.69	17.58
John Hancock Multifactor Small Cap	JHSC	0.42	435.6	19.53	18.40	-
iShares ESG Aware MSCI USA Small-Cap	ESML	0.17	1,393.6	19.28	22.57	-
Invesco S&P SmallCap Momentum	XSMO	0.39	194.6	19.25	23.12	17.34
ProShares Russell 2000 Dividend Growers	SMDV	0.41	880.9	18.14	8.92	5.29
Nuveen ESG Small-Cap	NUSC	0.30	1,111.1	17.63	22.74	14.27
Vanguard Small-Cap	VB	0.05	50,191.4	17.56	21.27	13.46
iShares Morningstar Small-Cap	ISCB	0.04	237.9	17.46	17.34	9.46
iShares MSCI USA Small-Cap Min Vol Factor	SMMV	0.20	861.8	16.64	12.06	10.23
Schwab US Small-Cap	SCHA	0.04	17,143.1	16.45	20.69	12.26
JPMorgan BetaBuilders US Small Cap Equity	BBSC	0.09	428.0	15.43	-	-
Vanguard Russell 2000	VTWO	0.10	7,215.9	14.80	20.19	12.09
iShares Russell 2000	IWM	0.19	69,197.4	14.54	19.91	11.92
Dimensional US Small Cap	DFAS	0.34	4,420.2	-	-	-
U.S. EQUITY: SMALL CAP GROWTH						
Vanguard S&P Small-Cap 600 Growth	VIOG	0.16	615.9	22.48	21.09	14.21
SPDR S&P 600 Small Cap Growth	SLYG	0.15	2,475.6	22.42	20.95	14.19
iShares S&P Small-Cap 600 Growth	IJT	0.18	6,337.4	22.37	20.85	14.08
First Trust Small Cap Growth AlphaDEX	FYC	0.71	369.5	21.63	23.42	16.91
Vanguard Small-Cap Growth	VBK	0.07	16,432.9	5.66	23.84	16.90
Vanguard Russell 2000 Growth	VTWG	0.15	727.2	2.85	21.28	14.58
iShares Russell 2000 Growth	IWO	0.24	12,389.9	2.54	21.06	14.46
iShares Morningstar Small-Cap Growth	ISCG	0.06	445.5	-1.25	21.82	15.98
U.S. EQUITY: SMALL CAP VALUE						
Invesco S&P SmallCap Value w/ Momentum	XSVM	0.39	515.0	56.39	28.82	14.20
Invesco S&P SmallCap 600 Pure Value	RZV	0.35	299.8	45.97	19.72	6.90
Avantis US Small Cap Value	AVUV	0.25	2,274.3	42.23	-	-
Vanguard S&P Small-Cap 600 Value	VIOV	0.15	1,309.6	30.63	18.66	10.19
SPDR S&P 600 Small Cap Value	SLYV	0.15	4,319.3	30.60	18.56	11.00
iShares S&P Small-Cap 600 Value	IUS	0.18	8,779.7	30.53	18.47	10.04
iShares Morningstar Small Cap Value	ISCV	0.06	421.6	29.15	15.89	6.91
First Trust Small Cap Value AlphaDEX	FYT	0.72	230.8	28.68	20.01	8.96
Vanguard Small-Cap Value	VBR	0.07	26,817.9	28.06	18.51	10.30
iShares Russell 2000 Value	IWN	0.24	15,986.0	27.96	17.79	8.89
Vanguard Russell 2000 Value	VTWV	0.15	1,039.0	27.90	17.98	8.99
Opus Small Cap Value	OSCV	0.79	194.0	27.69	19.53	-
U.S. EQUITY: MICRO CAP						
First Trust Dow Jones Select MicroCap	FDM	0.60	188.6	34.28	16.58	7.83

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
iShares Micro-Cap	IWC	0.60	1,251.8	18.68	20.58	11.43
U.S. EQUITY: BASIC MATERIALS						
iShares North American Natural Resources	IGE	0.43	457.4	39.43	9.52	0.76
SPDR S&P North American Natural Resources	NANR	0.35	500.6	36.43	17.92	8.07
SPDR S&P Metals & Mining	XME	0.35	1,848.9	34.94	21.53	9.76
First Trust Water	FIW	0.54	1,597.7	31.83	29.93	19.95
Invesco Water Resources	PHO	0.60	2,124.0	31.28	29.71	20.34
Invesco S&P 500 Equal Weight Materials	RTM	0.40	475.0	31.22	26.34	16.70
First Trust Materials AlphaDEX	FXZ	0.67	516.2	30.41	23.22	11.85
Fidelity MSCI Materials	FMAT	0.08	525.7	27.48	23.44	13.93
Materials Select Sector SPDR	MLB	0.12	8,140.9	27.45	24.00	15.02
Vanguard Materials	VAV	0.10	4,168.6	27.41	23.40	13.93
iShares US Basic Materials	IYM	0.43	760.3	25.62	20.86	12.94
U.S. EQUITY: CONSUMER CYCLICALS						
SPDR S&P Retail	XRT	0.35	709.2	42.63	32.20	17.23
Invesco S&P 500 Equal Weight Consumer Discr	RCD	0.40	480.7	28.76	21.79	13.65
Consumer Discretionary Select Sector SPDR	XLY	0.12	23,582.9	27.93	28.65	21.58
Vanguard Consumer Discretionary	VCR	0.10	7,450.7	24.86	33.15	23.15
Fidelity MSCI Consumer Discretionary	FDIS	0.08	2,013.4	24.25	33.28	23.61
Invesco Dynamic Leisure and Entertainment	PEJ	0.55	1,315.2	22.79	7.83	4.81
First Trust Consumer Discretionary AlphaDEX	FXD	0.63	1,954.2	22.38	19.11	11.89
Invesco DWA Consumer Cyclical Momentum	PEZ	0.60	196.0	20.34	25.45	17.13
iShares US Consumer Discretionary	IYC	0.43	1,493.9	19.65	23.82	18.29
ETFMG Travel Tech	AWAY	0.75	261.6	-5.91	-	-
Amplify Online Retail	IBUY	0.65	637.4	-22.99	30.34	26.69
ProShares Online Retail	ONLN	0.58	634.7	-25.22	23.86	-
U.S. EQUITY: CONSUMER NON-CYCLICALS						
First Trust Consumer Staples AlphaDEX	FXG	0.63	286.0	21.28	14.05	6.47
Vanguard Consumer Staples	VDC	0.10	6,665.7	17.61	18.02	11.13
Fidelity MSCI Consumer Staples	FSTA	0.08	906.5	17.46	18.26	11.27
iShares US Consumer Staples	IYK	0.43	766.4	17.31	25.86	14.89
Consumer Staples Select Sector SPDR	XLP	0.12	13,221.5	17.20	18.05	11.31
Invesco S&P 500 Equal Weight Cons Staples	RHS	0.40	468.4	14.68	16.02	9.72
U.S. EQUITY: ENERGY						
First Trust Natural Gas	FCG	0.60	423.5	96.67	7.42	-6.99
iShares US Oil & Gas Exploration & Production	IEO	0.42	321.2	75.59	8.99	0.92
First Trust Nasdaq Oil & Gas	FTXN	0.60	927.1	69.15	7.87	-0.63
SPDR S&P Oil & Gas Exploration & Production	XOP	0.35	3,492.3	66.76	-1.29	-8.94
Invesco S&P 500 Equal Weight Energy	RYE	0.40	263.2	57.76	6.56	-3.13
Vanguard Energy	VDE	0.10	5,833.1	56.21	4.54	-2.27
Fidelity MSCI Energy	FENY	0.08	998.3	55.69	4.32	-2.36
iShares US Energy	IYE	0.42	2,469.9	53.44	3.93	-2.32
Energy Select Sector SPDR	XLE	0.12	26,365.5	53.31	4.95	-1.29
First Trust Energy AlphaDEX	FXN	0.64	427.8	50.97	1.30	-6.24
InfraCap MLP	AMZA	2.01	272.3	44.41	-8.70	-12.25
Global X MLP & Energy Infrastructure	MLPX	0.45	748.9	39.56	9.85	1.36
Global X MLP	MLPA	0.46	1,027.8	39.56	1.15	-4.36
Alerian MLP	AMLPL	0.90	4,951.1	39.03	-0.03	-4.27
JPMorgan Alerian MLP Index ETN	AMJ	0.85	2,084.6	38.11	1.01	-3.57
Tortoise North American Pipeline	TPYP	0.40	432.8	34.93	9.56	3.44
ETRACS Alerian MLP Infrastructure ETN Ser B	MLPB	0.85	187.7	33.91	-0.72	-5.72
First Trust North Amer Energy Infrastructure	EMLP	0.96	2,134.0	22.21	7.93	1.33
First Trust NASDAQ Clean Edge Green Energy	QCLN	0.60	2,834.0	-3.21	56.84	34.55
SPDR S&P Kensho Clean Power	CNRG	0.45	354.0	-15.66	48.62	-
ALPS Clean Energy	ACES	0.55	877.0	-19.44	43.18	-
BlackRock US Carbon Transition Readiness	LCTU	0.14	1,642.6	-	-	-
U.S. EQUITY: FINANCIALS						
iShares US Broker-Dealers & Sec Exchanges	IAI	0.41	990.2	40.49	27.46	19.30
First Trust Nasdaq Bank	FTXO	0.60	277.6	40.48	16.89	7.38
SPDR S&P Capital Markets	KCE	0.35	397.5	40.07	32.59	21.03
SPDR S&P Regional Banking	KRE	0.35	4,878.4	39.32	18.07	7.46

