

U.S. Size & Style Performance

Large Cap Blend (S&P 500) IVV



Large Growth Mid Value (IJJ) Mid Growth (IJK) Small Value (IJS) Small Cap (IJR) Small Growth (IJT) Large Value (IVE) Large Cap (IVV) Mid Cap (IJH) (IVW) 0.5% 0.42% 0.31% 0.08% 0.0% -0.02% -0.03% -0.08% -0.21% -0.32% -0.40% -0.5%

U.S. Size & Style 1-Day Performance

Mid Cap Blend (S&P 400) IJH



Small Cap Blend (S&P 600) IJR



Size & Style 1-Day Performance Leaders

Ticker	Fund	
QVMS	Invesco S&P SmallCap 600 QVM Multi-factor ETF	4.97%
BUZZ	VanEck Social Sentiment ETF	0.88%
CSB	VictoryShares US Small Cap High Dividend Volatility Wt	0.81%
IPO	Renaissance IPO ETF	0.80%
CALF	Pacer US Small Cap Cash Cows 100 ETF	0.79%
RWJ	Invesco S&P SmallCap 600 Revenue ETF	0.77%
RZV	Invesco S&P Smallcap 600 Pure Value ETF	0.66%
DGRS	WisdomTree US Smallcap Quality Dividend Growth Fund	0.56%
FDM	First Trust Dow Jones Select MicroCap Index Fund	0.55%
XSVM	Invesco S&P SmallCap Value with Momentum ETF	0.51%

Size & Style 1-Day Performance Laggards

Ticker	Fund	
EQRR	ProShares Equities for Rising Rates ETF	-1.23%
VEGN	US Vegan Climate ETF	-0.89%
QMOM	Alpha Architect U.S. Quantitative Momentum ETF	-0.86%
FCTR	First Trust Lunt U.S. Factor Rotation ETF	-0.82%
AUSF	Global X Adaptive U.S. Factor ETF	-0.78%
DVOL	First Trust Dorsey Wright Momentum & Low Volatility E	-0.73%
MTUM	iShares MSCI USA Momentum Factor ETF	-0.73%
PDP	Invesco DWA Momentum ETF	-0.70%
SPMO	Invesco S&P 500 Momentum ETF	-0.68%
ABEQ	Absolute Core Strategy ETF	-0.66%

200 Day Moving Average

Size & Style Most Overbought

Ticker	Fund	
ACSI	American Customer Satisfaction ETF	79.09
GUSA	Goldman Sachs MarketBeta U.S. 1000 Equity ETF	77.33
QVMS	Invesco S&P SmallCap 600 QVM Multi-factor ETF	75.79
XSLV	Invesco S&P SmallCap Low Volatility ETF	74.16
USNZ	Xtrackers Net Zero Pathway Paris Aligned US Equity ETF	74.07
XSMO	Invesco S&P SmallCap Momentum ETF	72.78
DGRS	WisdomTree US Smallcap Quality Dividend Growth Fund	72.43
TPSC	Timothy Plan US Small Cap Core ETF	72.17
SMIG	AAM Bahl & Gaynor Small/Mid Cap Income Growth ETF	72.06
FDM	First Trust Dow Jones Select MicroCap Index Fund	72.01

Size & Style Most Oversold

47.38 47.70 50.18
-
50.18
50.36
52.41
54.36
54.98
55.33
55.67
56.01

* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify



U.S. Size & Style Flows

Large-Cap 30-Day Rolling Flows



Mid-Cap 30-Day Rolling Flows







	Funds	AUM	1 Week	3 Month	6 Month	1 Year
arge Cap, Beta Growth, Beta	25	\$1,236B	(\$2.96B)	\$33.77B	\$49.96B	\$121.41B
arge Cap, Beta Growth, Beta: Growth	10	\$232B	\$0.95B	\$8.20B	\$12.27B	\$16.59B
arge Cap, Beta Growth, Beta: Value	11	\$217B	\$0.05B	\$4.18B	\$13.44B	\$26.28B
Nid Cap, Beta, Beta	10	\$177B	\$0.08B	\$2.40B	\$5.44B	\$12.86B
Nid Cap, Beta, Beta: Growth	6	\$32B	\$0.09B	\$0.61B	\$0.25B	\$0.65B
Nid Cap, Beta, Beta: Value	6	\$40B	\$0.05B	\$0.35B	(\$0.19B)	\$1.22B
Small Cap, Beta, Beta	13	\$192B	\$0.18B	(\$1.87B)	(\$4.06B)	\$6.86B
Small Cap, Beta, Beta: Growth	7	\$32B	\$0.33B	\$0.99B	\$1.17B	\$1.62B
Small Cap, Beta, Beta: Value	7	\$50B	(\$0.06B)	(\$0.98B)	(\$4.57B)	(\$2.57B)

