

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) 2.0% 1.85% 1.62% 1.45% 1.30% 1.06% 1.07% 1.0% 0.62% 0.57% 0.0% -0.01%

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	
IPO	Renaissance IPO ETF	4.42%
BUZZ	VanEck Social Sentiment ETF	3.99%
ACSI	American Customer Satisfaction ETF	3.87%
ONEO	SPDR Russell 1000 Momentum Focus ETF	3.71%
MMLG	First Trust Multi-Manager Large Growth ETF	2.85%
CLRG	IQ Chaikin U.S. Large Cap ETF	2.78%
JSML	Janus Henderson Small Cap Growth Alpha ETF	2.57%
SPHB	Invesco S&P 500 High Beta ETF	2.55%
TMFS	Motley Fool Small-Cap Growth ETF	2.52%
LCG	Sterling Capital Focus Equity ETF	2.49%

Size & Style 1-Day Performance Laggards



TICKER	Fund	
PEY	Invesco High Yield Equity Dividend Achievers ETF	-0.97%
ALTL	Pacer Lunt Large Cap Alternator ETF	-0.61%
LVHD	Franklin U.S. Low Volatility High Dividend Index ETF	-0.61%
SPLV	Invesco S&P 500 Low Volatility ETF	-0.60%
RDIV	Invesco S&P Ultra Dividend Revenue ETF	-0.58%
DHS	WisdomTree U.S. High Dividend Fund	-0.53%
ABEQ	Absolute Core Strategy ETF	-0.53%
UTRN	Vesper U.S. Large Cap Short-Term Reversal Strategy ETF	-0.53%
DURA	VanEck Morningstar Durable Dividend ETF	-0.52%
SPHD	Invesco S&P 500 High Dividend Low Volatility ETF	-0.48%

200 Day Moving Average

Size & Style Most Overbought

	Ticker	Fund	
	USNZ	Xtrackers Net Zero Pathway Paris Aligned US Equity ETF	69.43
	JSML	Janus Henderson Small Cap Growth Alpha ETF	65.99
	RZG	Invesco S&P Smallcap 600 Pure Growth ETF	65.55
	FDM	First Trust Dow Jones Select MicroCap Index Fund	65.23
_	QVMS	Invesco S&P SmallCap 600 QVM Multi-factor ETF	64.90
	NZUS	SPDR MSCI USA Climate Paris Aligned ETF	63.87
_	BUZZ	VanEck Social Sentiment ETF	63.86
	ACSI	American Customer Satisfaction ETF	63.85
	SLYG	SPDR S&P 600 Small Cap Growth ETF	63.78
	IJT	iShares S&P Small-Cap 600 Growth ETF	63.67

Size & Style Most Oversold

	Ticker	Fund	
%	LGH	HCM Defender 500 Index ETF	33.24
%	QQH	HCM Defender 100 Index ETF	36.52
%	LFEQ	VanEck Long/Flat Trend ETF	42.31
%	RUFF	Alpha Dog ETF	43.59
%	ABEQ	Absolute Core Strategy ETF	43.94
%	SPHD	Invesco S&P 500 High Dividend Low Volatility ETF	44.30
%	FFTY	Innovator IBD 50 ETF	44.72
%	HDV	iShares Core High Dividend ETF	45.46
%	PEY	Invesco High Yield Equity Dividend Achievers ETF	45.56
%	UTRN	Vesper U.S. Large Cap Short-Term Reversal Strategy	46.07



U.S. Size & Style Flows

Large-Cap 30-Day Rolling Flows



Mid-Cap 30-Day Rolling Flows



Small-Cap 30-Day Rolling Flows



	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Large Cap, Beta Growth, Beta	24	\$1,190B	\$1.59B	\$34.58B	\$41.07B	\$124.68B
Large Cap, Beta Growth, Beta: Growth	9	\$219B	\$0.60B	\$7.31B	\$10.09B	\$15.86B
Large Cap, Beta Growth, Beta: Value	10	\$211B	(\$0.36B)	\$5.11B	\$14.87B	\$27.43B
Mid Cap, Beta, Beta	10	\$169B	(\$0.22B)	\$2.89B	\$4.70B	\$12.18B
Mid Cap, Beta, Beta: Growth	6	\$31B	(\$0.02B)	\$0.26B	(\$0.18B)	\$0.71B
Mid Cap, Beta, Beta: Value	6	\$38B	\$0.00B	(\$0.17B)	(\$0.29B)	\$0.76B
Small Cap, Beta, Beta	13	\$182B	(\$0.58B)	(\$5.31B)	(\$4.41B)	\$5.59B
Small Cap, Beta, Beta: Growth	7	\$30B	(\$0.07B)	\$0.54B	\$0.71B	\$1.35B
Small Cap, Beta, Beta: Value	7	\$49B	(\$0.20B)	(\$0.11B)	(\$3.14B)	(\$1.57B)