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
iShares US Regional Banks	IAT	0.41	1,371.9	38.90	19.04	8.99
Invesco KBW Bank	KBWB	0.35	2,726.4	37.76	18.53	9.95
First Trust Financials AlphaDEX	FXO	0.62	1,617.7	36.83	20.20	11.65
Invesco S&P 500 Equal Weight Financials	RYF	0.40	497.5	36.39	23.72	14.15
VanEck BDC Income	BIZD	10.07	535.3	36.16	18.41	9.17
Vanguard Financials	VFH	0.10	11,669.8	35.19	20.35	12.58
Fidelity MSCI Financials	FNCL	0.08	1,889.9	34.96	20.23	12.54
Financial Select Sector SPDR	XLF	0.12	44,787.4	34.82	20.47	13.15
SPDR S&P Bank	KBE	0.35	3,068.2	33.50	16.53	7.04
Invesco KBW High Dividend Yield Financial	KBWD	1.24	492.9	31.91	10.11	6.43
iShares US Financials	IYF	0.42	2,577.6	31.60	19.76	13.24
iShares US Financial Services	IYG	0.42	2,668.7	30.36	21.91	14.55
SPDR S&P Insurance	KIE	0.35	453.9	22.76	14.84	9.95
U.S. EQUITY: HEALTH CARE						
Health Care Select Sector SPDR	XLV	0.12	35,942.5	26.03	19.83	17.36
iShares US Healthcare Providers	IHF	0.42	1,327.6	24.46	21.46	19.76
iShares US Healthcare	IYH	0.43	3,347.0	23.41	19.88	17.39
Invesco S&P 500 Equal Weight Health Care	RYH	0.40	1,003.3	23.20	22.43	17.66
iShares US Medical Devices	IHI	0.41	9,085.4	21.03	25.89	24.68
Vanguard Health Care	VHT	0.10	17,730.8	20.56	20.22	17.72
Fidelity MSCI Health Care	FHLC	0.08	3,043.9	20.39	20.15	17.69
First Trust Health Care AlphaDEX	FXH	0.61	1,614.1	15.20	21.71	16.73
Invesco Dynamic Pharmaceuticals	PJP	0.58	441.8	14.58	10.10	8.62
iShares US Pharmaceuticals	IHE	0.42	399.7	13.05	14.06	8.66
Invesco S&P SmallCap Health Care	PSCH	0.29	482.2	5.75	18.66	19.72
SPDR S&P Health Care Equipment	XHE	0.35	692.5	3.04	18.76	18.94
Invesco Dynamic Biotechnology & Genome	PBE	0.59	279.4	1.54	14.83	13.07
iShares Biotechnology	IBB	0.45	10,058.2	0.95	16.79	11.78
Invesco DWA Healthcare Momentum	PTH	0.60	417.6	-3.20	29.60	26.41
First Trust NYSE Arca Biotechnology	FBT	0.55	1,720.2	-3.59	9.25	12.25
SPDR S&P Pharmaceuticals	XPH	0.35	227.2	-10.53	8.83	4.11
ALPS Medical Breakthroughs	SBIO	0.50	184.4	-17.55	14.51	14.06
SPDR S&P Biotech	XBI	0.35	7,198.6	-20.45	16.08	13.76
U.S. EQUITY: INDUSTRIALS						
SPDR S&P Transportation	XTN	0.35	885.2	33.69	22.24	12.93
First Trust RBA American Industrial Ren	AIRR	0.70	259.7	33.01	27.81	14.04
Invesco Dynamic Building & Construction	PKB	0.60	293.5	32.96	32.38	14.79
iShares US Transportation Average	IYT	0.42	1,859.8	26.41	20.14	12.43
Invesco S&P 500 Equal Weight Industrials	RGI	0.40	497.7	26.08	25.64	16.22
Invesco DWA Industrials Momentum	PRN	0.60	301.7	25.21	31.95	18.78
First Trust Industrials/Prod Dur AlphaDEX	FXR	0.64	1,895.5	24.85	22.49	13.76
First Trust Nasdaq Transportation	FTXR	0.60	1,237.7	24.01	17.88	9.96
Industrial Select Sector SPDR	XLI	0.12	17,413.0	21.09	20.15	13.28
Fidelity MSCI Industrials	FIDU	0.08	921.0	20.98	21.62	13.62
Vanguard Industrials	VIS	0.10	5,217.7	20.79	20.84	13.01
iShares US Industrials	IYJ	0.42	1,756.2	17.02	22.01	14.75
iShares US Aerospace & Defense	ITA	0.42	2,480.2	9.39	7.24	9.13
Invesco Aerospace & Defense	PPA	0.61	651.6	7.09	14.53	12.57
SPDR S&P Aerospace & Defense	XAR	0.35	1,107.6	2.31	14.82	13.95
U.S. EQUITY: TECHNOLOGY						
Invesco Dynamic Semiconductors	PSI	0.56	934.2	46.55	51.87	34.14
iShares Semiconductor	SOXX	0.43	9,968.1	44.09	52.90	36.12
SPDR S&P Semiconductor	XSD	0.35	1,623.0	42.54	56.06	34.84
VanEck Semiconductor	SMH	0.35	7,144.5	42.14	53.76	35.56
HCM Defender 100	QQH	1.11	395.5	37.52	-	-
iShares US Technology	IYW	0.43	10,189.8	35.44	43.08	31.71
Technology Select Sector SPDR	XLK	0.12	52,220.5	34.74	42.60	30.80
Fidelity MSCI Information Technology	FTEC	0.08	7,237.7	30.49	41.53	31.04
Vanguard Information Technology	VGIT	0.10	56,750.2	30.45	41.46	31.79
Invesco S&P 500 Equal Weight Technology	RYT	0.40	2,967.0	28.53	33.47	25.74
First Trust NASDAQ-100 Technology Sector	QTEC	0.57	4,075.9	26.88	37.05	27.17

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
Invesco S&P SmallCap Information Technology	P SCT	0.29	529.2	26.26	31.01	17.52
iShares Expanded Tech Sector	IGM	0.43	3,958.2	25.72	37.28	29.41
iShares US Tech Breakthrough Multisector	TECB	0.40	439.0	19.60	-	-
First Trust Technology AlphaDEX	FXL	0.61	1,992.0	18.19	36.21	28.66
Invesco DWA Technology Momentum	PTF	0.60	505.8	18.10	46.66	33.03
SPDR S&P NYSE Technology	XNTK	0.35	754.7	17.64	41.36	30.07
iShares Expanded Tech-Software Sector	IGV	0.43	6,119.1	12.30	32.12	29.81
First Trust Cloud Computing	SKYY	0.60	6,200.9	9.91	29.16	24.82
SPDR S&P Software & Services	XSW	0.35	396.8	7.48	30.76	25.23
First Trust Dow Jones Internet	FDN	0.51	10,086.9	6.55	24.68	23.15
WisdomTree Cloud Computing	WCLD	0.45	1,197.2	-3.21	-	-
Invesco NASDAQ Internet	PNQI	0.60	947.1	-5.57	25.19	21.14
SPDR FactSet Innovative Technology	XITK	0.45	267.2	-11.24	32.24	27.61
Invesco Dynamic Software	PSJ	0.56	368.2	-11.70	22.54	23.58

U.S. EQUITY: TELECOMMUNICATIONS

Global X US Infrastructure Development	PAVE	0.47	5,552.8	36.42	29.59	-
iShares US Infrastructure	IFRA	0.30	830.6	29.81	20.96	-
Communication Services Select Sector SPDR	XLC	0.12	14,459.6	15.96	24.47	-
Fidelity MSCI Communication Services	FCOM	0.08	863.1	13.89	22.80	12.69
Vanguard Communication Services	VOX	0.10	4,255.7	13.83	23.45	8.15
iShares US Telecommunications	ITZ	0.42	546.3	11.68	10.54	1.72

U.S. EQUITY: UTILITIES

Utilities Select Sector SPDR	XLU	0.12	12,942.9	17.69	14.23	11.65
Fidelity MSCI Utilities	FUTY	0.08	1,245.6	17.57	13.40	11.35
Vanguard Utilities	VPU	0.10	5,548.7	17.37	13.30	11.29
Invesco S&P 500 Equal Weight Utilities	RYU	0.40	227.7	17.13	11.92	10.40
iShares US Utilities	IDU	0.43	871.7	16.94	12.83	10.82
First Trust Utilities AlphaDEX	FXU	0.62	194.0	16.79	7.37	4.40

U.S. EQUITY: REAL ESTATE

Pacer Benchmark Industrial Real Estate SCTR	INDS	0.60	467.9	54.60	35.31	-
SPDR S&P Homebuilders	XHB	0.35	2,500.1	49.70	39.37	21.53
iShares US Home Construction	ITB	0.41	3,165.9	49.25	41.03	25.34
iShares Residential & Multisector Real Estate	REZ	0.48	1,183.6	47.83	19.76	13.16
Real Estate Select Sector SPDR	XLRE	0.12	6,175.9	46.08	22.54	14.74
SPDR Dow Jones REIT	RWR	0.25	2,153.6	45.46	16.54	9.38
iShares Cohen & Steers REIT	ICF	0.33	2,973.2	44.15	19.58	11.83
iShares Core US REIT	USRT	0.08	2,748.7	43.24	18.35	10.73
JPMorgan BetaBuilders MSCI US REIT	BBRE	0.11	1,551.3	42.98	18.53	-
First Trust S&P REIT	FRI	0.50	235.9	41.47	14.99	7.35
Schwab US REIT	SCHH	0.07	7,277.2	41.06	13.88	7.96
Vanguard Real Estate	VNQ	0.12	49,718.6	40.52	19.96	11.22
Fidelity MSCI Real Estate	FREL	0.09	2,302.7	40.50	19.84	12.34
iShares US Real Estate	IYR	0.41	7,233.6	38.72	18.99	12.00
Invesco KBW Premium Yield Equity REIT	KBWY	0.35	335.7	31.20	6.31	-0.18
Pacer Benchmark Data/Infrastructure Real Est	SRVR	0.60	1,650.7	22.30	24.84	-
iShares Mortgage Real Estate	REM	0.48	1,290.3	16.17	3.81	-
VanEck Mortgage REIT Income	MORT	0.40	300.4	15.89	3.13	4.49

U.S. EQUITY: HIGH DIVIDEND YIELD

iShares Select Dividend	DVY	0.39	19,829.7	31.68	15.36	10.56
Global X SuperDividend US	DIV	0.45	704.6	30.61	4.64	3.29
Schwab US Dividend Equity	SCHD	0.06	31,231.1	29.87	23.90	16.77
Invesco S&P Ultra Dividend Revenue	RDIV	0.39	744.6	29.13	12.88	8.86
Vanguard High Dividend Yield	VYM	0.06	42,593.4	26.21	16.56	11.65
Invesco High Yield Equity Dividend Achievers	PEY	0.53	996.3	26.15	14.66	8.70
SPDR S&P Dividend	SDY	0.35	20,846.2	25.37	16.31	12.12
First Trust Value Line Dividend	FVD	0.70	12,922.6	24.38	15.24	9.69
First Trust Morningstar Dividend Leaders	FDL	0.45	1,762.1	23.34	10.24	5.63
WisdomTree US High Dividend	DHS	0.38	865.4	23.18	12.52	8.06
iShares Core High Dividend	HDV	0.08	7,472.7	19.44	10.33	8.13

GLOBAL EQUITY

iShares Global 100	I00	0.40	3,883.9	26.03	24.79	17.63
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FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
Global X Internet of Things	SNSR	0.68	538.3	23.66	35.18	21.20
First Trust Dorsey Wright Dynamic Focus 5	FVC	0.71	224.5	21.92	17.90	12.40
First Trust Dorsey Wright Focus 5	FV	0.87	2,917.2	21.63	25.21	16.65
SPDR Portfolio MSCI Global Stock Market	SPGM	0.09	682.9	21.14	20.91	14.39
iShares MSCI ACWI	ACWI	0.32	17,636.6	18.67	20.45	14.58
ClearBridge All Cap Growth ESG	CACG	0.53	221.6	18.43	25.46	-
Vanguard Total World Stock	VT	0.08	26,337.8	18.27	20.48	14.46
T. Rowe Price Blue Chip Growth	TCHP	0.57	273.0	18.08	-	-
iShares MSCI Global Min Vol Factor	ACWV	0.20	5,586.4	13.95	12.43	10.68
iShares MSCI Global Impact	SDG	0.49	535.6	-1.20	21.37	15.85
Davis Select Worldwide	DWLD	0.63	364.2	-4.02	15.64	-
Horizon Kinetics Inflation Beneficiaries	INFL	0.85	865.2	-	-	-
Motley Fool Global Opportunities	TMFG	0.85	643.6	-	-	-

GLOBAL EQUITY EX-U.S.

Invesco International Dividend Achievers	PID	0.56	615.6	24.49	13.58	9.08
WisdomTree Global ex-US Qual Div Growth	DNL	0.58	464.5	16.14	23.20	15.89
Avantis International Small Cap Value	AVDV	0.36	1,262.9	15.79	-	-
Vanguard FTSE All-World ex-US Small-Cap	VSS	0.11	9,862.5	13.07	15.35	10.32
Vanguard International Dividend Appreciation	VIGI	0.20	4,120.8	12.54	18.07	13.26
Vident International Equity	VIDI	0.59	434.0	11.96	9.47	7.60
FlexShares International Quality Dividend	IQDF	0.47	622.1	10.23	11.29	7.13
iShares International Dividend Growth	IGRO	0.15	269.4	9.95	14.30	9.65
American Century Qual Diversified Intl	QINT	0.39	223.5	9.28	16.74	-
Vanguard Total International Stock	VXUS	0.08	52,949.5	9.00	13.68	9.88
iShares Core MSCI Total International Stock	IXUS	0.09	32,819.7	8.87	13.65	9.99
SPDR MSCI ACWI ex-US	CWI	0.30	1,910.2	8.82	13.36	9.76
Vanguard FTSE All-World ex-US	VEU	0.08	35,697.2	8.28	13.60	9.89
iShares MSCI ACWI ex US	ACWX	0.32	5,048.7	7.68	12.86	9.49
Vanguard ESG International Stock	VSGX	0.12	3,172.9	7.27	14.26	-
First Trust Dorsey Wright International Focus 5	IFV	1.06	227.3	5.59	12.28	8.35
Davis Select International	DINT	0.65	236.6	-14.92	10.57	-
First Trust International Equity Opportunities	FPXI	0.70	874.7	-15.98	24.43	17.92

INTERNATIONAL EQUITY: BLENDED DEVELOPMENT

ClearBridge Large Cap Growth ESG	LRGE	0.59	216.6	22.91	29.31	-
Fidelity Blue Chip Growth	FBCG	0.59	514.3	21.34	-	-
iShares MSCI All Country Asia ex Japan	AAJ	0.70	4,422.6	-5.71	11.11	10.56
iShares Asia 50	AIA	0.50	2,194.0	-10.90	13.34	12.61