U.S. Size & Style Landscape Flows

U.S. Size & Style Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
SDY	SPDR S&P Dividend ETF	\$1.47B	\$2.22B	\$2.94B	\$3.43B	\$23.41B
SPYD	SPDR Portfolio S&P 500 High Dividend ETF	\$1.46B	\$3.28B	\$4.19B	\$4.71B	\$9.39B
SPHD	Invesco S&P 500 High Dividend Low Volatility	\$0.75B	\$1.24B	\$1.62B	\$1.64B	\$4.70B
IVV	iShares Core S&P 500 ETF	\$0.64B	\$13.47B	\$15.18B	\$30.83B	\$301.98B
V00	Vanguard S&P 500 ETF	\$0.47B	\$14.59B	\$18.96B	\$44.14B	\$267.50B
SPYG	SPDR Portfolio S&P 500 Growth ETF	\$0.41B	\$1.42B	\$1.97B	\$2.26B	\$14.08B
IJT	iShares S&P Small-Cap 600 Growth ETF	\$0.38B	\$0.41B	\$0.37B	\$0.04B	\$5.65B
SPLV	Invesco S&P 500 Low Volatility ETF	\$0.32B	\$1.12B	\$1.53B	\$2.81B	\$10.86B
VTI	Vanguard Total Stock Market ETF	\$0.31B	\$3.99B	\$9.89B	\$35.17B	\$265.64B
SCHD	Schwab US Dividend Equity ETF	\$0.27B	\$3.14B	\$6.44B	\$11.14B	\$36.84B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
SPY	SPDR S&P 500 ETF Trust	(\$3.50B)	(\$1.66B)	\$1.88B	\$13.67B	\$367.92B
QQQ	Invesco QQQ Trust	(\$0.49B)	\$2.84B	\$8.12B	\$18.46B	\$171.21B
ΙΤΟΤ	iShares Core S&P Total U.S. Stock Market ETF	(\$0.45B)	\$2.57B	\$2.64B	\$5.29B	\$42.89B
IWB	iShares Russell 1000 ETF	(\$0.21B)	\$0.83B	\$0.75B	\$0.12B	\$28.29B
IWD	iShares Russell 1000 Value ETF	(\$0.14B)	\$0.37B	(\$0.62B)	\$1.27B	\$53.48B
VLUE	iShares MSCI USA Value Factor ETF	(\$0.10B)	(\$2.53B)	(\$3.60B)	(\$5.84B)	\$9.12B
DVY	iShares Select Dividend ETF	(\$0.10B)	\$0.50B	\$1.93B	\$3.16B	\$21.68B
IWS	iShares Russell Mid-Cap Value ETF	(\$0.06B)	\$0.01B	(\$0.53B)	(\$0.21B)	\$13.27B
FLQL	Franklin U.S. Large Cap Multifactor Index ETF	(\$0.06B)	\$0.07B	\$0.06B	(\$0.22B)	\$0.96B
IJS	iShares S&P Small-Cap 600 Value ETF	(\$0.05B)	\$0.14B	(\$0.84B)	(\$0.95B)	\$7.35B

* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day

S&P Sector & Industry 1 Day Performance

2.33%

Retail (XRT					
Cons Staples (XLP)				1.2	:5%
Internet (XWEB)				1.10)%
Aerospace & Defense (XAR)				1.04	%
Health Care Equipment (XHE)				0.84%	ó
Transportation (XTN)				0.81%)
Homebuilders (XHB)				0.67%	
Cons Discretionary (XLY)				0.50%	
Software & Svcs (XSW)				0.46%	
Health Care Svcs (XHS)				0.42%	
Banks (KBE)				0.19%	
Utilities (XLU)				0.11%	
Industrial (XLI)				0.10%	
Regional Banking (KRE)				0.08%	
Telecom (XTL)				0.05%	
Comm Svcs (XLC)			-0.14%		
Technology (XLK)			-0.21%		
Capital Mkts (KCE)			-0.23%		
Semiconductor (XSD)		-	-0.27%		
S&P 500 (SPY)		-	0.30%		
Health Care (XLV)		-0.7	74%		
Materials (XLB)		-0.8	1%		
Financials (XLF)		-0.83	3%		
Real Estate (XLRE)		-0.90	0%		
Metals & Mining (XME)		-1.069	%		
Insurance (KIE)		-1.16%	6		
Pharmaceuticals (XPH)		-1.77%			
Biotech (XBI)	-2	2.05%			
Energy (XLE)	-2	.07%			
Oil & Gas Expl. & Prod (XOP)	-2.	.15%			
Oil & Gas Equip. & Svcs (XES)	-2.729	6			
	-4.0%	-2.0%	0.0)% 2	.0%

Select Sector SPDRs Technicals

Ticker	Fund Name	% From 52W High	% From 52W Low	% Abv/Below 50 SMA	% Abv/Below 200 SMA	RSI (14D)
XLU	Utilities Select Sector SPDR Fund	-3.81%	16.47%	4.85%	5.52%	69.41
XLP	Consumer Staples Select Sector SPDR Fund	-6.39%	9.62%	3.79%	1.20%	66.13
XLV	Health Care Select Sector SPDR Fund	-7.99%	9.62%	2.18%	-0.61%	55.61
XLI	Industrial Select Sector SPDR Fund	-10.62%	11.98%	6.26%	-2.90%	71.62
SPY	SPDR S&P 500 ETF Trust	-14.01%	12.28%	4.95%	-5.05%	65.46
XLB	Materials Select Sector SPDR Fund	-14.47%	9.26%	-0.40%	-7.90%	58.56
XLRE	Real Estate Select Sector SPDR Fund	-15.19%	13.10%	4.95%	-4.64%	66.41
XLE	Energy Select Sector SPDR Fund	-16.78%	67.72%	-1.08%	9.78%	57.31
XLK	Technology Select Sector SPDR Fund	-18.53%	16.54%	7.77%	-5.07%	66.25
XLF	Financial Select Sector SPDR Fund	-19.29%	8.75%	2.11%	-9.51%	59.09
XLY	Consumer Discretionary Select Sector SPDR Fund	-22.60%	21.55%	11.57%	-7.12%	69.13
XLC	Communication Services Select Sector SPDR Fund	-34.58%	6.05%	-0.34%	-16.61%	50.64