U.S. Size & Style Landscape Flows

U.S. Size & Style Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
VOO	Vanguard S&P 500 ETF	\$0.71B	\$14.18B	\$27.58B	\$43.49B	\$256.98B
QQQ	Invesco QQQ Trust	\$0.64B	\$4.98B	\$7.07B	\$21.27B	\$165.35B
SPYG	SPDR Portfolio S&P 500 Growth ETF	\$0.52B	\$0.78B	\$1.20B	\$1.83B	\$12.87B
SPLV	Invesco S&P 500 Low Volatility ETF	\$0.41B	\$0.86B	\$1.29B	\$2.43B	\$10.09B
VUG	Vanguard Growth ETF	\$0.25B	\$2.93B	\$5.45B	\$6.87B	\$71.96B
VTI	Vanguard Total Stock Market ETF	\$0.23B	\$4.36B	\$11.17B	\$35.88B	\$256.07B
SCHD	Schwab US Dividend Equity ETF	\$0.23B	\$3.18B	\$6.73B	\$10.91B	\$35.58B
DGRW	WisdomTree US Quality Dividend Growth Fund	\$0.21B	(\$0.03B)	\$0.10B	\$0.46B	\$6.47B
IVV	iShares Core S&P 500 ETF	\$0.18B	\$13.02B	\$17.38B	\$29.47B	\$291.23B
JQUA	JPMorgan U.S. Quality Factor ETF	\$0.12B	\$0.13B	\$0.17B	\$0.20B	\$0.53B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
HDV	iShares Core High Dividend ETF	(\$0.53B)	\$3.34B	\$5.26B	\$5.48B	\$12.58B
IWM	iShares Russell 2000 ETF	(\$0.22B)	(\$0.92B)	(\$1.87B)	(\$2.26B)	\$51.67B
VO	Vanguard Mid-Cap ETF	(\$0.18B)	\$1.16B	\$2.04B	\$6.15B	\$48.73B
IWN	iShares Russell 2000 Value ETF	(\$0.18B)	(\$0.85B)	(\$2.16B)	(\$2.48B)	\$11.73B
IVE	iShares S&P 500 Value ETF	(\$0.17B)	\$0.59B	\$1.47B	\$2.69B	\$23.63B
VTWO	Vanguard Russell 2000 ETF	(\$0.17B)	(\$1.06B)	(\$0.37B)	\$0.81B	\$5.25B
IUSG	iShares Core S&P U.S. Growth ETF	(\$0.16B)	\$0.44B	\$0.64B	\$0.95B	\$11.16B
IVW	iShares S&P 500 Growth ETF	(\$0.15B)	(\$0.12B)	(\$0.83B)	(\$0.36B)	\$29.70B
IJR	iShares Core S&P Small Cap ETF	(\$0.15B)	(\$1.58B)	(\$1.38B)	\$3.30B	\$62.65B
ITOT	iShares Core S&P Total U.S. Stock Market ETF	(\$0.14B)	\$3.08B	\$3.57B	\$6.55B	\$41.90B

Fund Name

Ticker

RSI (14D)

49.46

49.90

41.66

56.80

57.74

47.62

51.68

49.24

55.82

61.16

62.48

59.06

% Abv/Below

200 SMA

-2.55%

-2.89%

-2.35%

-9.05%

-9.16%

-11.78%

-10.22%

-12.06%

-9.92%

-14.31%

-15.28%

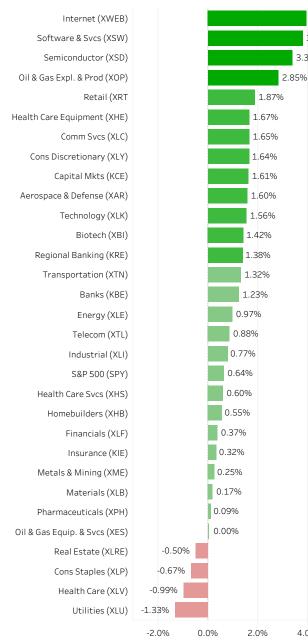
5.38%

S&P Sector & Industry 1 Day Performance

3.96%

3.82%

3.39%



XLP	Consumer Staples Select Sector SPDR Fund		-10.02%	5.38%	-0.24%
XLV	Health Care Select Sector SPDR Fund		-10.14%	7.05%	0.05%
XLU	Utilities Select Sector SPDR Fund		-11.24%	7.47%	-3.33%
XLI	Industrial Select Sector SPDR Fund		-15.90%	5.37%	0.06%
SPY	SPDR S&P 500 ETF Trust		-17.36%	7.90%	1.07%
XLB	Materials Select Sector SPDR Fund		-17.74%	5.09%	-5.48%
XLRE	Real Estate Select Sector SPDR Fund		-19.88%	6.85%	-0.67%
XLE	Energy Select Sector SPDR Fund		-20.87%	59.47%	-7.37%
XLF	Financial Select Sector SPDR Fund		-20.98%	6.47%	-0.18%
XLK	Technology Select Sector SPDR Fund		-22.33%	11.11%	3.50%
XLY	Consumer Discretionary Select Sector SPDR Fund		-28.02%	13.03%	4.91%
XLC	Communication Services Select Sector SPDR Fund		-32.56%	9.33%	2.11%
	Sector & Industry 1 Day Performance Leaders			Sector & I	ndustry Most
Ticker	Fund		Ticker	Fund	
XSW	SPDR S&P Software & Services ETF	3.82%	РКВ	Invesco Dynamic B	uilding & Constru