INTERNATIONAL EQUITY: DEVELOPED

iShares MSCI Saudi Arabia	KSA	0.74	983.1	33.62	14.44	12.46
Fidelity High Dividend	FDV	0.29	1,049.5	29.28	18.17	13.18
JPMorgan BetaBuilders Canada	BBCA	0.19	6,126.1	28.14	20.57	-
iShares MSCI Canada	EWC	0.51	3,942.5	27.00	19.57	10.39
Fidelity Dividend for Rising Rates	FDRR	0.29	569.3	26.08	20.11	14.78
Xtrackers MSCI Europe Hedged Equity	DBEU	0.46	602.1	23.99	15.89	10.30
iShares MSCI Korusai	TOK	0.25	199.0	23.85	22.83	15.84
FlexShares STOXX Global ESG Select	ESGG	0.42	189.8	23.78	23.31	16.24
WisdomTree Europe Hedged Equity	HEDJ	0.58	2,150.1	23.52	15.03	9.41
iShares Currency Hedged MSCI Eurozone	HEZU	0.54	578.5	23.50	17.13	10.51
iShares MSCI Sweden	EWD	0.51	647.7	22.86	22.29	14.22
iShares MSCI Israel	EIS	0.59	210.7	22.84	18.50	12.30
iShares MSCI Netherlands	EWN	0.51	383.5	22.74	26.06	17.79
iShares MSCI World	URTH	0.24	2,112.8	22.28	21.96	15.32
iShares MSCI France	EWQ	0.51	730.0	21.47	16.53	12.23
Xtrackers MSCI Korusai Equity	KOKU	0.09	405.7	21.39	-	-
Invesco DWA Developed Markets Momentum	PIZ	0.80	236.2	20.53	21.94	14.76
iShares MSCI Switzerland	EWL	0.51	1,783.6	20.19	20.92	14.64
WisdomTree Intl Hedged Qual Div Growth	IHDG	0.58	1,161.0	19.74	20.86	13.62
Xtrackers MSCI EAFE Hedged Equity	DBEF	0.36	4,357.4	19.60	15.10	10.01
iShares Currency Hedged MSCI EAFE	HEFA	0.35	3,313.3	19.58	15.07	10.03
WisdomTree Europe SmallCap Dividend	DFE	0.58	328.3	18.44	15.41	9.96
iShares MSCI United Kingdom	EWU	0.51	2,952.7	18.22	8.13	5.67

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
WisdomTree Japan Hedged Equity	DXJ	0.48	1,999.5	17.97	13.41	7.53
JPMorgan BetaBuilders Europe	BBEU	0.09	9,682.3	17.49	15.18	-
Franklin FTSE United Kingdom	FLGB	0.09	610.3	17.15	9.37	-
Global X Artificial Intelligence & Technology	AIQ	0.68	189.6	17.09	35.81	-
First Trust Europe AlphaDEX	FEP	0.80	572.5	17.00	14.99	10.91
Vanguard FTSE Europe	VGK	0.08	22,313.5	16.88	15.45	10.71
Franklin FTSE Europe	FLEE	0.09	211.3	16.86	15.27	-
iShares Europe	IEV	0.59	2,141.9	16.74	14.64	9.93
iShares Core MSCI Europe	IEUR	0.09	5,491.6	16.73	15.37	10.63
SPDR Portfolio Europe	SPEU	0.09	425.9	16.19	15.96	10.72
Invesco FTSE RAFI Developed Markets ex-US	PXF	0.45	1,139.8	15.95	11.82	8.19
Invesco RAFI Strategic Developed ex-US	ISDX	0.23	311.0	15.78	14.08	-
iShares MSCI Intl Value Factor	IVLU	0.30	1,170.9	15.38	8.40	5.89
iShares MSCI Europe Small-Cap	IEUS	0.40	351.0	15.09	19.03	12.70
Schwab Fundamental International Large Co	FNDF	0.25	7,125.0	14.98	12.17	8.44
SPDR Euro STOXX 50	FEZ	0.29	2,444.5	14.83	14.91	9.76
iShares MSCI Denmark	EDEN	0.53	182.8	14.80	26.73	18.72
iShares MSCI Italy	EWI	0.51	630.9	14.41	13.88	9.50
IQ 50 Percent Hedged FTSE International	HFXI	0.20	323.5	13.96	14.63	10.04
iShares MSCI Eurozone	EZU	0.51	7,272.9	13.94	14.76	9.99
Avantis International Equity	AVDE	0.23	1,184.9	13.61	-	-
Knowledge Leaders Developed World	KLDW	0.75	200.5	13.54	18.88	13.50
IQ 500 International	IQIN	0.25	239.6	13.47	12.03	-
iShares MSCI Intl Small-Cap Multifactor	ISCF	0.40	209.6	13.34	15.50	11.58
Dimensional International Core Equity Market	DFAI	0.18	1,063.0	13.34	-	-
Xtrackers MSCI Japan Hedged Equity	DBJP	0.46	201.8	13.03	14.73	9.30
iShares Core MSCI Intl Developed Markets	IDEV	0.05	6,777.7	13.01	14.65	-
iShares MSCI Intl Quality Factor	IQLT	0.30	4,215.5	12.94	17.64	12.51
FlexShares Mstar DM ex-US Factor Tilt	TLTD	0.39	632.0	12.88	12.58	8.23
iShares Currency Hedged MSCI Japan	HEWJ	0.51	758.3	12.78	14.53	9.26
SPDR MSCI EAFE StrategicFactors	QEFA	0.30	910.4	12.52	13.55	10.22
WisdomTree Intl Quality Dividend Growth	IQDG	0.42	346.9	12.28	19.38	13.08
Schwab International Small-Cap Equity	SCHC	0.11	3,829.5	12.03	15.06	9.90
John Hancock Multifactor Developed Intl	JHMD	0.39	535.2	11.82	12.85	8.95
iShares ESG Aware MSCI EAFE	ESGD	0.20	7,609.2	11.80	14.20	10.06
iShares MSCI Intl Multifactor	INTF	0.30	909.0	11.72	10.81	8.03
JPMorgan BetaBuilders International Equity	BBIN	0.07	3,551.0	11.72	-	-
WisdomTree International SmallCap Dividend	DLS	0.58	1,431.7	11.70	10.44	7.56
Vanguard FTSE Developed Markets	VEA	0.05	109,889.2	11.67	14.54	10.12
iShares Core MSCI EAFE	IEFA	0.07	104,093.8	11.65	13.99	9.99
WisdomTree International LargeCap Dividend	DOL	0.48	370.3	11.53	8.83	6.54
iShares MSCI EAFE	EFA	0.32	57,059.5	11.46	13.53	9.55
SPDR Portfolio Developed World ex-US	SPDW	0.04	12,721.5	11.43	14.44	10.10
Schwab International Equity	SCHF	0.06	29,139.1	11.41	14.24	9.99
First Trust Developed Markets ex-US AlphaDEX	FDT	0.80	413.9	11.39	10.71	7.86
IQ Candriam ESG International Equity	IQSI	0.15	214.4	11.21	-	-
iShares MSCI EAFE Value	EFV	0.39	15,323.6	11.10	7.67	5.25
Hartford Multifactor Dev Markets (ex-US)	RODM	0.29	1,886.9	11.08	8.94	7.81
iShares MSCI EAFE Growth	EFG	0.40	13,580.7	11.01	18.58	13.35
Goldman Sachs ActiveBeta International Equity	GSIE	0.25	3,270.3	10.98	13.29	9.75
iShares ESG Advanced MSCI EAFE	DMXF	0.12	322.3	10.90	-	-
WisdomTree International Equity	DWM	0.48	620.6	10.75	8.76	6.66
Goldman Sachs MarketBeta Intl Equity	GSID	0.20	372.2	10.67	-	-
SPDR MSCI EAFE Fossil Fuel Reserves Free	EFAX	0.20	276.7	10.51	14.35	9.49
VictoryShares MSCI Intl Value Momentum	UVM	0.35	354.5	10.28	8.34	-
Schwab Fundamental Intl Small Company	FNDC	0.39	2,708.7	10.27	12.32	8.17
iShares MSCI EAFE Small-Cap	SCZ	0.40	15,257.5	10.14	15.32	10.89
Invesco S&P Intl Developed Low Volatility	IDLV	0.25	700.9	9.75	5.71	5.80
SPDR S&P International Small Cap	GWX	0.40	819.8	9.67	13.69	8.95
Invesco FTSE RAFI DM ex-US Small-Mid	PDN	0.49	482.8	9.04	12.88	8.95
iShares MSCI Australia	EWA	0.51	1,364.7	8.95	13.03	8.79

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
Global X Robotics & Artificial Intelligence	BOTZ	0.68	2,687.9	8.65	29.57	19.75
iShares MSCI EAFE Min Vol Factor	EFV	0.20	8,154.4	7.20	7.71	7.57
Xtrackers MSCI EAFE High Dividend Yield Equity	HDEF	0.20	862.2	6.97	9.49	4.35
JPMorgan Diversified Return International	JPIN	0.37	840.1	6.76	9.11	7.18
iShares MSCI Intl Momentum Factor	IMTM	0.30	906.8	6.60	17.48	11.76
iShares MSCI Germany	EWG	0.51	2,464.5	5.84	11.72	6.92
iShares MSCI Singapore	EWS	0.51	538.7	5.56	3.43	-
JPMorgan BetaBuilders Dev Asia ex-Japan	BBAX	0.19	4,158.5	5.49	10.54	-
iShares MSCI Pacific ex-Japan	EPP	0.48	2,264.4	4.29	9.36	8.03
iShares Core MSCI Pacific	IPAC	0.09	1,060.0	3.11	11.44	8.75
iShares MSCI Japan	EWJ	0.51	11,860.4	1.17	11.69	8.26
Vanguard FTSE Pacific	VPL	0.08	5,694.0	1.12	11.71	8.99
Franklin FTSE Japan	FLJP	0.09	808.7	1.00	11.64	-
WisdomTree Japan SmallCap Dividend	DFJ	0.58	221.0	0.38	5.95	5.08
iShares MSCI Spain	EWP	0.51	554.3	0.27	2.53	2.99
JPMorgan BetaBuilders Japan	BBJP	0.19	7,633.9	-1.64	10.50	-
iShares MSCI Hong Kong	EWH	0.51	943.0	-3.48	3.64	6.76
Global X FinTech	FINX	0.68	1,148.0	-9.72	24.05	23.61
BlackRock Wrld ex US Carbon Trans Readiness	LCTD	0.20	581.6	-	-	-
INTERNATIONAL EQUITY: EMERGING						
iShares MSCI India Small Cap	SMIN	0.81	406.9	44.45	17.87	14.64
iShares MSCI Taiwan	EWT	0.59	7,294.6	28.94	31.25	-
WisdomTree India Earnings	EPI	0.84	969.7	26.41	15.02	13.79
iShares MSCI India	INDA	0.69	5,876.3	21.49	14.10	13.53
iShares MSCI Russia	ERUS	0.59	559.6	21.28	18.26	-
iShares MSCI Mexico	EWX	0.51	941.3	20.30	9.52	5.14
iShares India 50	INDY	0.90	678.9	19.55	13.10	13.52
SPDR S&P Emerging Markets Small Cap	EWX	0.65	658.8	18.16	16.19	11.32
iShares MSCI Emerging Markets Small-Cap	EEMS	0.71	396.0	18.15	16.23	11.39
VanEck Russia	RSX	0.67	1,357.0	16.88	18.07	9.78
Invesco S&P Emerging Markets Low Volatility	EELV	0.30	363.7	16.16	6.74	7.53
WisdomTree Emerging Markets SmallCap Div	DGS	0.58	2,367.7	15.32	12.59	10.37
Schwab Fundamental Emerging Mkts Large Co	FNDE	0.39	4,902.2	14.40	10.00	8.63
Invesco DWA Emerging Markets Momentum	PIE	0.90	215.5	14.33	20.29	13.99
iShares MSCI Poland	EPOL	0.59	268.4	12.22	-1.18	4.87
WisdomTree Emerging Markets High Dividend	DEM	0.63	1,865.2	11.49	7.97	7.97
SPDR S&P Emerging Markets Dividend	EDIV	0.49	294.8	11.25	3.86	6.15
VictoryShares MSCI EM Value Momentum	UEVM	0.45	238.1	11.07	8.46	-
iShares Emerging Markets Dividend	DVYE	0.49	826.2	11.02	7.71	8.45
iShares MSCI Emerging Markets ex China	EMXC	0.25	2,117.0	8.55	12.33	-
Invesco FTSE RAFI Emerging Markets	PXH	0.50	1,378.6	8.38	7.48	7.50
iShares MSCI South Africa	EZA	0.59	308.0	7.92	3.90	2.67
First Trust Emerging Markets AlphaDEX	FEM	0.80	434.3	7.35	8.36	8.69
iShares MSCI Emerging Markets Multifactor	EMGF	0.45	875.9	6.67	12.47	10.21
KraneShares MSCI China Clean Technology	KGRN	0.79	182.4	5.91	41.49	-
Avantis Emerging Markets Equity	AVEM	0.33	984.3	5.16	-	-
iShares MSCI Emerging Markets Min Vol Factor	EEMV	0.25	3,773.1	5.05	6.59	7.74
FlexShares Mstar EM Factor Tilt	TLTE	0.59	324.5	4.81	10.40	8.09
iShares MSCI China A	CNYA	0.60	926.9	3.53	25.82	13.89
KraneShares Bosera MSCI China A Share	KBA	0.60	750.3	3.31	25.61	13.69
Dimensional Emerging Core Equity Market	DFAE	0.35	588.8	2.73	-	-
John Hancock Multifactor Emerging Markets	JHEM	0.49	701.1	2.09	10.24	-
iShares MSCI Thailand	THD	0.59	395.6	1.85	-0.18	3.72
SPDR Portfolio Emerging Markets	SPEM	0.11	5,563.1	1.54	11.26	10.01
Vanguard FTSE Emerging Markets	VWO	0.10	81,120.7	1.30	12.11	9.57
iShares MSCI Indonesia	EIDO	0.59	372.6	-0.60	-0.94	0.67
iShares Core MSCI Emerging Markets	IEMG	0.11	76,730.8	-0.61	11.34	10.04
Schwab Emerging Markets Equity	SCHE	0.11	9,245.3	-0.67	10.99	9.42
Goldman Sachs ActiveBeta Emerging Markets	GEM	0.45	1,325.6	-0.72	9.60	9.03
Xtrackers Harvest CSI 300 China A-Shares	ASHR	0.65	2,809.1	-1.56	22.35	11.83
iShares Curr Hedged MSCI Emerging Markets	HEEM	0.70	205.0	-1.82	11.13	9.25