Sector & Industry 1 Day Performance Leaders

Ticker	Fund	
XRT	SPDR S&P Retail ETF	2.33%
PSCC	Invesco S&P SmallCap Consumer Staples ETF	2.01%
PSL	Invesco DWA Consumer Staples Momentum ETF	1.42%
XLP	Consumer Staples Select Sector SPDR Fund	1.25%
FSTA	FIDELITY COVINGTON TRUST MSCI CONSUMER ST	1.21%
VDC	Vanguard Consumer Staples ETF	1.17%
IYK	iShares U.S. Consumer Staples ETF	1.14%
XAR	SPDR S&P Aerospace & Defense ETF	1.04%
RHS	Invesco S&P 500 Equal Weight Consumer Staples	1.02%
FXD	First Trust Consumer Discretionary AlphaDEX Fund	0.99%

Sector & Industry 1 Day Performance Laggards

Ticker	Fund	
XES	SPDR S&P Oil & Gas Equipment & Services ETF	-2.72%
PSCE	Invesco S&P SmallCap Energy ETF	-2.52%
FCG	First Trust Natural Gas ETF	-2.40%
IEO	iShares U.S. Oil & Gas Exploration & Production ETF	-2.37%
PXE	Invesco Dynamic Energy Exploration & Production ETF	-2.30%
PXI	Invesco DWA Energy Momentum ETF	-2.26%
FENY	Fidelity MSCI Energy Index ETF	-2.19%
FTXN	First Trust Nasdaq Oil & Gas ETF	-2.17%
XOP	SPDR S&P Oil & Gas Exploration & Production ETF	-2.15%
VDE	Vanguard Energy ETF	-2.14%

Sector & Industry Most Overbought

Ticker	Fund	
AIRR	First Trust RBA American Industrial Renaissance ETF	77.22
IGN	iShares North American Tech-Multimedia Networking E	75.71
PAVE	Global X U.S. Infrastructure Development ETF	75.23
PSCI	Invesco S&P SmallCap Industrials ETF	75.11
PRN	Invesco DWA Industrials Momentum ETF	74.22
IFRA	iShares U.S. Infrastructure ETF	73.40
RGI	Invesco S&P 500 Equal Weight Industrials ETF	72.64
REM	iShares Mortgage Real Estate ETF	72.61
FIDU	Fidelity MSCI Industrial Index ETF	72.50
MORT	VanEck Mortgage REIT Income ETF	72.33

Sector & Industry Most Oversold

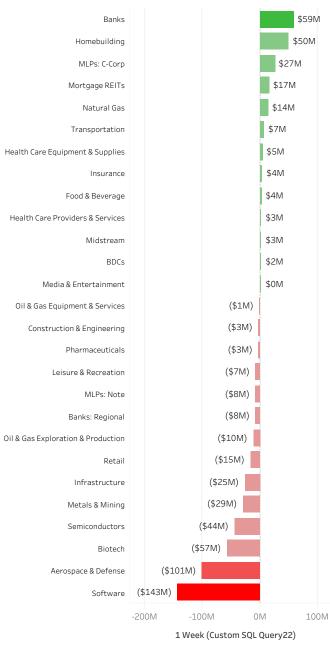
	Ticker	Fund	
6	KBWP	Invesco KBW Property & Casualty Insurance ETF	35.79
6	IHE	iShares U.S. Pharmaceuticals ETF	44.65
6	XPH	SPDR S&P Pharmaceuticals ETF	45.54
6	PJP	Invesco Dynamic Pharmaceuticals ETF	46.38
6	IAK	iShares U.S. Insurance ETF	46.82
6	IYZ	iShares U.S. Telecommunications ETF	47.16
6	KIE	SPDR S&P Insurance ETF	48.98
6	XBI	SPDR S&P BIOTECH ETF	49.43
6	FBT	First Trust NYSE Arca Biotechnology Index Fund	50.42
6	XLC	Communication Services Select Sector SPDR Fund	50.64

* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify

2.0%

U.S. Sector Landscape

U.S. Sector & Industry 1-Week Flows



	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services	9	\$14B	\$23M	(\$275M)	(\$518M)	(\$633M)
Consumer Discretionary	13	\$23B	\$102M	(\$2,202M)	(\$4,215M)	(\$5,133M)
Consumer Staples	12	\$28B	\$104M	\$36M	\$2,989M	\$5,219M
Energy	34	\$72B	\$797M	(\$3,823M)	(\$3,451M)	\$1,350M
Financials	28	\$57B	\$366M	(\$9,118M)	(\$18,494M)	(\$8,560M)
Health Care	26	\$93B	\$210M	\$3,469M	\$7,589M	\$13,074M
Industrial	14	\$28B	(\$71M)	(\$2,903M)	(\$2,491M)	(\$5,844M)
Materials	10	\$14B	\$23M	(\$2,411M)	(\$459M)	(\$1,523M)
Multi-Sector	19	\$15B	\$11M	(\$379M)	(\$4,379M)	(\$3,563M)
Real Estate	25	\$70B	(\$157M)	(\$3,132M)	(\$5,186M)	\$2,393M
Technology	24	\$125B	\$30M	(\$464M)	(\$390M)	\$4,348M
Utilities	10	\$27B	(\$138M)	\$1,061M	\$3,547M	\$4,976M

U.S. Sector Landscape

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLE	Energy Select Sector SPDR Fund	\$779M	(\$391M)	(\$2,896M)	\$148M	\$35,485M
XLF	Financial Select Sector SPDR Fund	\$299M	(\$5,554M)	(\$11,394M)	(\$5,424M)	\$29,779M
XLK	Technology Select Sector SPDR Fund	\$146M	(\$233M)	\$876M	\$1,689M	\$42,670M
XLV	Health Care Select Sector SPDR Fund	\$126M	\$2,578M	\$5,724M	\$7,907M	\$40,077M
XLY	Consumer Discretionary Select Sector SPDR Fu	\$120M	(\$1,250M)	(\$1,965M)	(\$1,517M)	\$15,150M
VGT	Vanguard Information Technology ETF	\$82M	\$638M	\$1,077M	\$2,063M	\$45,327M
XLP	Consumer Staples Select Sector SPDR Fund	\$77M	(\$687M)	\$425M	\$1,887M	\$15,582M
XLB	Materials Select Sector SPDR Fund	\$68M	(\$843M)	(\$1,117M)	(\$1,954M)	\$6,020M
ХНВ	SPDR S&P Homebuilders ETF	\$62M	(\$70M)	(\$582M)	(\$386M)	\$1,121M
IYH	iShares U.S. Healthcare ETF	\$55M	\$190M	\$136M	\$323M	\$3,072M

U.S. Sector & Industry Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IGV	iShares Expanded Tech-Software Sector ETF	(\$140M)	\$157M	(\$408M)	\$1,301M	\$4,469M
IYR	iShares U.S. Real Estate ETF	(\$113M)	(\$747M)	(\$1,947M)	(\$604M)	\$4,334M
ITA	iShares U.S. Aerospace & Defense ETF	(\$101M)	\$95M	\$1,376M	\$1,028M	\$3,806M
XLU	Utilities Select Sector SPDR Fund	(\$98M)	\$471M	\$2,180M	\$3,045M	\$16,598M
SOXX	iShares Semiconductor ETF	(\$62M)	(\$310M)	(\$84M)	\$1,072M	\$7,114M
VPU	Vanguard Utilities ETF	(\$58M)	(\$388M)	(\$55M)	\$392M	\$5,835M
IBB	iShares Biotechnology ETF	(\$31M)	\$75M	(\$198M)	(\$109M)	\$8,043M
XME	SPDR S&P Metals & Mining ETF	(\$29M)	(\$614M)	(\$104M)	\$93M	\$1,968M
IYE	iShares U.S. Energy ETF	(\$26M)	(\$1,553M)	(\$1,263M)	(\$1,275M)	\$2,162M
VNQ	Vanguard Real Estate ETF	(\$19M)	(\$2,046M)	(\$2,222M)	\$701M	\$40,838M

* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day



U.S. Sector Rolling 30-Day Flows

August 1, 2022







Consumer Staples



Energy





Health Care

Materials





\$4B

\$2B

\$0B

(\$2B)

* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day



Global Thematic Performance

August 1, 2022

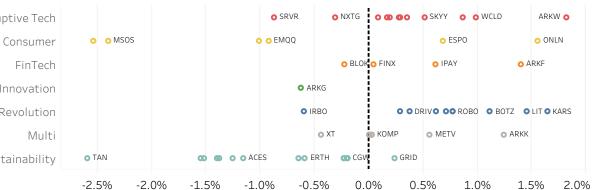
Global Thematic Segment 1-Day Performance

Online Retail (IBUY)						2.0
Disruptive Tech (ARKW)						1.82
Multi-Theme (ARKK)					1.2	24%
Robotics & AI (ROBO)					0.77	%
eSports & Video Games (ESPO					0.68	%
Advanced Materials (REMX)					0.62%	6
Digital Payments (IPAY)					0.619	6
Space (UFO)					0.52%	ó
Cloud Computing (SKYY)					0.51%	ó
NextGen Transportation (DRI					0.37%	,
Connectivity (FIVG)					0.29%	
Industrial Revolution (ARKQ)					0.29%	
Smart Infrastructure (GRID)					0.24%	
Cyber Security (HACK)					0.08%	
FinTech (FINX)					0.04%	
Big Data (AIQ)			-0.04	4%		
3D Printing (PRNT)			-0.13	3%		
Blockchain (BLOK)			-0.23	%		
Water (PHO)			-0.23	%		
Genomics (ARKG)			-0.63%)		
Clean Energy: Wind (FAN)			0.65%			
Digital Infrastructure (SRVR)		-().88%			
Evolving Consumer (SOCL)		-C	.97%			
Cannabis (MJ)		-1	.01%			
Casinos & Gaming (BETZ)		-1.7	28%			
Clean Energy (PBW)		-1.5	2%			
Biotech	-2	2.34%			1	
Clean Energy: Solar (TAN)	-2.	59%				
	-4.0)0% -2	2.00%	0.0	0% 2.0	0%