Select Sector SPDRs Technicals

% From 52W

High

% From 52W

Low

Ticker	Fund	
XSW	SPDR S&P Software & Services ETF	3.82%
FDN	First Trust Dow Jones Internet Index Fund	3.42%
XSD	SPDR S&P Semiconductor ETF	3.39%
PNQI	Invesco NASDAQ Internet ETF	3.38%
IGV	iShares Expanded Tech-Software Sector ETF	3.35%
QTEC	First Trust NASDAQ-100 Technology Sector Index	3.22%
PSI	Invesco Dynamic Semiconductors ETF	2.99%
PSCT	Invesco S&P SmallCap Information Technology ETF	2.93%
FTXL	First Trust Nasdaq Semiconductor ETF	2.91%
XOP	SPDR S&P Oil & Gas Exploration & Production ETF	2.85%

Sector & Industry 1 Day Performance Laggards

Ticker	Fund	
XLU	Utilities Select Sector SPDR Fund	-1.33%
RYU	Invesco S&P 500 Equal Weight Utilities ETF	-1.31%
VPU	Vanguard Utilities ETF	-1.30%
FUTY	Fidelity MSCI Utilities Index ETF	-1.30%
PJP	Invesco Dynamic Pharmaceuticals ETF	-1.23%
XLV	Health Care Select Sector SPDR Fund	-0.99%
PUI	Invesco DWA Utilities Momentum ETF	-0.95%
FXU	First Trust Utilities AlphaDEX Fund	-0.93%
FHLC	Fidelity MSCI Health Care Index ETF	-0.73%
XLP	Consumer Staples Select Sector SPDR Fund	-0.67%

Most Overbought

% Abv/Below

50 SMA

Ticker	Fund	
РКВ	Invesco Dynamic Building & Construction ETF	66.38
PSCT	Invesco S&P SmallCap Information Technology ETF	65.87
PSI	Invesco Dynamic Semiconductors ETF	65.00
XSD	SPDR S&P Semiconductor ETF	64.55
XHS	SPDR S&P Health Care Services ETF	64.34
SOXX	iShares Semiconductor ETF	63.90
FTXL	First Trust Nasdaq Semiconductor ETF	63.78
XHB	SPDR S&P Homebuilders ETF	63.55
SOXQ	Invesco PHLX Semiconductor ETF	63.53
AIRR	First Trust RBA American Industrial Renaissance ETF	63.22

Sector & Industry Most Oversold

Ticker	Fund	
RYU	Invesco S&P 500 Equal Weight Utilities ETF	39.90
KBWP	Invesco KBW Property & Casualty Insurance ETF	39.99
XLU	Utilities Select Sector SPDR Fund	41.66
VPU	Vanguard Utilities ETF	42.66
FUTY	Fidelity MSCI Utilities Index ETF	42.93
XES	SPDR S&P Oil & Gas Equipment & Services ETF	44.36
PUI	Invesco DWA Utilities Momentum ETF	45.05
VRAI	Virtus Real Asset Income ETF	45.41
FXU	First Trust Utilities AlphaDEX Fund	45.48
XLB	Materials Select Sector SPDR Fund	47.62
	RYU KBWP XLU VPU FUTY XES PUI VRAI FXU	RYU Invesco S&P 500 Equal Weight Utilities ETF KBWP Invesco KBW Property & Casualty Insurance ETF XLU Utilities Select Sector SPDR Fund VPU Vanguard Utilities ETF FUTY Fidelity MSCI Utilities Index ETF XES SPDR S&P Oil & Gas Equipment & Services ETF PUI Invesco DWA Utilities Momentum ETF VRAI Virtus Real Asset Income ETF FXU First Trust Utilities AlphaDEX Fund

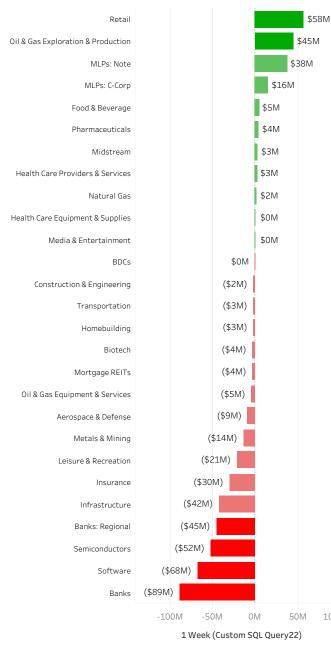
* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify

4.0%



U.S. Sector Landscape

U.S. Sector & Industry 1-Week Flows



	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services		\$14B	(\$17M)	(\$56M)	(\$468M)	\$69M
Consumer Discretionary	12	\$22B	(\$6M)	(\$3,171M)	(\$5,630M)	(\$5,258M)
Consumer Staples	11	\$27B	(\$76M)	\$1,267M	\$4,135M	\$6,236M
Energy	31	\$69B	(\$48M)	(\$4,140M)	(\$2,842M)	\$1,397N
Financials	23	\$56B	(\$470M)	(\$10,757M)	(\$17,623M)	(\$8,416M)
Health Care	22	\$91B	\$575M	\$3,965M	\$7,661M	\$12,934N
Industrial	11	\$27B	\$54M	(\$2,820M)	(\$3,179M)	(\$5,010M)
Materials	9	\$14B	(\$33M)	(\$2,731M)	(\$489M)	(\$1,477M)
Multi-Sector	17	\$14B	(\$138M)	(\$514M)	(\$4,924M)	(\$3,192M)
Real Estate	23	\$67B	(\$173M)	(\$2,918M)	(\$5,191M)	\$2,955M
Technology	23	\$119B	(\$207M)	(\$1,485M)	(\$1,076M)	\$4,287N
Utilities	9	\$26B	\$76M	\$2,612M	\$4,922M	\$5,795M

U.S. Sector Landscape

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLV	Health Care Select Sector SPDR Fund	\$483M	\$2,604M	\$5,236M	\$8,299M	\$39,035M
XLI	Industrial Select Sector SPDR Fund	\$88M	(\$1,234M)	(\$3,067M)	(\$4,561M)	\$12,413M
XLU	Utilities Select Sector SPDR Fund	\$71M	\$2,065M	\$3,318M	\$3,815M	\$16,282M
VHT	Vanguard Health Care ETF	\$60M	(\$148M)	\$465M	\$1,321M	\$16,267M
XRT	SPDR S&P Retail ETF	\$58M	(\$88M)	\$168M	(\$345M)	\$461M
XOP	SPDR S&P Oil & Gas Exploration & Production E	\$50M	(\$910M)	(\$759M)	(\$746M)	\$4,347M
XBI	SPDR S&P BIOTECH ETF	\$45M	\$1,238M	\$2,525M	\$3,549M	\$7,834M
AMJ	J.P. Morgan Alerian MLP Index ETN	\$38M	\$8M	\$5M	(\$46M)	\$2,395M
VDC	Vanguard Consumer Staples ETF	\$33M	\$170M	\$443M	\$1,023M	\$6,721M
XLB	Materials Select Sector SPDR Fund	\$21M	(\$922M)	(\$1,279M)	(\$2,000M)	\$5,926M

U.S. Sector & Industry Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUN
XLF	Financial Select Sector SPDR Fund	(\$245M)	(\$6,377M)	(\$10,451M)	(\$5,292M)	\$29,0871
XLP	Consumer Staples Select Sector SPDR Fund	(\$131M)	(\$311M)	\$1,442M	\$2,775M	\$15,299
VNQ	Vanguard Real Estate ETF	(\$102M)	(\$2,155M)	(\$1,838M)	\$1,065M	\$38,956
IGV	iShares Expanded Tech-Software Sector ETF	(\$67M)	\$420M	\$510M	\$1,269M	\$4,561
VDE	Vanguard Energy ETF	(\$66M)	(\$599M)	(\$859M)	(\$241M)	\$7,078
KBWB	Invesco KBW Bank ETF	(\$63M)	(\$459M)	(\$747M)	(\$2M)	\$1,764
XLE	Energy Select Sector SPDR Fund	(\$60M)	(\$1,570M)	(\$2,756M)	(\$461M)	\$33,549
IBB	iShares Biotechnology ETF	(\$53M)	\$10M	(\$207M)	(\$614M)	\$8,086
XLRE	Real Estate Select Sector SPDR Fund	(\$53M)	\$154M	(\$139M)	\$2,131M	\$5,267
SOXX	iShares Semiconductor ETF	(\$53M)	(\$372M)	(\$212M)	\$1,285M	\$6,874