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
SPDR S&P Emerging Asia Pacific	GMF	0.49	546.7	-1.90	13.70	12.31
iShares ESG Aware MSCI EM	ESGE	0.25	6,223.7	-2.84	11.52	10.30
iShares MSCI Emerging Markets	EEM	0.70	29,018.5	-3.62	10.06	9.16
iShares MSCI Emerging Markets Asia	EEMA	0.50	821.6	-4.18	12.46	11.43
WisdomTree Emerging Markets ex-SOE	XSOE	0.32	3,793.6	-5.92	14.73	12.91
iShares MSCI Malaysia	EWM	0.51	240.0	-7.41	-1.98	-
iShares MSCI South Korea	EWY	0.59	4,543.2	-7.56	11.64	9.94
iShares Latin America 40	ILF	0.48	823.4	-13.48	-4.56	0.45
Franklin FTSE Brazil	FLBR	0.19	229.5	-16.75	-5.09	-
iShares MSCI Brazil	EWZ	0.59	4,796.6	-17.28	-5.60	0.27
SPDR S&P China	GXC	0.59	1,470.6	-19.68	8.24	9.17
iShares MSCI Chile	ECH	0.59	424.8	-19.71	-15.05	-6.76
iShares MSCI China	MCHI	0.59	5,886.5	-21.73	7.35	8.95
WisdomTree China ex-SOE	CXSE	0.32	1,040.4	-23.67	18.84	16.65
iShares MSCI Turkey	TUR	0.59	278.7	-27.48	-6.41	-7.97
Invesco Golden Dragon China	PGJ	0.69	208.5	-42.87	5.21	5.63
KraneShares CSI China Internet	KWEB	0.76	6,243.6	-48.88	1.66	3.35
JPMorgan ActiveBuilders Emerging Markets	JEMA	0.39	334.5	-	-	-
INTERNATIONAL EQUITY: FRONTIER						
iShares MSCI Frontier and Select EM	FM	0.79	507.4	24.35	12.91	9.97
VanEck Vietnam	VNM	0.66	585.6	22.05	13.64	11.08
GLOBAL EQUITY: SECTOR						
VanEck Rare Earth/Strategic Metals	REMX	0.59	1,010.1	80.16	44.06	22.47
North Shore Global Uranium Mining	URNM	0.85	678.1	67.88	-	-
Global X Uranium	URA	0.69	1,156.5	57.72	29.06	14.85
iShares Global Energy	IXC	0.43	1,542.0	40.97	3.11	-0.29
Global X Lithium & Battery Tech	LIT	0.75	5,561.0	36.74	47.63	30.39
iShares Global REIT	REET	0.14	3,638.6	32.42	13.79	8.45
FlexShares Global Quality Real Estate	GQRE	0.45	461.8	32.03	13.49	8.64
Invesco S&P Global Water	CGW	0.57	1,260.1	31.71	26.78	18.33
Amplify Transformational Data Sharing	BLOK	0.71	1,171.3	31.19	47.85	-
SPDR Dow Jones Global Real Estate	RWO	0.50	1,811.7	31.03	12.47	7.59
Davis Select Financial	DFNL	0.64	215.5	30.99	16.61	-
iShares Global Tech	IXN	0.43	5,953.9	29.59	40.14	29.73
First Trust NASDAQ Technology Dividend	TDIV	0.50	1,830.4	29.47	26.56	19.07
First Trust NASDAQ Smart Grid Infrastructure	GRID	0.70	819.3	27.59	38.78	20.83
Invesco Global Listed Private Equity	PSP	1.44	280.4	27.36	24.86	15.43
iShares Self-Driving EV and Tech	IDRV	0.47	622.7	27.00	-	-
FlexShares Mstar Glb Upstr Natural Resources	GUNR	0.46	6,590.7	26.12	14.50	10.06
Invesco Global Water	PIO	0.75	361.7	25.98	24.96	17.39
Defiance Next Gen Connectivity	FIVG	0.30	1,386.7	25.68	-	-
iShares Global Financials	IXG	0.43	2,782.9	25.10	14.78	9.39
VanEck Retail	RTH	0.35	237.6	24.95	28.52	21.98
SPDR S&P Global Natural Resources	GNR	0.40	2,324.7	24.74	13.24	9.10
KraneShares Electric Vehicles/Future Mobility	KARS	0.70	335.6	24.17	41.98	-
VanEck Agribusiness	MOO	0.56	1,180.4	24.01	20.25	14.75
Global X Copper Miners	COPX	0.65	1,666.3	23.39	28.14	14.96
iShares MSCI Global Metals & Mining Producers	PICK	0.39	1,033.4	22.64	22.11	-
VanEck Oil Services	OIH	0.35	2,150.0	21.25	-11.69	-21.18
First Trust Indxx NextG	NXTG	0.70	1,080.9	19.69	25.54	15.95
iShares Global Healthcare	IXJ	0.43	3,708.4	19.59	18.44	15.52
First Trust NASDAQ Cybersecurity	CIBR	0.60	5,801.2	19.03	31.15	22.03
iShares MSCI ACWI Low Carbon Target	CRBN	0.20	1,339.3	18.83	21.32	14.75
VanEck Pharmaceutical	PPH	0.35	369.2	17.79	14.06	9.98
iShares Global Industrials	EXI	0.43	406.0	17.38	18.44	12.22
iShares Global Timber & Forestry	WOOD	0.43	318.8	17.03	19.04	13.29
Amplify Lithium & Battery Technology	BATT	0.59	234.5	16.53	17.98	-
iShares Exponential Technologies	XT	0.46	4,264.0	16.43	27.16	21.20
iShares Global Consumer Discretionary	RXI	0.43	445.3	16.33	22.44	16.15
ROBO Global Robotics and Automation	ROBO	0.95	1,960.1	15.14	29.39	19.83
iShares Global Materials	MXI	0.43	627.7	15.08	19.81	13.48

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
Global X SuperDividend REIT	SRET	0.58	429.1	14.00	-4.14	-0.41
Global X Millennial Consumer	MILLN	0.50	225.6	13.99	29.71	22.75
iShares Global Consumer Staples	KXI	0.43	1,058.6	13.69	14.74	9.67
Global X Cybersecurity	BUG	0.50	1,149.9	13.23	-	-
iShares Global Comm Services	IXP	0.43	308.2	12.77	19.92	9.69
iShares Global Infrastructure	IGF	0.43	3,228.1	11.58	9.49	7.12
SPDR S&P Global Infrastructure	GII	0.40	462.8	11.40	9.45	7.02
iShares Cybersecurity and Tech	IHAK	0.47	610.9	11.13	-	-
ProShares Pet Care	PAWZ	0.50	330.8	10.45	29.98	-
Goldman Sachs Innovate Equity	GINN	0.50	485.2	10.39	-	-
First Trust Nasdaq AI & Robotics	ROBT	0.65	298.4	9.91	29.21	-
FlexShares STOXX Global Broad Infrastructure	NFRA	0.47	2,610.1	9.63	12.29	8.66
3D Printing	PRNT	0.66	397.0	8.99	19.99	10.88
ETFMG Prime Cyber Security	HACK	0.60	2,258.8	7.03	23.12	18.95
iShares Robotics & AI Multisector	IRBO	0.47	434.2	6.35	28.64	-
ALPS Disruptive Technologies	DTEC	0.50	242.8	4.89	26.98	-
Siren Nasdaq NexGen Economy	BLCN	0.68	264.4	4.32	29.89	-
SPDR S&P Kensho New Economies Composite	KOMP	0.20	2,047.7	3.69	31.87	-
Invesco MSCI Sustainable Future	ERTH	0.55	458.0	2.51	28.31	19.26
ARK Autonomous Technology & Robotics	ARKQ	0.75	2,167.6	1.75	38.48	30.08
ROBO Global Healthcare Tech & Innovation	HTEC	0.68	220.2	-0.33	-	-
VanEck Video Gaming and eSports	ESPO	0.55	611.0	-2.08	36.87	-
VanEck Low Carbon Energy	SMOG	0.62	301.3	-2.74	43.41	26.59
Global X Cloud Computing	CLOU	0.68	1,218.1	-3.29	-	-
ARK Israel Innovative Technology	IZRL	0.49	216.2	-3.55	16.35	-
Roundhill Sports Betting & iGaming	BETZ	0.75	291.8	-3.91	-	-
iShares Genomics Immunology/Healthcare	IDNA	0.47	333.0	-3.99	-	-
U.S. Global Jets	JETS	0.60	3,237.1	-5.14	-8.30	-4.94
iShares MSCI Global Gold Miners	RING	0.39	507.7	-7.49	20.12	-
Global X Video Games & Esports	HERO	0.50	431.3	-8.38	-	-
Sprott Gold Miners	SGDM	0.50	229.9	-9.13	16.89	8.40
O'Shares Global Internet Giants	OGIG	0.48	490.7	-9.30	37.18	-
VanEck Gold Miners	GDX	0.52	13,155.5	-9.52	16.08	9.82
First Trust Global Wind Energy	FAN	0.62	345.6	-12.11	21.35	11.85
ETFMG Prime Mobile Payments	IPAY	0.75	1,012.7	-12.72	18.45	17.98
Global X Social Media	SOCL	0.65	340.4	-12.84	25.03	20.38
Global X Telemedicine & Digital Health	EDOC	0.68	302.1	-14.21	-	-
Global X Genomics & Biotechnology	GNOM	0.50	249.9	-15.96	-	-
ARK Next Generation Internet	ARKW	0.83	3,875.9	-16.71	42.79	41.54
ARK Fintech Innovation	ARKF	0.75	2,244.0	-17.82	-	-
Global X Silver Miners	SIL	0.65	1,039.3	-18.36	15.54	4.00
VanEck Junior Gold Miners	GDXJ	0.53	4,437.6	-21.25	13.04	6.81
ETFMG Alternative Harvest	MJ	0.75	817.1	-21.66	-20.90	-11.61
Invesco Global Clean Energy	PBD	0.75	325.3	-22.29	38.73	22.63
ETFMG Prime Junior Silver Miners	SILJ	0.69	764.5	-23.21	17.06	1.74
ARK Innovation	ARKK	0.75	16,556.9	-23.38	37.80	38.38
AdvisorShares Pure Cannabis	YOLO	0.76	191.1	-23.53	-	-
iShares MSCI Global Silver and Metals Miners	SLVP	0.39	247.2	-23.55	18.12	6.06
iShares Global Clean Energy	ICLN	0.42	5,603.7	-24.18	38.32	23.94
Invesco Solar	TAN	0.69	2,729.4	-25.10	60.90	36.74
Invesco WilderHill Clean Energy	PBW	0.61	1,567.7	-29.82	51.51	33.12
AdvisorShares Pure US Cannabis	MSOS	0.73	1,132.7	-29.89	-	-
Emerging Markets Internet & Ecommerce	EMQQ	0.86	1,021.5	-32.53	17.68	13.98
ARK Genomic Revolution	ARKG	0.75	5,142.3	-33.92	38.75	31.36
Roundhill Ball Metaverse	META	0.75	940.5	-	-	-
ARK Space Exploration & Innovation	ARKX	0.75	472.3	-	-	-
Goldman Sachs Future Tech Leaders Equity	GTEK	0.75	281.6	-	-	-
GLOBAL EX-U.S. EQUITY: SECTOR						
VanEck Biotech	BBH	0.35	570.7	11.81	19.97	12.43
Xtrackers International Real Estate	HAUZ	0.10	573.6	9.83	7.28	7.44
SPDR Dow Jones International Real Estate	RWX	0.59	830.4	9.37	6.06	4.81