2.00%

1.82%



Global Thematic 1-Day Performance Landscape

Global Thematic 1-Day Performance Leaders

Ticker	Fund	
IBUY	Amplify Online Retail ETF	2.00%
ARKW	ARK Next Generation Internet ETF	1.82%
KARS	KraneShares Electric Vehicles & Future Mobility Index ETF	1.64%
ONLN	ProShares Online Retail ETF	1.55%
LIT	Global X Lithium & Battery Tech ETF	1.45%
ARKF	ARK Fintech Innovation ETF	1.40%
ARKK	ARK Innovation ETF	1.24%
BOTZ	Global X Robotics & Artificial Intelligence ETF	1.11%
WCLD	WisdomTree Cloud Computing Fund	0.98%
BATT	Amplify Lithium & Battery Technology ETF	0.93%

Global Thematic 1-Day Performance Laggards

Ticker	Fund	
TAN	Invesco Solar ETF	-2.59%
KWEB	KraneShares CSI China Internet ETF	-2.54%
YOLO	AdvisorShares Pure Cannabis ETF	-2.47%
MSOS	AdvisorShares Pure US Cannabis ETF	-2.40%
SBIO	ALPS Medical Breakthroughs ETF	-2.34%
GNOM	Global X Genomics & Biotechnology ETF	-1.97%
IDNA	iShares Genomics Immunology and Healthcare ETF Ge	-1.67%
CTEC	Global X CleanTech ETF	-1.67%
CNRG	SPDR S&P Kensho Clean Power ETF	-1.55%
PBW	Invesco WilderHill Clean Energy ETF	-1.52%

Thematic Most Overbought

	Ticker	Fund	
ó	GRID	First Trust Nasdaq Clean Edge Smart GRID Infrastructure	74.95
ó	FIW	First Trust Water ETF	74.45
ó	CGW	Invesco S&P Global Water Index ETF	73.83
ó	PHO	Invesco Water Resources ETF	73.77
ó	EVX	VanEck Environmental Services ETF	72.59
ó	EBLU	Ecofin Global Water ESG Fund	71.24
6	PIO	Invesco Global Water ETF	71.13
б	ICLN	iShares Global Clean Energy ETF	69.79
ó	SMOG	VanEck Low Carbon Energy ETF	69.67
б	ACES	ALPS Clean Energy ETF	69.40

Thematic Most Oversold

	Ticker	Fund	
6	KWEB	KraneShares CSI China Internet ETF	36.06
6	EMQQ	EMQQ The Emerging Markets Internet & Ecommerce ETF	41.32
6	KGRN	KraneShares MSCI China Clean Technology Index ETF	42.62
6	YOLO	AdvisorShares Pure Cannabis ETF	42.83
6	MSOS	AdvisorShares Pure US Cannabis ETF	43.50
6	MJ	ETFMG Alternative Harvest ETF	44.90
6	SOCL	Global X Social Media ETF	45.23
6	SBIO	ALPS Medical Breakthroughs ETF	47.20
6	POTX	Global X Cannabis ETF	47.55
6	BUG	Global X Cybersecurity ETF	49.29

* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify

© ETF Action. Inc. 2022



Global Thematic Flows

Thematic 1 Week Flow Leaders

Ticker	Fund		S
TAN	Invesco Solar ETF	\$15M	
FIW	First Trust Water ETF	\$12M	ſ
TARK	AXS 2X Innovation ETF	\$11M	
BUG	Global X Cybersecurity ETF	\$10M	
ICLN	iShares Global Clean Energy ETF	\$9M	F
IRBO	iShares Robotics and Artificial Intelligence Multisector ETF	\$6M	
KOMP	SPDR S&P Kensho New Economies Composite ETF	\$6M	
BOTZ	Global X Robotics & Artificial Intelligence ETF	\$5M	r
PBW	Invesco WilderHill Clean Energy ETF	\$4M	ſ
PHO	Invesco Water Resources ETF	\$3M	

Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	35	\$19B	(\$20M)	(\$1,170M)	(\$359M)	(\$1,252M)
Evolving Consumer	48	\$11B	(\$191M)	\$918M	\$956M	\$4,951M
FinTech	24	\$3B	(\$35M)	(\$147M)	\$48M	(\$299M)
Health Innovation	19	\$4B	(\$60M)	(\$7M)	(\$253M)	(\$1,934M)
Industrial Revolution	32	\$13B	(\$12M)	(\$673M)	(\$1,083M)	(\$187M)
Multi	42	\$16B	\$44M	\$837M	\$1,759M	\$1,395M
Sustainability	42	\$19B	\$42M	(\$475M)	(\$555M)	(\$241M)
Grand Total	242	\$85B	(\$231M)	(\$717M)	\$512M	\$2,434M