U.S. Sector Rolling 30-Day Flows

July 20, 2022





Consumer Discretionary





Energy





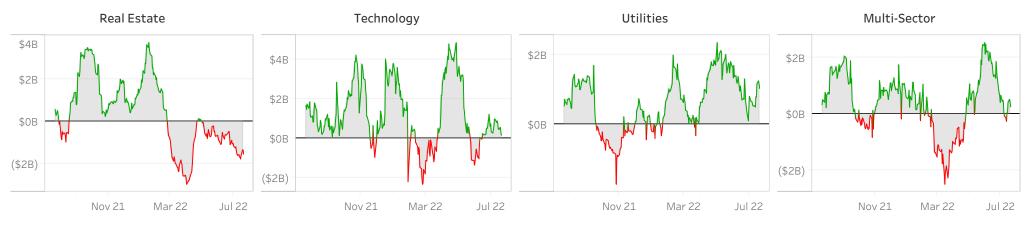
Industrial



Consumer Staples







\$4B

\$2B

\$0B

(\$2B)



Global Thematic Performance

July 20, 2022

Global Thematic Segment 1-Day Performance

Cannabis (MJ)		Θ
Disruptive Tech (ARKW)		6
Multi-Theme (ARKK)		5.07
Cloud Computing (SKYY)		4.39%
Online Retail (IBUY)		3.86%
Clean Energy (PBW)		3.70%
Blockchain (BLOK)		3.60%
Genomics (ARKG)		3.32%
FinTech (FINX)		3.03%
Industrial Revolution (ARKQ)		2.60%
3D Printing (PRNT)		2.39%
eSports & Video Games (ESPO		2.36%
Casinos & Gaming (BETZ)		2.03%
Evolving Consumer (SOCL)		2.00%
Big Data (AIQ)		1.98%
Robotics & AI (ROBO)		1.88%
Cyber Security (HACK)		1.75%
Digital Payments (IPAY)		1.42%
NextGen Transportation (DRI		1.41%
Connectivity (FIVG)		1.32%
Space (UFO)		1.30%
Advanced Materials (REMX)		1.20%
Biotech		1.14%
Clean Energy: Solar (TAN)		1.02%
Water (PHO)		0.86%
Smart Infrastructure (GRID)		0.16%
Clean Energy: Wind (FAN)	-0.63%	
Digital Infrastructure (SRVR)	-0.72%	
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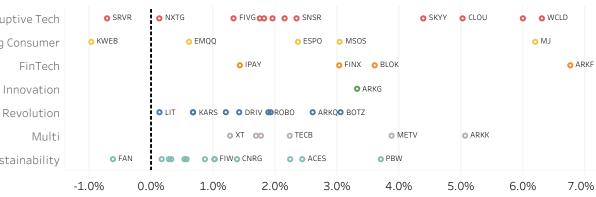


6.20%

6.00%

5.07%

4.39%



Global Thematic 1-Day Performance Landscape

Global Thematic 1-Day Performance Leaders

Ticker	Fund	
POTX	Global X Cannabis ETF	8.34%
ARKF	ARK Fintech Innovation ETF	6.77%
YOLO	AdvisorShares Pure Cannabis ETF	6.36%
WCLD	WisdomTree Cloud Computing Fund	6.31%
MJ	ETFMG Alternative Harvest ETF	6.20%
BITQ	Bitwise Crypto Industry Innovators ETF	6.04%
ARKW	ARK Next Generation Internet ETF	6.00%
ARKK	ARK Innovation ETF	5.07%
CLOU	Global X Cloud Computing ETF	5.02%
вксн	Global X Blockchain ETF	4.44%

Global Thematic 1-Day Performance Laggards

Ticker	Fund	
RNRG	Global X Funds Global X Renewable Energy Producers	-1.17%
KWEB	KraneShares CSI China Internet ETF	-0.98%
VPN	Global X Data Center REITs & Digital Infrastructure ETF	-0.87%
AGNG	Global X Aging Population ETF	-0.73%
SRVR	Pacer Benchmark Data & Infrastructure Real Estate S	-0.72%
FAN	First Trust Global Wind Energy ETF	-0.63%
KGRN	KraneShares MSCI China Clean Technology Index ETF	-0.46%
PAWZ	ProShares Pet Care ETF	-0.16%
SMOG	VanEck Low Carbon Energy ETF	-0.05%
LEGR	First Trust Indxx Innovative Transaction & Process ETF	0.06%

Thematic Most Overbought

	Ticker	Fund	
5	GNOM	Global X Genomics & Biotechnology ETF	66.66
5	BITQ	Bitwise Crypto Industry Innovators ETF	65.52
5	BLOK	Amplify Transformational Data Sharing ETF	64.20
5	IDNA	iShares Genomics Immunology and Healthcare ETF Genom	63.84
5	SNSR	Global X Internet of Things ETF	63.50
5	вксн	Global X Blockchain ETF	62.99
6	ARKG	ARK Genomic Revolution ETF	62.82
5	SBIO	ALPS Medical Breakthroughs ETF	62.33
ó	FIVG	Defiance Next Gen Connectivity ETF	62.17
ó	BTEC	Principal Healthcare Innovators ETF	61.33