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
iShares International Developed Real Estate	IFGL	0.48	270.8	8.31	6.45	6.27
Vanguard Global ex-U.S. Real Estate	VNQI	0.12	4,736.6	5.90	6.12	6.56
INTERNATIONAL EQUITY: DEVELOPED SECTOR						
iShares MSCI Europe Financials	EUFN	0.48	1,612.2	19.16	9.57	5.12
INTERNATIONAL EQUITY: EMERGING SECTOR						
Xtrackers EM Carb Reduc & Climate Improvers	EMCR	0.15	464.3	5.54	13.61	14.11
Invesco China Technology	COQQ	0.70	1,387.0	-24.54	16.62	12.52
Global X MSCI China Consumer Discretionary	CHIQ	0.65	508.1	-27.07	26.53	19.37
GLOBAL EQUITY: HIGH DIVIDEND YIELD						
First Trust Dow Jones Global Select Dividend	FGD	0.59	516.7	18.46	7.53	3.13
SPDR S&P Global Dividend	WDIV	0.40	287.1	14.46	7.33	6.06
Global X SuperDividend	SDIV	0.59	901.1	3.76	-2.71	-2.63
GLOBAL EX-U.S. EQUITY: HIGH DIVIDEND YIELD						
Vanguard International High Dividend Yield	VYMI	0.27	3,185.7	15.41	10.60	7.65
SPDR S&P International Dividend	DWX	0.45	624.2	10.56	8.07	5.94
INTERNATIONAL EQUITY: HIGH DIVIDEND YIELD						
First Trust Stoxx European Select Dividend	FDD	0.58	292.5	15.55	7.56	4.60
iShares International Select Dividend	IDV	0.49	4,372.3	12.02	9.13	6.90
U.S. FIXED INCOME: BROAD MARKET - BROAD MATURITIES						
iShares ESG Advanced Total USD Bond Market	EUSB	0.12	635.8	-1.29	-	-
iShares Core Total USD Bond Market	IUSB	0.06	16,652.7	-1.33	5.04	3.71
Fidelity Corporate Bond	FCOR	0.36	280.7	-1.64	7.96	5.30
U.S. FIXED INCOME: BROAD MARKET - LONG-TERM						
iShares Core 10+ Year USD Bond	ILTB	0.06	353.1	-2.67	10.56	7.37
U.S. FIXED INCOME: BROAD MARKET - SHORT-TERM						
VictoryShares USAA Core Short-Term Bond	USTB	0.35	387.1	0.79	3.50	-
First Trust Enhanced Short Maturity	FTSM	0.25	4,253.1	-0.04	1.30	1.45
iShares Core 1-5 Year USD Bond	ISTB	0.06	6,335.7	-0.71	3.18	2.45
First Trust Low Duration Strategic Focus	LDSF	0.77	252.7	-0.89	-	-
U.S. FIXED INCOME: GOVERNMENT/CREDIT - INTERMEDIATE						
VictoryShares USAA Core Intermediate Bond	UITB	0.40	1,204.5	0.31	6.89	-
Vident Core US Bond Strategy	VBND	0.39	417.6	-0.43	4.74	3.26
U.S. FIXED INCOME: GOVERNMENT/CREDIT - LONG-TERM						
iShares Int Rate Hdgd Long-Term Corporate	IGBH	0.16	817.8	2.20	4.23	3.50
iShares 10+ Year Inv Grade Corporate Bond	IGLB	0.06	2,508.5	-1.69	11.13	7.46
Vanguard Long-Term Corporate Bond	VCLT	0.04	5,366.5	-1.74	11.31	7.45
SPDR Portfolio Long Term Corporate Bond	SPLB	0.04	1,044.3	-2.00	11.15	7.39
U.S. FIXED INCOME: GOVERNMENT						
iShares New York Muni Bond	NYF	0.25	547.0	1.34	3.99	3.52
iShares Treasury Floating Rate Bond	TFLO	0.15	341.8	-0.02	0.82	1.04
WisdomTree Floating Rate Treasury	USFR	0.15	1,844.2	-0.03	0.85	0.99
iShares US Treasury Bond	GOVT	0.05	16,268.6	-1.11	4.43	3.13
Franklin Liberty US Treasury Bond	FLGV	0.09	415.7	-2.39	-	-
Invesco 1-30 Laddered Treasury	PLW	0.25	414.3	-3.76	6.01	4.52
U.S. FIXED INCOME: TREASURY - SHORT TERM						
iShares 0-3 Month Treasury Bond	SGOV	0.03	815.2	0.04	-	-
Invesco Treasury Collateral	CLTL	0.08	615.8	-0.01	1.08	-
Goldman Sachs Access Treasury 0-1 Year	GBIL	0.12	1,812.7	-0.08	0.90	1.03
SPDR Bloomberg 1-3 Month T-Bill	BIL	0.14	13,585.8	-0.10	0.77	0.95
iShares Short Treasury Bond	SHV	0.15	13,087.2	-0.10	1.02	1.09
Vanguard Short-Term Treasury	VGSH	0.04	13,764.2	-0.60	1.97	1.50
Schwab Short-Term US Treasury	SCHO	0.05	9,229.3	-0.64	1.96	1.55
iShares 1-3 Year Treasury Bond	SHY	0.15	20,612.4	-0.71	1.88	1.47
SPDR Portfolio Short Term Treasury	SPTS	0.06	3,889.0	-0.72	2.00	1.53
Franklin Liberty Short Duration US Govt	FTSD	0.25	399.5	-0.90	1.53	1.36
U.S. FIXED INCOME: TREASURY - INTERMEDIATE						
iShares 3-7 Year Treasury Bond	IEI	0.15	10,309.6	-2.54	3.28	2.48
SPDR Portfolio Intermediate Term Treasury	SPTI	0.06	3,483.1	-2.55	3.62	2.83
Schwab Intermediate-Term US Treasury	SCHR	0.05	3,524.0	-2.62	3.66	2.80
Vanguard Intermediate-Term Treasury	VGIT	0.04	9,493.8	-2.64	3.65	2.80
iShares 7-10 Year Treasury Bond	IEF	0.15	17,762.5	-3.33	4.73	3.54

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
U.S. FIXED INCOME: TREASURY - LONG-TERM						
iShares 20+ Year Treasury Bond	TLT	0.15	19,717.9	-4.60	8.75	6.68
iShares 25+ Year Treasury STRIPS Bond	GOVZ	0.15	386.8	-4.87	-	-
Vanguard Long-Term Treasury	VGLT	0.04	2,970.1	-4.98	8.49	6.44
SPDR Portfolio Long Term Treasury	SPTL	0.06	4,845.6	-5.00	8.46	6.49
PIMCO 25+ Year Zero Coupon US Treasury	ZROZ	0.15	395.8	-5.24	12.69	9.39
iShares 10-20 Year Treasury Bond	TLH	0.15	1,525.1	-5.38	5.84	4.40
Vanguard Extended Duration Treasury	EDV	0.06	1,333.1	-6.20	11.23	8.66
U.S. FIXED INCOME: AGENCIES						
iShares Agency Bond	AGZ	0.20	755.6	-1.05	3.36	2.68
U.S. FIXED INCOME: AGENCY MBS						
Janus Henderson Mortgage-Backed Securities	JMBS	0.32	870.0	-0.58	4.05	-
Vanguard Mortgage-Backed Securities	VMBS	0.04	15,300.4	-1.28	2.84	2.38
First Trust Low Duration Opportunities	LMBS	0.68	6,229.1	-1.37	-0.19	-0.55
iShares MBS	MBB	0.06	25,586.6	-1.43	2.89	2.40
SPDR Portfolio Mortgage Backed Bond	SPMB	0.04	4,223.1	-1.46	2.91	2.37
iShares GNMA Bond	GNMA	0.11	462.7	-1.86	2.45	1.99
U.S. FIXED INCOME: TIPS						
PIMCO 15+ Year US TIPS	LTPZ	0.20	993.4	7.00	16.22	9.75
PIMCO Broad US TIPS	TIPZ	0.20	246.1	5.92	8.49	5.35
Schwab US TIPS	SCHP	0.05	21,248.3	5.86	8.40	5.28
SPDR Portfolio TIPS	SPIP	0.12	3,726.0	5.79	8.64	5.43
iShares 0-5 Year TIPS Bond	STIP	0.05	8,952.2	5.68	5.25	3.38
iShares TIPS Bond	TIP	0.19	38,772.3	5.67	8.26	5.18
PIMCO 1-5 Year US TIPS	STPZ	0.20	1,347.3	5.64	5.30	3.29
FlexShares iBoxx 5-Year Target Duration TIPS	TDTF	0.18	771.3	5.54	7.82	4.85
FlexShares iBoxx 3 Year Target Duration TIPS	TDTT	0.18	1,500.7	5.49	6.02	3.71
SPDR Bloomberg Barclays 1-10 Year TIPS	TIPX	0.15	1,162.3	5.42	6.83	4.50
Vanguard Short-Term Inflation-Protected Sec	VTIP	0.05	19,718.8	5.36	5.05	3.29
Goldman Sachs Access Inflation Prot USD Bond	GTIP	0.12	209.1	3.49	7.28	-
Quadratic Int Rate Vol & Inflation Hedge	IVOL	1.05	2,446.0	-0.32	-	-
U.S. FIXED INCOME: MUNICIPAL - BROAD MARKET						
VanEck CEF Muni Income	XMPT	2.32	221.6	7.93	11.86	7.37
First Trust Municipal High Income	FMHI	0.55	384.1	7.58	7.21	-
American Century Diversified Municipal Bond	TAXF	0.29	204.2	2.72	5.65	-
First Trust Managed Municipal	FMB	0.50	2,497.3	2.43	4.95	4.57
Invesco National AMT-Free Municipal Bond	PZA	0.28	2,576.7	2.37	5.44	4.61
Hartford Municipal Opportunities	HMOP	0.29	232.3	1.80	4.12	-
Columbia Multi-Sector Municipal Income	MUST	0.23	186.2	1.74	5.55	-
Vanguard Tax-Exempt Bond	VTEB	0.06	14,957.3	1.14	4.53	3.89
IQ MacKay Municipal Insured	MMIN	0.31	506.8	1.02	5.42	-
iShares National Muni Bond	MUB	0.07	25,160.0	1.02	4.37	3.74
Invesco Taxable Municipal Bond	BAB	0.28	2,467.2	1.00	6.89	6.25
iShares California Muni Bond	CMF	0.25	1,946.9	0.78	4.04	3.54
U.S. FIXED INCOME: MUNICIPAL - SHORT-TERM						
First Trust Short Duration Managed Municipal	FSMB	0.45	194.8	1.20	2.78	-
JPMorgan Ultra-Short Municipal Income	JMST	0.18	2,379.2	0.31	1.46	-
PIMCO Short Term Municipal Bond Active	SMMU	0.35	566.4	0.17	2.16	2.10
VanEck Short Muni	SMB	0.20	334.9	0.12	2.68	2.21
iShares iBonds Dec 2022 Term Muni Bond	IBMK	0.18	381.8	0.08	1.98	2.00
iShares iBonds Dec 2023 Term Muni Bond	IBML	0.18	347.2	0.08	2.49	-
BlackRock Short Maturity Municipal Bond	MEAR	0.25	298.0	0.05	1.04	1.18
iShares Short-Term National Muni Bond	SUB	0.07	6,822.2	0.03	1.82	1.61
SPDR Nuveen Bloomberg Short Term Muni	SHM	0.20	5,214.9	-0.37	1.96	1.69
U.S. FIXED INCOME: MUNICIPAL - INTERMEDIATE						
IQ MacKay Municipal Intermediate	MMIT	0.31	274.6	0.87	4.74	-
PIMCO Intermediate Municipal Bond Active	MUNI	0.35	700.6	0.67	4.16	3.67
iShares iBonds Dec 2024 Term Muni Bond	IBMM	0.18	260.1	-0.16	3.06	-
iShares iBonds Dec 2025 Term Muni Bond	IBMN	0.18	196.4	-0.41	3.72	-
VanEck Intermediate Muni	ITM	0.24	1,943.9	-0.52	4.51	4.11