Thematic Landscape Assets & Flows

Thematic 1 Week Flow Laggards

Ticker	Fund		I
KWEB	KraneShares CSI China Internet ETF	(\$227M)	
ARKG	ARK Genomic Revolution ETF	(\$69M)	
IPAY	ETFMG Prime Mobile Payments ETF	(\$19M)	N
ARKK	ARK Innovation ETF	(\$19M)	
FINX	Global X FinTech ETF	(\$16M)	
IBUY	Amplify Online Retail ETF	(\$13M)	S
WCLD	WisdomTree Cloud Computing Fund	(\$12M)	
ESPO	VanEck Video Gaming and eSports ETF	(\$10M)	
CIBR	First Trust NASDAQ Cybersecurity ETF	(\$8M)	G
ARKW	ARK Next Generation Internet ETF	(\$8M)	

Thematic Monthly Flows



* ETF Landscape represented using the ETF Action classification system ** Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify *** Flows delayed one day

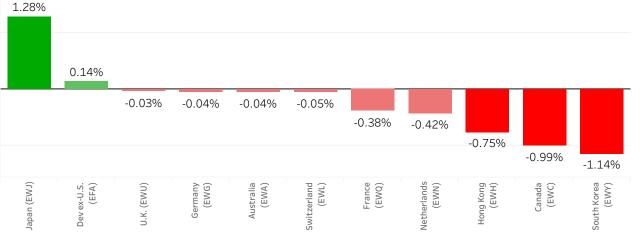


Developed Markets ex-U.S. Performance

August 1, 2022

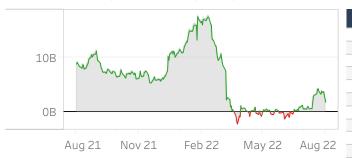
Developed ex-U.S. (EFA)





Developed ex-U.S. 1-Day Performance Top 10 Countries

Developed ex-U.S. 30-Day Rolling Flows



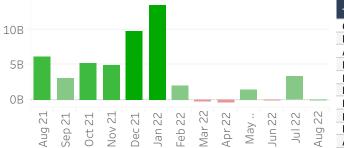
Developed ex-U.S. 1-Day Performance Leaders

Ticker	Fund	
IMFL	Invesco International Developed Dynamic Multifactor ETF	3.02%
QLVD	FlexShares Developed Markets ex-US Quality Low Volatility I	2.46%
GREK	Global X MSCI Greece ETF	1.88%
DFJ	WisdomTree Japan SmallCap Dividend Fund	1.65%
SCJ	iShares MSCI Japan Small-Cap ETF	1.64%
JPXN	iShares JPX-Nikkei 400 ETF	1.57%
BBJP	JPMorgan BetaBuilders Japan ETF	1.45%
FLJP	Franklin FTSE Japan ETF	1.37%
EWJ	iShares MSCI Japan ETF	1.28%
EWJV	iShares MSCI Japan Value ETF	1.10%

Developed ex-U.S. Most Overbought

Ticker	Fund	
DFJ	WisdomTree Japan SmallCap Dividend Fund	76.01
SCJ	iShares MSCI Japan Small-Cap ETF	74.98
BBJP	JPMorgan BetaBuilders Japan ETF	71.59
JPXN	iShares JPX-Nikkei 400 ETF	71.41
FLJP	Franklin FTSE Japan ETF	71.31
EWJ	iShares MSCI Japan ETF	70.65
ENZL	iShares MSCI New Zealand ETF	69.43
IPAC	iShares Core MSCI Pacific ETF	68.61
EFG	iShares MSCI EAFE Growth ETF	68.42
VPL	Vanguard FTSE Pacific ETF	67.92

Developed ex-U.S. Monthly Flows



Developed ex-U.S. 1-Day Performance Laggards

Ticker	Fund	
CIL	VictoryShares International Volatility Wtd ETF	-1.65%
EWD	iShares MSCI Sweden ETF	-1.53%
AIA	iShares Asia 50 ETF	-1.49%
EUSC	WisdomTree Europe Hedged SmallCap Equity Fund	-1.35%
EWP	iShares MSCI Spain ETF	-1.26%
EWY	iShares MSCI South Korea ETF	-1.14%
EWC	iShares MSCI Canada ETF	-0.99%
HEDJ	WisdomTree Europe Hedged Equity Fund	-0.96%
FLCA	Franklin FTSE Canada ETF	-0.94%
AAXJ	iShares MSCI All Country Asia ex Japan ETF	-0.87%

Developed ex-U.S. Most Oversold

Ticker	Fund	
AIA	iShares Asia 50 ETF	38.77
EWH	iShares MSCI Hong Kong ETF	40.98
AAXJ	iShares MSCI All Country Asia ex Japan ETF	45.17
EWP	iShares MSCI Spain ETF	48.51
IDOG	ALPS International Sector Dividend Dogs ETF	51.82
PTIN	Pacer Trendpilot International ETF	52.98
EWO	iShares MSCI Austria ETF	53.03
LVHI	Franklin International Low Volatility High Dividend I	53.23
EUSC	WisdomTree Europe Hedged SmallCap Equity Fund	53.28
CIL	VictoryShares International Volatility Wtd ETF	53.35

* ETF Landscape represented using the ETF Action classification system **Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day