Thematic Most Oversold

	Ticker	Fund	
ó	AWAY	ETFMG Travel Tech ETF	45.98
ó	KWEB	KraneShares CSI China Internet ETF	47.12
ó	KGRN	KraneShares MSCI China Clean Technology Index ETF	47.30
ó	SRVR	Pacer Benchmark Data & Infrastructure Real Estate SCTR	47.68
ó	RNRG	Global X Funds Global X Renewable Energy Producers ETF	48.10
ó	KSTR	KraneShares SSE STAR Market 50 Index ETF	48.20
ó	FAN	First Trust Global Wind Energy ETF	48.38
ó	REMX	VanEck Rare Earth/Strategic Metals ETF	48.72
ó	BATT	Amplify Lithium & Battery Technology ETF	48.75
ó	VPN	Global X Data Center REITs & Digital Infrastructure ETF	49.03

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

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Global Thematic Flows

Thematic 1 Week Flow Leaders

Ticker	Fund	
ARKK	ARK Innovation ETF	\$76M
SRVR	Pacer Benchmark Data & Infrastructure Real Estate SCTR ETF	\$38M
MSOS	AdvisorShares Pure US Cannabis ETF	\$25M
WCLD	WisdomTree Cloud Computing Fund	\$15M
GINN	Goldman Sachs Innovate Equity ETF	\$13M
CIBR	First Trust NASDAQ Cybersecurity ETF	\$8M
CNRG	SPDR S&P Kensho Clean Power ETF	\$3M
KGRN	KraneShares MSCI China Clean Technology Index ETF	\$2M
MJ	ETFMG Alternative Harvest ETF	\$2M
TECB	iShares U.S. Tech Breakthrough Multisector ETF	\$1M

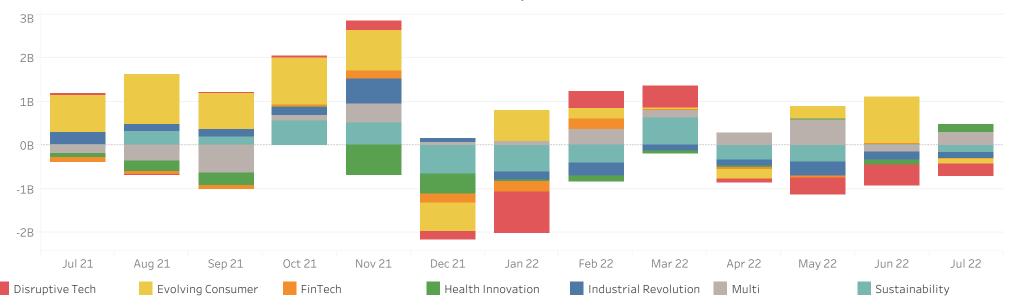
Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	35	\$18B	\$18M	(\$1,084M)	(\$566M)	(\$1,162M)
Evolving Consumer	48	\$12B	(\$132M)	\$981M	\$1,250M	\$6,177M
FinTech	24	\$3B	(\$3M)	(\$112M)	\$92M	(\$322M)
Health Innovation	19	\$4B	(\$22M)	\$6M	(\$147M)	(\$1,929M)
Industrial Revolution	32	\$12B	(\$43M)	(\$711M)	(\$1,365M)	\$28M
Multi	42	\$16B	\$18M	\$950M	\$1,851M	\$1,129M
Sustainability	42	\$17B	(\$143M)	(\$751M)	(\$730M)	(\$222M)
Grand Total	242	\$83B	(\$306M)	(\$720M)	\$386M	\$3,698M

Thematic Landscape Assets & Flows

Thematic 1 Week Flow Laggards

Ticker Fund KWEB KraneShares CSI China Internet ETF (\$156M) (\$131M) Invesco Solar ETF TAN ONLN ProShares Online Retail ETF (\$31M) iShares Global Clean Energy ETF (\$21M) ICLN (\$15M) IDRV iShares Self-driving EV & Tech ETF GTEK Goldman Sachs Future Tech Leaders Equity ETF (\$13M) (\$10M) LIT Global X Lithium & Battery Tech ETF PBW Invesco WilderHill Clean Energy ETF (\$10M) EMQQ EMQQ The Emerging Markets Internet & Ecommerce ETF (\$9M) PHO Invesco Water Resources ETF (\$8M)