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
U.S. FIXED INCOME: MUNICIPAL - LONG-TERM						
VanEck Long Muni	MLN	0.24	257.9	2.20	6.28	5.21
Invesco California AMT-Free Municipal Bond	PWZ	0.28	565.8	1.94	5.15	4.50
SPDR Nuveen Bloomberg Municipal Bond	TFI	0.23	4,244.9	0.25	4.50	3.89
U.S. FIXED INCOME: MUNICIPAL - HIGH YIELD						
SPDR Nuveen Bloomberg High Yield Muni	HYMB	0.35	1,900.7	5.15	6.11	5.29
VanEck Short High Yield Muni	SHYD	0.35	441.9	4.04	4.35	4.24
VanEck High Yield Muni	HYD	0.35	3,721.3	3.47	4.47	5.04
U.S. FIXED INCOME: CORPORATE - INVESTMENT GRADE - BROAD MATURITIES						
iShares Interest Rate Hedged Corporate Bond	LQDH	0.24	1,081.1	1.84	4.28	3.29
WisdomTree Interest Rate Hedged US Agg	AGZD	0.23	242.7	0.69	1.87	1.69
ProShares Investment Grade-Int Rate Hedged	IGHG	0.30	1,035.0	0.25	4.06	2.49
Fidelity Low Duration Bond Factor	FLDR	0.15	229.4	-0.18	2.10	-
Principal Investment Grade Corporate Active	IG	0.19	489.6	-0.93	8.25	-
PIMCO Investment Grade Corporate Bond	CORP	0.20	810.8	-1.19	7.56	5.17
iShares ESG Aware US Aggregate Bond	EAGG	0.10	1,766.8	-1.30	4.83	-
iShares Broad USD Investment Grade Corp	ISIG	0.04	6,577.5	-1.34	7.17	4.94
SPDR Portfolio Corporate Bond	SPBO	0.03	365.6	-1.35	7.66	5.27
Vanguard Total Corporate Bond	VTC	0.04	706.5	-1.41	7.29	-
iShares ESG Aware USD Corporate Bond	SUSC	0.18	906.5	-1.57	7.26	-
WisdomTree Yield Enh US Aggregate Bond	AGGY	0.12	1,105.7	-1.72	5.16	3.76
Schwab US Aggregate Bond	SCHZ	0.04	9,068.0	-1.72	4.69	3.49
Franklin Liberty US Core Bond	FLCB	0.15	1,689.9	-1.73	-	-
iShares Core US Aggregate Bond	AGG	0.04	92,095.1	-1.77	4.62	3.49
SPDR Portfolio Aggregate Bond	SPAB	0.03	6,519.0	-1.78	4.65	3.48
JPMorgan US Aggregate Bond	JAGG	0.07	1,104.2	-1.79	4.46	-
iShares iBoxx USD Investment Grade Corp	LQD	0.14	38,945.7	-1.84	8.53	5.66
Vanguard Total Bond Market	BND	0.04	84,157.2	-1.86	4.78	3.54
Goldman Sachs Access US Aggregate Bond	GCOR	0.14	252.8	-1.88	-	-
Vanguard ESG US Corporate Bond	VCEB	0.12	294.0	-1.99	-	-
Nuveen Enhanced Yield US Aggregate Bond	NUAG	0.20	361.8	-2.03	5.06	3.48
Franklin Liberty Investment Grade Corporate	FLCO	0.35	1,026.8	-2.06	7.34	4.73
Nuveen ESG US Aggregate Bond	NUBD	0.15	269.7	-2.19	4.29	-
iShares Aaa-A Rated Corporate Bond	QLTA	0.15	1,175.1	-2.32	6.41	4.48
Goldman Sachs Access Investment Grade Corp	GIGB	0.14	789.9	-2.38	7.09	-
Vanguard Long-Term Bond	BLV	0.05	6,199.4	-2.90	10.19	8.35
BNY Mellon Core Bond	BKAG	0.00	228.1	-2.96	-	-
U.S. FIXED INCOME: CORPORATE - INVESTMENT GRADE - SHORT-TERM						
PGIM Ultra Short Bond	PULS	0.15	1,985.5	0.48	1.71	-
ClearShares Ultra-Short Maturity	OPER	0.20	180.1	0.37	1.05	-
SPDR SSGA Ultra Short Term Bond	ULST	0.20	447.4	0.25	1.64	1.63
Invesco BulletShares 2022 Corporate Bond	BSCM	0.10	2,418.3	0.19	3.69	2.96
BlackRock Ultra Short-Term Bond	ICSH	0.08	6,088.4	0.16	1.64	1.76
iShares iBonds Dec 2022 Term Corporate	IBDN	0.10	1,572.9	0.11	3.74	2.85
JPMorgan Ultra-Short Income	JPST	0.18	18,460.5	0.11	1.87	-
PIMCO Enhanced Short Maturity Active	MINT	0.35	13,676.7	-0.03	1.63	1.69
SPDR Portfolio Short Term Corporate Bond	SPSB	0.07	7,932.4	-0.20	2.92	2.36
Goldman Sachs Access Ultra Short Bond	GSST	0.16	349.6	-0.20	-	-
Invesco BulletShares 2023 Corporate Bond	BSCN	0.10	2,286.8	-0.22	4.51	3.59
iShares 1-5 Year Investment Grade Corporate	IGSB	0.06	23,001.6	-0.56	3.92	2.85
iShares 0-5 Year Investment Grade Corporate	SLQD	0.06	2,487.2	-0.61	3.37	2.66
Vanguard Short-Term Corporate Bond	VCSH	0.04	41,658.5	-0.63	3.79	2.89
Schwab 1-5 Year Corporate Bond	SCHJ	0.05	617.0	-0.67	-	-
iShares ESG Aware 1-5 Yr USD Corporate Bond	SUSB	0.12	1,061.6	-0.76	3.69	-
Vanguard Short-Term Bond	BSV	0.05	42,051.8	-1.09	2.83	2.20
Vanguard Ultra-Short Bond	VUSB	0.10	2,039.6	-	-	-
U.S. FIXED INCOME: CORPORATE - INVESTMENT GRADE - INTERMEDIATE						
iShares iBonds Dec 2023 Term Corporate	IBDO	0.10	1,668.3	-0.29	4.60	3.53
Invesco BulletShares 2024 Corporate Bond	BSCO	0.10	1,782.1	-0.54	5.58	4.12
iShares iBonds Dec 2024 Term Corporate	IBDP	0.10	1,569.1	-0.64	5.39	4.05
SPDR Portfolio Intermediate Term Corp Bond	SPIB	0.04	5,624.7	-1.24	5.44	3.89

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
Invesco BulletShares 2025 Corporate Bond	BSCP	0.10	1,155.2	-1.37	6.26	4.48
FlexShares Credit-Scored US Corporate Bond	SKOQ	0.22	321.8	-1.40	5.91	4.13
iShares iBonds Dec 2025 Term Corporate	IBDQ	0.10	1,297.7	-1.49	6.61	4.68
iShares iBonds Dec 2027 Term Corporate	IBDS	0.10	536.2	-1.56	7.27	-
iShares 5-10 Year Inv Grade Corporate Bond	IGIB	0.06	11,604.0	-1.67	7.30	4.89
Invesco BulletShares 2026 Corporate Bond	BSCQ	0.10	703.5	-1.68	7.03	4.86
Invesco BulletShares 2027 Corporate Bond	BSCR	0.10	393.9	-1.72	7.40	-
Vanguard Intermediate-Term Corporate Bond	VCIT	0.04	47,083.4	-1.77	7.05	4.89
iShares iBonds Dec 2026 Term Corporate	IBDR	0.10	955.1	-1.79	7.08	4.81
Schwab 5-10 Year Corporate Bond	SCHI	0.05	377.7	-1.86	-	-
Invesco BulletShares 2028 Corporate Bond	BSCS	0.10	238.2	-1.89	7.65	-
iShares iBonds Dec 2028 Term Corporate	IBDT	0.10	311.3	-1.91	7.38	-
Inspire Corporate Bond Impact	IBD	0.49	229.2	-2.15	3.52	-
U.S. FIXED INCOME: CORPORATE - INVESTMENT GRADE - FLOATING RATE						
Invesco Variable Rate Investment Grade	VRIG	0.30	475.9	1.06	2.45	2.21
VanEck Investment Grade Floating Rate	FLTR	0.14	763.1	0.55	2.54	2.14
iShares Floating Rate Bond	FLOT	0.15	7,196.8	0.45	1.75	1.68
SPDR Bloomberg Inv Grade Floating Rate	FLRN	0.15	2,454.7	0.39	1.72	1.67
U.S. FIXED INCOME: CORPORATE - HIGH YIELD - BROAD MATURITIES						
VanEck Fallen Angel High Yield Bond	ANGL	0.35	5,401.9	6.84	12.69	8.13
WisdomTree Int Rate Hedged High Yield Bond	HYZD	0.43	213.4	6.27	4.86	3.69
FlexShares High Yield Value-Scored Bond	HYGV	0.37	647.2	5.92	9.82	-
SPDR Portfolio High Yield Bond	SPHY	0.10	593.9	5.60	8.42	5.75
iShares Fallen Angels USD Bond	FALN	0.25	4,980.2	5.39	12.44	7.98
iShares Edge High Yield Defensive Bond	HYDB	0.35	187.0	5.13	9.45	-
iShares Broad USD HiYld Corp Bond	USHY	0.15	8,860.5	5.01	8.40	-
Franklin Liberty Senior Loan	FLBL	0.45	216.1	4.35	4.70	-
WisdomTree US HiYld Corp Bond	WFHY	0.38	183.8	4.12	8.46	5.56
SPDR Bloomberg High Yield Bond	JNK	0.40	9,621.8	3.99	7.83	5.25
JPMorgan High Yield Research Enhanced	JPHY	0.24	1,544.6	3.88	7.76	5.30
iShares iBoxx USD HiYld Corp Bond	HYG	0.48	21,396.7	3.75	7.34	5.15
Xtrackers USD HiYld Corp Bond	HYLB	0.15	6,582.4	3.75	7.36	5.19
Invesco Senior Loan	BKLN	0.65	6,328.0	2.32	4.40	2.78
Xtrackers Low Beta High Yield Bond	HYDW	0.20	1,038.4	2.22	6.19	-
Goldman Sachs Access HiYld Corp Bond	GHYB	0.34	204.0	2.09	7.27	-
Pacer Trendpilot US Bond	PTBD	0.60	1,327.9	0.46	-	-
U.S. FIXED INCOME: CORPORATE - HIGH YIELD - SHORT-TERM						
SPDR Bloomberg Short Term High Yield Bond	SJNK	0.40	4,202.0	5.05	6.77	5.03
PIMCO 0-5 Year HiYld Corp Bond	HYS	0.55	1,797.4	4.76	6.04	4.60
iShares 0-5 Year HiYld Corp Bond	SHYG	0.30	5,482.0	4.60	5.86	4.51
Invesco BulletShares 2022 HiYld Corp Bond	BSJM	0.42	919.3	2.83	4.26	3.19
U.S. FIXED INCOME: CORPORATE - HIGH YIELD - INTERMEDIATE						
Invesco BulletShares 2025 HiYld Corp Bond	BSJP	0.42	323.7	4.57	8.24	-
Invesco BulletShares 2024 HiYld Corp Bond	BSJO	0.42	441.4	4.38	6.92	4.79
Invesco Fundamental HiYld Corp Bond	PHB	0.50	989.6	3.32	7.28	4.78
Invesco BulletShares 2023 HiYld Corp Bond	BSJN	0.42	748.4	3.29	5.53	4.12
iShares Intermediate Govt/Credit Bond	GVI	0.20	2,688.0	-1.91	3.59	2.67
iShares Government/Credit Bond	GBF	0.20	443.4	-2.30	5.17	3.79
Vanguard Intermediate-Term Bond	BIV	0.05	14,363.5	-2.41	5.70	4.09
U.S. FIXED INCOME: CORPORATE - ASSET-BACKED						
First Trust TCW Securitized Plus	DEED	0.65	303.9	0.90	-	-
iShares CMBS	CMBS	0.25	845.4	-1.82	4.56	3.47
U.S. FIXED INCOME: CORPORATE - CONVERTIBLES						
SPDR Bloomberg Convertible Securities	CWB	0.40	6,454.8	2.17	24.24	16.82
iShares Convertible Bond	ICVT	0.20	1,638.2	-0.51	24.94	17.74
U.S. FIXED INCOME: CORPORATE - PREFERRED STOCK						
VanEck Preferred Securities ex Financials	PXFX	0.40	1,100.7	11.59	13.11	8.40
iShares Preferred and Income Securities	PFF	0.46	20,567.7	7.14	10.25	6.68
Global X US Preferred	PFFD	0.23	2,564.7	5.07	10.17	-
Invesco Variable Rate Preferred	VRP	0.50	2,073.9	4.20	9.35	5.93