Emerging Markets Performance

August 1, 2022

71.97

71.07

70.69

69.70 69.15

68.28

67.81

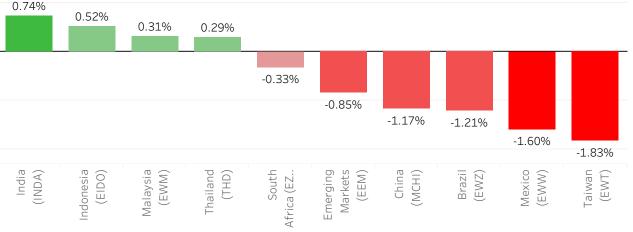
67.34

65.24

65.00

Emerging (EEM)





Emerging 30-Day Rolling Flows



Emerging Monthly Flows

6B

4B

2B

0B

Aug 21

Emerging 1-Day Performance Leaders

Ticker	Fund		Ticker	Fund
TUR	iShares MSCI Turkey ETF	2.13%	PIN	Invesco
SMIN	iShares MSCI India Small Cap ETF	1.41%	FLIN	Franklir
FLIN	Franklin FTSE India ETF	1.09%	NFTY	First Tr
EPI	WisdomTree India Earnings Fund	0.97%	INDA	iShares
EPOL	iShares MSCI Poland ETF	0.90%	INDY	iShares
QAT	iShares MSCI Qatar ETF	0.81%	QAT	iShares
PIN	Invesco India ETF	0.81%	SMIN	iShares
INDA	iShares MSCI India ETF	0.74%	EPI	Wisdom
KSA	iShares MSCI Saudi Arabia ETF	0.52%	KSA	iShares
EIDO	iShares MSCI Indonesia ETF	0.52%	EIDO	iShares

Emerging 1-Day Performance Laggards

	Ticker	Fund
	ECNS	iShares MSCI China Small-Cap ETF
	PGJ	Invesco Golden Dragon China ETF
	SDEM	Global X MSCI SuperDividend Emerging Markets ETF
	EWT	iShares MSCI Taiwan ETF
	EWW	iShares MSCI Mexico ETF
	EDIV	SPDR S&P Emerging Markets Dividend ETF
	ILF	iShares Latin America 40 ETF
22 22 22 23 23 23 23 23 23 23 23 23 23 2	FLCH	Franklin FTSE China ETF
	FXI	iShares China Large-Cap ETF
	GXC	SPDR S&P China ETF

na Large ea	PEN	
hina ETF		

Emerging Most Oversold

Emerging Most Overbought

Invesco India ETF

Franklin FTSE India ETF

iShares MSCI India ETF

iShares MSCI Qatar ETF

iShares MSCI India Small Cap ETF

WisdomTree India Earnings Fund

iShares MSCI Saudi Arabia ETF

iShares MSCI Indonesia ETF

iShares India 50 ETF

First Trust India NIFTY 50 Equal Weight ETF

Ticker	Fund	
ECNS	iShares MSCI China Small-Cap ETF	29.18
FLCH	Franklin FTSE China ETF	31.90
GXC	SPDR S&P China ETF	32.20
MCHI	iShares MSCI China ETF	32.86
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	33.08
FXI	iShares China Large-Cap ETF	34.15
ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	35.98
КВА	KraneShares Bosera MSCI China A 50 Connect Index	36.21
RAYC	Rayliant Quantamental China Equity ETF	36.74
CNYA	iShares MSCI China A ETF	36.88

* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day

© ETF Action. Inc. 2022

Emerging 1-Day Performance Top 10 Countries

-3.44%

-2.00%

-1.94%

-1.83%

-1.60%

-1.59%

-1.57%

-1.40%

-1.35%

-1.26%









Fixed Income Performance

Commodities Performance

Apr 22

Jul 22

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD	Ticker	Name	1 Day	1 Month	YTD	Ticker	Name	1 Day	1 Month	YTD
AGG	U.S. Aggregate	0.35%	2.04%	-7.56%	DJP	Broad Commodities	-1.57%	2.80%	24.22%					
AUU	0.3. Aggregate		2.01.0	,	DBE	Energy	-2.54%	-6.32%	45.90%	UUP	Long Dollar	-0.39%	0.46%	9.95%
SHY	1-3 Year Treasury Bonds	0.00%	0.11%	-2.60%	USO	WTI Crude Oil	-3.74%	-8.01%	38.21%					
					BNO	Brent Crude Oil	-3.77%	-6.54%	49.02%		Short Dollar	0.47%	-0.30%	-9.61%
IEF	7-10 Year Treasury Bonds	0.58%	2.46%	-7.37%	UNG	Natural Gas	-0.42%	47.59%	128.18%	UDN				
		2.400/	2.020/	10.000/	UGA	Gasoline	-3.36%	-14.39%	46.85%					
TLT	20+ Year Treasury Bonds	2.40%	3.83%	-18.06%	DBP	Precious Metals	0.44%	-1.44%	-6.35%					
TIP	TIPS Bonds	0.05%	2.70%	-5.08%	GLD	Gold	0.57%	-1.95%	-3.47%	FXE	Euro	0.38%	-1.72%	-10.36%
	TFS Bonds	0.0070	2.7070	3.0070	SLV	Silver	0.48%	2.62%	-12.65%					
FLOT	Floating Rate Bonds	-0.04%	0.50%	-0.75%	PPLT	abrdn Physical Platin	1.71%	2.23%	-6.07%	FXB		0.64%	1.32%	-9.51%
	-				PALL	abrdn Physical Palla	3.35%	12.29%	15.42%		British Pound Sterling			
LQD	Investment Grade Corporate	0.20%	3.34%	-12.18%	DBB	Base Metals	-0.56%	1.40%	-12.13%					
		0.000/	5 700/	7.070/	CPER	Copper	-1.71%	-2.25%	-21.61%		Swiss Franc	0.23%	0.92%	-4.68%
HYG	High Yield Corporate	0.03%	5.72%	-7.97%	LD	Lead	1.75%	5.05%	-11.34%	FXF				
BKLN	Senior Loan	0.05%	3.05%	-3.13%	JJN	Nickel	2.08%	10.48%	18.12%	174				
DILIN		0.0570	5.0570	5.1570	JJU	Aluminum	-1.24%	-2.12%	-12.92%					
PFF	Preferred & Income Securities	0.39%	5.71%	-9.51%	JJT	Tin	1.04%	-5.10%	-34.59%	FXY	Japanese Yen	1.30%	2.72%	-12.77%
					DBA	Agriculture	-1.14%	-0.10%	1.06%	FAT	Japanese ren	1.5070	2.7270	-12.7770
MUB	Municipal Bonds	0.11%	1.97%	-5.66%	CORN	Corn	-1.40%	0.16%	14.44%					
					SOYB	Soybeans	-3.87%	1.11%	15.69%	EV/C		0.00%	0.20%	1 700
MBB	MBS	0.29%	2.76%	-5.41%	WEAT	Wheat	-1.18%	-3.13%	13.13%	FXC	Canadian Dollar	-0.26%	0.39%	-1.76%
5145		0.45%	2.63%	-17.04%	CANE	Sugar	0.11%	-4.17%	-5.00%					
EMB	Dollar Denominated EM Bonds	0.4070	2.0370	·1/.0470	BAL	Cotton	-2.54%	-2.87%	0.63%					
LEMB	Local Currency EM Bond	0.44%	0.44%	-12.67%	NIB	Сосоа	0.96%	1.54%	-13.84%	FXA	Australian Dollar	0.57%	2.96%	-3.52%
LEWID	Eocar carrency Elvi Bolia		0.11%	0, , 0	JO	Coffee	-2.41%	-5.55%	-5.54%					

* ETF Landscape represented using the ETF Action classification system **Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify

Definitions & Disclosures

Disclaimer of Warranties

Except for the express warranties set forth in the terms of service, all services, including all ETF Action materials, are provided on an "as is," "where is" basis, and ETF Action and its licensors disclaim all representations or warranties, express or implied as to the services. ETF Action and its licensors specifically disclaim all implied warranties of merchantability, fitness for a particular purpose, title and non-infringement, and all warranties arising from course of dealing, usage or trade practice. Without limiting the foregoing, ETF Action and its licensors make no warranty of any kind that the services or ETF Action materials, or any products or results of the use thereof, will meet customer's or any other person's requirements, operate without interruption, achieve any intended result, be compatible or work with any software, system or other services, or be secure, accurate, complete, timely, free of harmful code or error free. All third-party materials are provided "as is" and any representation or warranty of or concerning any third-party materials is strictly between customer and the third-party owner or distributor of the third-party materials.

Additional Disclaimers

The services are not intended and should not be construed as financial or investment advice, a recommendation or promotion. Neither ETF Action nor its licensors shall be responsible for investment decisions, damages, or other losses *resulting from use of the services*. *Past performance* does not guarantee future performance. Neither ETF Action nor its licensors shall be considered an "expert" under the securities act of 1933. Neither ETF Action nor its licensors warrant that the services comply with the requirements of the NASD or any similar organization or with the securities laws of any jurisdiction. Any information contained in in the services should not be acted upon without obtaining specific legal, tax, and investment advice from a licensed professional.

Distribution prohibited without prior permission. Full terms of service, including terms of use, copyrights, and disclaimers are available at https://www.etfaction.com/terms.

© Copyright ETF Action, Inc. All Rights Reserved.

Data Reliability and Definitions

ETF Action, LLC believes the information herein to be accurate (at time of publication) and was obtained from reliable sources, but makes no guarantees with respect to its accuracy. Calculations of fundamental data are based on weighted averages of reported results and consensus estimates of current ETF constituents. Valuation data (price/earnings, price/sales, price/cash flow, price/book value) are calculated using per share data divided by current NAV of corresponding ETF. Performance, risk and technical data (moving averages, relative performance, RSI) calculated for specified periods using ETF market price which may differ from net asset value (NAV). ETF Action Sector Beta Composites represent ETFs that meet stringent criteria surrounding index methodology, liquidity, assets under management, and management fee.

2 in Action Sector Beta composites represent 2 in strat meet strangent enterna sur ounding mack methodology, inquidity, assets under managen

Source Data & ETF Issuer Information ..

ETF Action is an independent technology and research firm focused on helping advisors build better portfolios, create engaging experiences with their clients, and navigate the vast ETF landscape.

Contact us at:

team@etfaction.com www.etfaction.com