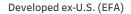
Thematic Monthly Flows



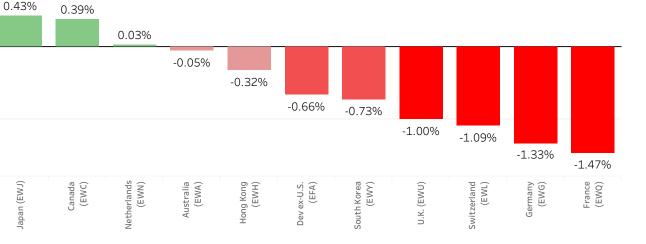


Developed Markets ex-U.S. Performance

July 20, 2022

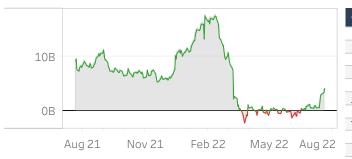






Developed ex-U.S. 1-Day Performance Top 10 Countries

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



Developed ex-U.S. Monthly Flows

Nov 21 Dec 21 Jan 22

Sep 21 Oct 21 Feb 22 Mar 22

Apr 22 May .. Jun 22

Jul 22

10B

5B

0B

Aug 21

Jul 21

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

Ticker	Fund	
ISRA	VanEck Israel ETF	1.87%
EIS	iShares MSCI Israel ETF	1.78%
EWS	iShares MSCI Singapore ETF	1.16%
FLCA	Franklin FTSE Canada ETF	0.60%
FDT	First Trust Developed Markets ex-US AlphaDEX Fund	0.52%
JPXN	iShares JPX-Nikkei 400 ETF	0.50%
DFJ	WisdomTree Japan SmallCap Dividend Fund	0.49%
ток	iShares MSCI Kokusai ETF	0.47%
EWJ	iShares MSCI Japan ETF	0.43%
HEWJ	iShares Currency Hedged MSCI Japan ETF	0.39%

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

Ticker	Fund	
EWI	iShares MSCI Italy ETF	-4.16%
EWP	iShares MSCI Spain ETF	-2.51%
CIL	VictoryShares International Volatility Wtd ETF	-2.03%
EUSC	WisdomTree Europe Hedged SmallCap Equity Fund	-1.52%
EWQ	iShares MSCI France ETF	-1.47%
EWO	iShares MSCI Austria ETF	-1.43%
FDD	First Trust Stoxx European Select Dividend Index Fund	-1.37%
EWG	iShares MSCI Germany ETF	-1.33%
EZU	iShares MSCI Eurozone ETF	-1.30%
IEV	iShares Europe ETF	-1.22%

Developed ex-U.S. Most Overbought

	Ticker	Fund	
Ś	DBJP	Xtrackers MSCI Japan Hedged Equity ETF	63.10
ó	HEWJ	iShares Currency Hedged MSCI Japan ETF	61.40
5	EIS	iShares MSCI Israel ETF	60.82
ó	ISRA	VanEck Israel ETF	60.35
5	DXJ	WisdomTree Japan Hedged Equity Fund	59.47
5	EWN	iShares MSCI Netherlands ETF	56.88
5	ENZL	iShares MSCI New Zealand ETF	56.83
Ś	EFG	iShares MSCI EAFE Growth ETF	56.82
ò	EWS	iShares MSCI Singapore ETF	56.68
ó	ток	iShares MSCI Kokusai ETF	55.48

Developed ex-U.S. Most Oversold

	Ticker	Fund	
)	EWI	iShares MSCI Italy ETF	39.71
)	DTH	WisdomTree International High Dividend Fund	40.16
)	EWP	iShares MSCI Spain ETF	40.66
)	EUSC	WisdomTree Europe Hedged SmallCap Equity Fund	41.65
)	HDEF	Xtrackers MSCI EAFE High Dividend Yield Equity ETF	41.77
)	FIDI	Fidelity International High Dividend ETF	42.07
)	IDV	iShares International Select Dividend ETF	42.71
	IMFL	Invesco International Developed Dynamic Multifact	43.29
	IDOG	ALPS International Sector Dividend Dogs ETF	44.04
	DFE	WisdomTree Europe SmallCap Dividend Fund	44.04

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

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Emerging Markets Performance

July 20, 2022

58.28

56.72

56.37

56.22 55.01

52.69

52.56

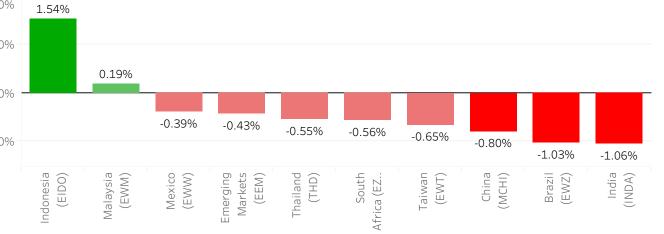
52.24

51.85

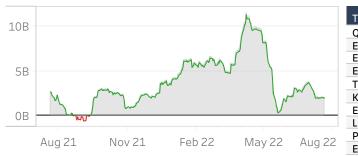
49.32

Emerging (EEM)