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
Invesco Preferred	PGX	0.52	7,598.0	3.15	9.14	6.63
Invesco Financial Preferred	PGF	0.55	1,782.5	2.65	8.05	6.32
SPDR ICE Preferred Securities	PSK	0.45	1,413.3	1.56	8.30	6.03
Innovator S&P Investment Grade Preferred	EPRF	0.47	217.9	-	-	-
GLOBAL FIXED INCOME						
First Trust Preferred Securities & Income	FPE	0.85	8,012.3	5.24	9.49	6.77
First Trust SSI Strategic Convertible Securities	FCVT	0.95	217.2	4.10	24.31	16.19
First Trust TCW Unconstrained Plus Bond	UCON	0.76	843.2	2.32	3.12	-
Invesco Global Short Term High Yield Bond	PGHY	0.35	232.7	1.22	3.36	2.68
Janus Henderson AAA CLO	JAAA	0.25	372.7	1.12	-	-
FormulaFolios Tactical Income	FTTI	0.93	181.8	0.93	3.89	-
BlackRock Short Maturity Bond	NEAR	0.25	4,820.8	0.32	1.74	1.67
ETFMG Sit Ultra Short	VALT	0.30	231.6	0.24	-	-
JPMorgan International Bond Opportunities	JPIB	0.50	323.1	0.14	5.92	-
Invesco Ultra Short Duration	GSY	0.22	2,856.1	0.03	1.73	1.85
FlexShares Ready Access Variable Income	RAVI	0.25	417.5	-0.04	1.83	1.67
Invesco Total Return Bond	GTO	0.50	1,085.7	-0.38	7.19	5.70
Fidelity Total Bond	FBND	0.36	2,239.2	-0.43	6.16	4.25
JPMorgan Core Plus Bond	JCPB	0.40	237.4	-0.51	-	-
PIMCO Enhanced Low Duration Active	LDUR	0.49	1,191.0	-0.55	2.71	2.32
PIMCO Active Bond	BOND	0.55	4,385.2	-0.78	5.10	4.07
Hartford Total Return Bond	HTRB	0.29	1,049.2	-0.80	6.03	-
SPDR DoubleLine Total Return Tactical	TOTL	0.55	2,888.5	-1.00	3.11	2.72
Janus Henderson Short Duration Income	VNLA	0.26	2,579.1	-1.05	2.10	1.94
Fidelity Limited Term Bond	FLTB	0.36	282.1	-1.20	3.36	2.64
Columbia Diversified Fixed Income Allocation	DIAL	0.28	1,225.9	-1.36	7.06	-
First Trust TCW Opportunistic Fixed Income	FIXD	0.56	5,264.6	-1.67	2.94	-
Hartford Core Bond	HCRB	0.29	260.0	-1.79	-	-
iShares Core International Aggregate Bond	IAGG	0.08	3,858.8	-1.87	3.50	3.19
Franklin Liberty International Aggregate Bond	FLIA	0.25	220.1	-1.98	2.25	-
Vanguard Total World Bond	BNDW	0.06	585.4	-2.10	4.07	-
Vanguard Total International Bond	BNDX	0.08	45,652.8	-2.28	3.32	3.03
iShares Global Green Bond	BGRN	0.20	273.1	-2.79	4.45	-
SPDR FTSE Intl Govt Inflation-Protected Bond	WIP	0.50	452.7	-4.15	4.10	3.64
SPDR Bloomberg International Treasury Bond	BWX	0.35	949.2	-8.67	1.83	2.64
Dimensional Short-Duration Fixed Income	DFSD	0.18	603.9	-	-	-
GLOBAL FIXED INCOME: CORPORATE - PREFERRED STOCK						
Global X SuperIncome Preferred	SPFF	0.58	229.0	5.15	8.13	4.63
First Trust Institutional Preferred Sec/Income	FPEI	0.85	555.2	4.63	8.88	-
Principal Spectrum Preferred Securities Active	PREF	0.55	451.2	2.08	8.79	-
GLOBAL FIXED INCOME: HIGH YIELD						
Fidelity High Yield Factor	FDHY	0.45	294.2	4.34	10.52	-
SPDR Blackstone Senior Loan	SRLN	0.70	8,937.5	4.09	5.71	3.94
Franklin Liberty HIYld Corp	FLHY	0.40	411.9	4.00	9.27	-
First Trust Senior Loan	FTSL	0.86	3,121.9	3.07	2.63	0.27
First Trust Tactical High Yield	HYLS	1.01	2,272.0	2.33	3.59	0.67
INTERNATIONAL FIXED INCOME: DEVELOPED						
iShares International Treasury Bond	IGOV	0.35	1,195.8	-9.25	1.45	2.52
INTERNATIONAL FIXED INCOME: EMERGING						
iShares J.P. Morgan EM Corporate Bond	CEMB	0.50	544.9	-0.59	6.53	4.76
VanEck Emerging Markets High Yield Bond	HYEM	0.40	1,247.7	-1.31	5.99	4.43
Vanguard Emerging Markets Govt Bond	VWOB	0.25	3,221.5	-1.81	5.90	4.56
iShares J.P. Morgan EM High Yield Bond	EMHY	0.50	525.9	-1.92	4.79	3.43
iShares JP Morgan USD Emerging Markets Bond	EMB	0.39	19,765.8	-2.24	5.97	4.41
Invesco Emerging Markets Sovereign Debt	PCY	0.50	2,611.3	-4.29	4.82	3.47
SPDR Bloomberg Emerging Markets Local Bond	EBND	0.30	1,179.6	-9.67	1.38	2.11
iShares J.P. Morgan EM Local Currency Bond	LEMB	0.30	514.2	-9.91	-0.40	0.56
VanEck J.P. Morgan EM Local Currency Bond	EMLC	0.30	3,343.4	-11.50	0.05	1.05
First Trust EM Local Currency Bond	FEMB	0.85	260.2	-13.40	-0.28	0.59
iShares China Large-Cap	FXI	0.74	4,932.0	-20.05	0.01	3.40
SPDR Bloomberg Emerging Markets USD Bond	EMHC	0.23	186.6	-	-	-

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	YTD %	3YR %	5YR %
COMMODITIES: BROAD MARKET						
Invesco DB Commodity Index Tracking	DBC	0.88	2,656.0	41.36	13.37	6.19
iShares S&P GSCI Commodity Indexed Trust	GSG	0.85	1,449.2	38.77	6.86	1.77
iShares GSCI Commodity Dynamic Roll Strategy	COMT	0.48	2,544.6	36.95	7.27	5.19
United States Commodity	USCI	1.03	236.0	33.07	5.02	1.68
iPath Bloomberg Commodity Index ETN	DJP	0.70	1,016.9	31.05	10.59	3.44
First Trust Global Tactical Commodity Strategy	FTGC	0.95	1,983.4	27.93	11.62	4.50
DeltaShares S&P 500 Managed Risk	DMRL	0.35	453.6	27.31	17.86	-
GraniteShares Commodity Broad No K-1	COMB	0.25	228.3	26.47	9.52	-
iShares Bloomberg Roll Select Commodity	CMDY	0.28	220.5	26.45	10.31	-
abrdn Bloomberg All Commodity K-1 Free	BCI	0.25	624.2	25.85	9.42	-
WisdomTree Enhanced Commodity Strategy	GCC	0.55	214.8	19.94	9.19	3.40
Direxion Auspice Broad Commodity Strategy	COM	0.70	245.5	15.75	7.20	-
Invesco Opt Yld Diversfd Commodity No K-1	PDBC	0.59	4,264.3	4.17	2.28	-0.40
COMMODITIES: AGRICULTURE						
Invesco DB Agriculture	DBA	0.94	1,023.5	22.37	5.80	0.30
COMMODITIES: ENERGY						
KraneShares Global Carbon Strategy	KRBN	0.79	1,606.7	107.68	-	-
United States Oil	USO	0.79	2,428.3	64.68	-11.07	-10.33
United States Brent Oil	BNO	0.90	231.5	62.34	10.90	5.93
Invesco DB Oil	DBO	0.78	444.7	60.74	17.59	7.66
United States Natural Gas	UNG	1.28	354.7	35.76	-20.34	-19.68
Credit Suisse Crude Oil Shrs Covered Call ETN	USOI	0.85	190.1	20.52	-18.28	-
COMMODITIES: INDUSTRIAL METALS						
Invesco DB Base Metals	DBB	0.80	487.3	28.97	13.77	9.06
United States Copper	CPER	0.80	225.2	25.21	18.28	10.72
COMMODITIES: PRECIOUS METALS						
GraniteShares Gold Trust	BAR	0.17	904.9	-3.92	12.38	-
Aberdeen Standard Physical Gold Shares	SGOL	0.17	2,391.3	-3.94	12.39	9.46
VanEck Merk Gold Trust	OUNZ	0.25	584.3	-4.00	12.21	9.32
iShares Gold Trust	IAU	0.25	28,501.9	-4.00	12.30	9.45
SPDR Gold MiniShares Trust	GLDM	0.18	4,321.2	-4.01	12.35	-
Goldman Sachs Physical Gold	AAAU	0.18	420.9	-4.01	12.35	9.13
SPDR Gold Trust	GLD	0.40	56,628.6	-4.15	12.13	9.30
Credit Suisse X-Links Silver Covered Call ETN	SLVO	0.65	213.9	-4.63	7.61	3.91
Aberdeen Standard Physical Precious Metals	GLTR	0.60	966.9	-9.60	12.30	9.22
Aberdeen Standard Physical Platinum	PPLT	0.60	1,133.2	-10.75	6.11	0.80
Aberdeen Standard Physical Silver	SIVR	0.30	981.4	-12.33	14.20	7.52
iShares Silver Trust	SLV	0.50	12,078.5	-12.45	14.00	7.32
Aberdeen Standard Physical Palladium	PALL	0.60	358.0	-23.26	13.96	21.99
iShares Gold Trust Micro	IAUM	0.15	865.6	-	-	-
CURRENCY: DEVELOPED						
Invesco DB US Dollar Index Bullish	UUP	0.76	720.1	5.73	0.90	-0.01
Invesco CurrencyShares Swiss Franc	FXF	0.40	249.5	-4.08	1.35	1.05
Invesco CurrencyShares Euro Trust	FXE	0.40	210.0	-7.83	-1.15	0.68
ProShares Bitcoin Strategy	BITO	0.95	1,292.0	-	-	-
ASSET ALLOCATION						
WisdomTree US Efficient Core	NTSX	0.20	973.6	22.20	26.34	-
Cabana Target Drawdown 16	TDSE	0.69	197.8	21.06	-	-
Cabana Target Drawdown 13	TDSB	0.69	378.8	17.74	-	-
Multi-Asset Diversified Income	MDIV	0.73	461.3	16.49	5.44	3.13
iShares Core Aggressive Allocation	AOA	0.15	1,684.4	15.41	16.87	12.04
Invesco CEF Income Composite	PCEF	2.34	947.0	15.40	14.20	9.21
Cabana Target Drawdown 10	TDSC	0.69	877.1	14.82	-	-
Amplify High Income	YYY	2.45	426.9	14.14	11.31	7.12
SPDR SSgA Global Allocation	GAL	0.35	287.8	12.24	13.63	9.95
iShares Core Growth Allocation	AOR	0.15	2,208.8	11.18	13.78	9.94
DeltaShares S&P International Managed Risk	DMRI	0.50	182.2	10.91	7.50	-
Amplify BlackSwan Growth & Treasury Core	SWAN	0.49	870.6	10.57	16.17	-
Principal Active High Yield	YLD	0.39	244.5	9.48	8.07	5.90
Cabana Target Drawdown 7	TDSB	0.69	324.2	8.44	-	-

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
Strategy Shares NASDAQ 7 HANDL	HNDL	0.97	1,512.1	8.42	12.79	-
iShares Core Moderate Allocation	AOM	0.15	1,874.5	6.93	10.78	7.85
iShares Core Conservative Allocation	AOK	0.15	1,085.7	4.87	9.30	6.78
iShares Morningstar Multi-Asset Income	IYLD	0.60	230.2	3.37	5.75	4.55
Aptus Defined Risk	DRSK	0.79	258.0	0.89	8.96	-
Cambria Tail Risk	TAIL	0.59	341.8	-12.80	-7.20	-
Cabana Target Leading Sector Aggressive	CLSA	0.69	485.9	-	-	-
Adaptive Alpha Opportunities	AGOX	1.69	233.9	-	-	-
ALTERNATIVES: ABSOLUTE RETURN						
SPDR SSGA Multi-Asset Real Return	RLY	0.50	181.2	22.86	12.18	6.59
First Trust Long/Short Equity	FTLS	1.60	463.3	19.65	12.54	9.19
Core Alternative	CCOR	1.09	258.5	9.90	6.58	-
RPAR Risk Parity	RPAR	0.51	1,604.1	7.56	-	-
IQ Hedge Multi-Strategy Tracker	QAI	0.79	864.6	-0.16	4.68	3.32
IQ Merger Arbitrage	MNA	0.77	687.2	-3.24	1.33	2.40
ALTERNATIVES: TACTICAL TOOLS						
ProShares VIX Short-Term Futures	VIXY	0.85	275.9	-72.40	-53.86	-46.31
iPath Ser B S&P 500 VIX Short Tm Futures ETN	VXX	0.89	830.0	-72.41	-53.80	-
LEVERAGED						
ProShares Ultra QQQ	QLD	0.95	6,459.8	209.34	119.78	75.36
Direxion Daily Homebuilders & Suppls Bull 3X	NAIL	1.00	397.6	168.20	73.08	37.85
MicroSectors US Big Oil 3X Lev ETN	NRGU	0.95	603.0	165.46	-	-
ProShares Ultra Bloomberg Crude Oil	UCO	0.95	1,062.3	139.26	-36.09	-31.70
Direxion Daily S&P Oil/Gas Exp/Prod Bull 2X	GUSH	1.17	749.1	129.95	-69.46	-66.25
Direxion Daily Technology Bull 3X	TECL	1.08	3,773.5	119.49	118.96	78.00
Direxion Daily Semiconductor Bull 3X	SOXL	0.96	5,771.7	118.80	131.10	78.61
Direxion Daily Financial Bull 3x	FAS	0.99	3,581.0	115.94	43.93	26.98
Direxion Daily Energy Bull 2x	ERX	1.00	489.4	110.48	-41.01	-39.67
Direxion Daily Regional Banks Bull 3X	DPST	0.99	446.3	107.62	-6.18	-17.45
ProShares Ultra Semiconductors	USD	0.95	541.5	104.27	93.34	57.20
Direxion Daily S&P 500 Bull 3X	SPXL	1.01	3,841.6	98.74	64.11	41.44
ProShares UltraPro S&P500	UPRO	0.93	3,664.3	98.64	64.16	41.51
Direxion Daily Healthcare Bull 3x	CURE	1.08	293.2	88.25	45.41	39.86
ProShares UltraPro QQQ	TQQQ	0.95	20,848.9	82.98	107.91	73.49
ProShares Ultra Technology	ROM	0.95	1,175.3	77.75	86.45	60.27
ProShares UltraPro Dow30	UDOW	0.95	987.8	65.32	33.45	29.01
ProShares Ultra S&P 500	SSO	0.91	4,949.1	60.45	46.76	30.97
ProShares Ultra Financials	UYG	0.95	858.9	60.19	27.69	17.13
UBS AG FI Enhanced Large Cap Growth ETN	FBGX	1.29	214.7	57.04	66.04	44.33
ProShares Ultra MidCap400	MVV	0.95	182.8	48.43	32.58	17.66

FUND NAME	TICKER	EXP RATIO %	AUM (\$M)	1YR %	3YR %	5YR %
ProShares Ultra Dow30	DDM	0.95	493.2	41.97	28.98	24.26
MicroSectors FANG+ Index 3X Leveraged ETN	FNGU	0.95	2,032.4	30.91	138.89	-
ProShares UltraPro Russell2000	URTY	0.95	468.2	28.47	26.90	11.37
MicroSectors FANG+ Index 2X Leveraged ETN	FNGO	0.95	244.5	28.38	98.26	-
Direxion Daily Small Cap Bull 3x	TNA	1.12	1,958.8	27.87	26.53	11.12
ProShares Ultra Russell2000	UWM	0.95	298.9	23.91	29.00	15.08
Virtus InfraCap US Preferred Stock	PFFA	1.47	551.5	19.42	13.24	-
Direxion Daily Aerospace & Defense Bull 3X	DFEN	0.99	299.0	12.76	-13.25	-
Direxion Daily Dow Jones Internet Bull 3X	WEBL	0.98	191.1	-0.54	-	-
ProShares Ultra NASDAQ Biotechnology	BIB	0.95	203.4	-6.02	24.45	15.24
ProShares Ultra Gold	UGL	0.95	225.7	-12.30	16.93	12.49
Direxion Daily 20+ Year Treasury Bull 3X	TMF	1.05	432.2	-19.81	14.53	10.41
Direxion Daily Gold Miners Index Bull 2X	NUGT	1.17	763.1	-26.31	-16.17	-19.45
ProShares Ultra Silver	AGQ	0.93	504.5	-32.25	9.62	1.60
Direxion Daily MSCI Brazil Bull 2X	BRZU	1.29	195.4	-42.49	-57.47	-42.68
Direxion Daily Jr Gold Miners Index Bull 2X	JNUG	1.12	488.1	-46.59	-47.95	-43.34
Direxion Daily FTSE China Bull 3X	YINN	1.37	484.0	-58.62	-21.06	-10.24
Direxion Daily S&P Biotech Bull 3X	LABU	1.02	983.4	-64.15	3.19	3.02
Direxion Daily CSI China Internet Index Bull 2X	CWEB	1.30	317.6	-79.35	-12.24	-7.85
ProShares Ultra VIX Short-Term Futures	UVXY	0.95	781.3	-98.87	-88.63	-83.12
MicroSectors FANG & Innovation 3x Lev ETN	BULZ	0.95	354.1	-	-	-
INVERSE						
ProShares Short VIX Short-Term Futures	SVXY	1.38	417.7	48.53	13.32	-19.49
ProShares UltraShort 20+ Year Treasury	TBT	0.92	1,408.2	2.86	-21.05	-15.63
ProShares UltraPro Short 20+ Year Treasury	TTT	0.95	215.2	2.55	-32.59	-24.74
ProShares Short 20+ Year Treasury	TBF	0.94	654.6	1.33	-10.06	-7.21
Direxion Daily 20+ Year Treasury Bear 3x	TMV	1.04	346.2	0.83	-32.68	-25.26
ProShares Short Russell2000	RWM	0.95	226.3	-17.90	-23.15	-15.24
ProShares Short Dow30	DOG	0.95	258.6	-19.21	-19.37	-15.68
ProShares Short S&P500	SH	0.90	1,284.4	-24.21	-23.81	-17.44
ProShares Short QQQ	PSQ	0.95	499.0	-24.84	-31.58	-25.12
ProShares UltraShort S&P500	SDS	0.91	519.4	-43.02	-44.90	-34.49
ProShares UltraShort QQQ	QID	0.95	202.5	-44.93	-56.19	-46.84
ProShares UltraPro Short Dow30	SDOW	0.95	351.0	-49.00	-55.81	-47.19
Direxion Daily Small Cap Bear 3X	TZA	1.07	350.1	-50.80	-64.42	-48.90
ProShares UltraPro Short S&P500	SPXU	0.93	524.5	-57.94	-62.09	-49.89
Direxion Daily S&P 500 Bear 3X	SPXS	1.07	344.0	-58.11	-62.22	-50.09
ProShares UltraPro Short QQQ	SQQQ	0.95	1,326.5	-60.87	-73.73	-64.13
ProShares UltraShort Bloomberg Natural Gas	KOLD	0.95	268.4	-74.44	-17.05	-12.08

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Ticker	Name	Segment	Issuer	Expense Ratio	AUM
SPY	SPDR S&P 500 ETF Trust	Equity U.S. - Large Cap	State Street Global Advisors	0.09%	\$408,800
IVV	iShares Core S&P 500 ETF	Equity U.S. - Large Cap	Blackrock	0.03%	\$307,288
VII	Vanguard Total Stock Market ETF	Equity U.S. - Total Market	Vanguard	0.03%	\$274,008
VOO	Vanguard S&P 500 ETF	Equity U.S. - Large Cap	Vanguard	0.03%	\$258,948
QQQ	Invesco QQQ Trust	Equity U.S. - Large Cap	Invesco	0.20%	\$196,148
VEA	Vanguard FTSE Developed Markets ETF	Equity Developed Markets Excl. U.S. - Total Market	Vanguard	0.05%	\$107,098
IEFA	iShares Core MSCI EAFE ETF	Equity Developed Markets Ex-North America - Total Market	Blackrock	0.07%	\$102,888
AGS	iShares Core U.S. Aggregate Bond ETF	Fixed Income U.S. - Broad Market, Broad-Based Investment Grade	Blackrock	0.04%	\$99,288
VUG	Vanguard Growth ETF	Equity U.S. - Large Cap Growth	Vanguard	0.04%	\$96,538

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THE LAST WORD

ETF REPORT'S 2022 MAKEOVER



BY HEATHER BELL
Editor

In order to better serve our readership, ETF Report has transitioned to digital-only as of the first of the year. Going forward, our readers will receive a digital version of the publication on or around the second Monday of every month rather than the physical print copy that was circulated around the first of the month. This provides a number of advantages.

During the pandemic, when most offices were closed and many people were working from home, some subscribers had trouble accessing the magazine since they weren't in their offices for long periods of time.

Going forward, the magazine will be delivered directly to your inbox every month. That means as long as you have access to your email, you'll have access to the magazine.

EXPANDED USER EXPERIENCE

The change also creates greater flexibility for ETF.com. We won't be limited to any particular page count due to concerns about print costs. That means we can provide even more content and more in-depth coverage of the ETF space for our readers.

Another benefit is the ability to create a more seamless user experience between the publication and our website as well as a more interactive experience overall. Articles can now directly link to related coverage on the website, the fund pages for mentioned ETFs, and any of our website tools that may be helpful in relation to the story you're reading. We'll also be able to link back to any sources we cite for graphics and data.

This change will have the biggest impact on our data pages that appear near the end of each issue. With the print version, the data pages reflected performance dates that were two months old by the time they reached the subscriber. For example, the September 2021 issue would have been available online as of Sept. 1, 2021, but the as-of date for the data would have been July 31, 2021.

Going forward, there will be an issue for each month, and the data will reflect the end of the previous month. For example, the January 2022 issue's data pages reflect an as-of date of Dec. 31, 2021, in order to bring you the freshest information possible. The data pages are one of the most valued departments in ETF Report. The more up-to-date they are, the better for our readers.

WHAT TO EXPECT

This shift to digital will provide readers a more portable and easily accessed ETF Report—one that is sleeker than the original, while providing more information and coverage in a more versatile wrapper.

We look forward to refining this approach in the coming months. By making this move, we're leveraging the benefits of technology to align our publication with the standards of digitization. Ultimately, our goal is to provide a better product.

We'd love to hear what you'd like to see in the new and improved ETF Report. Are there any departments you'd like to see brought back? Do you want more profiles of industry participants or roundtables compiling the views of well-known advisors? Are there any specific topics you feel we've neglected or maybe covered too much?

My email address is at the front of the publication. Please reach out with your feedback. ●