Emerging 30-Day Rolling Flows



Emerging Monthly Flows

Jan 22

Feb 22 Mar 22 Apr 22 May 22

Dec 21

Nov 21

Jun 22

6B

4B

2B

0B

Jul 21 Aug 21 Sep 21 Oct 21 Emerging 1-Day Performance Leaders

Ticker	Fund		Ticker	Fund
QAT	iShares MSCI Qatar ETF	2.26%	PIN	Invesco
EPU	iShares MSCI Peru ETF	1.92%	FLIN	Franklir
EIDO	iShares MSCI Indonesia ETF	1.54%	QAT	iShares
EWZS	iShares MSCI Brazil Small-Cap ETF	1.22%	SMIN	iShares
TUR	iShares MSCI Turkey ETF	0.59%	KSA	iShares
KSA	iShares MSCI Saudi Arabia ETF	0.50%	INDA	iShares
EWM	iShares MSCI Malaysia ETF	0.19%	ECH	iShares
LDEM	iShares ESG MSCI EM Leaders ETF	0.17%	EIDO	iShares
PIN	Invesco India ETF	0.09%	INDY	iShares
ECH	iShares MSCI Chile ETF	0.08%	VNM	VanEck

Emerging 1-Day Performance Laggards

	Ticker	Fund	
	KBA	KraneShares Bosera MSCI China A 50 Connect Index ETF	-1.07%
	INDA	iShares MSCI India ETF	-1.06%
	EWZ	iShares MSCI Brazil ETF	-1.03%
	INDY	iShares India 50 ETF	-0.95%
	UEVM	VictoryShares USAA MSCI Emerging Markets Value Mo	-0.93%
	EPHE	iShares MSCI Philippines ETF	-0.93%
	FEM	First Trust Emerging Markets AlphaDEX Fund	-0.81%
22	ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	-0.81%
17	MCHI	iShares MSCI China ETF	-0.80%
,	ILF	iShares Latin America 40 ETF	-0.78%

Emerging Most Oversold

Emerging Most Overbought

Invesco India ETF

Franklin FTSE India ETF iShares MSCI Qatar ETF

iShares MSCI India ETF

iShares MSCI Chile ETF

iShares India 50 ETF

VanEck Vietnam ETF

iShares MSCI Indonesia ETF

iShares MSCI India Small Cap ETF

iShares MSCI Saudi Arabia ETF

Ticker	Fund	
THD	iShares MSCI Thailand ETF	31.43
DEM	WisdomTree Emerging Markets High Dividend Fund	32.71
FLBR	Franklin FTSE Brazil ETF	34.29
EWZ	iShares MSCI Brazil ETF	34.65
EPHE	iShares MSCI Philippines ETF	36.17
DVYE	iShares Emerging Markets Dividend ETF	36.21
JPEM	J.P. Morgan Diversified Return Emerging Markets E	36.40
FLLA	Franklin FTSE Latin America ETF	36.69
SDEM	Global X MSCI SuperDividend Emerging Markets ETF	37.10
PIE	Invesco DWA Emerging Markets Momentum ETF	37.30

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Emerging 1-Day Performance Top 10 Countries



Commodities (DJP)

July 20, 2022









Fixed Income Performance

Commodities Performance

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	-0.07%	1.55%	-9.97%	DJP	Broad Commodities	0.90%	-8.40%	20.80%					
AUU	0.3. Aggregate	0.0770	1.0070	5.57.70	DBE	Energy	0.00%	-9.09%	48.65%	UUP	Long Dollar	0.28%	2.33%	11.59%
SHY	1-3 Year Treasury Bonds	-0.01%	0.14%	-3.33%	USO	WTI Crude Oil	-0.53%	-6.84%	42.83%					
					BNO	Brent Crude Oil	-0.68%	-3.59%	52.70%					
IEF	7-10 Year Treasury Bonds	-0.10%	1.83%	-10.79%	UNG	Natural Gas	7.42%	13.09%	114.41%	UDN	Short Dollar	-0.22%	-2.44%	-11.07%
		0.000	2.46%	24.0494	UGA	Gasoline	-1.75%	-11.14%	53.27%					
TLT	20+ Year Treasury Bonds	0.26%	2.46%	-21.91%	DBP	Precious Metals	-0.84%	-9.17%	-11.04%		Euro		-3.14%	-11.08%
TIP		-0.09%	0.07%	-8.32%	GLD	Gold	-0.94%	-7.72%	-7.56%	FXE		-0.49%		
IIP	TIPS Bonds	-0.0370	0.07 /0	-0.3270	SLV	Silver	-0.58%	-13.96%	-20.08%					
FLOT	Floating Rate Bonds	0.10%	0.36%	-0.74%	PPLT	abrdn Physical Platin	-1.79%	-8.15%	-11.35%			-0.21%	-1.97%	-11.58%
					PALL	abrdn Physical Palla	-0.22%	3.03%	-1.80%	FXB	British Pound Sterling			
LQD	Investment Grade Corporate	-0.11%	1.93%	-14.93%	DBB	Base Metals	0.88%	-12.88%	-17.97%	1 AB				
					CPER	Copper	1.16%	-17.56%	-26.17%		Swiss Franc	-0.31%	-0.23%	-6.80%
HYG	High Yield Corporate	0.44%	3.21%	-10.47%	LD	Lead	0.63%	-9.83%	-14.70%	FXF				
DIVIN	- · ·	-0.14%	1.59%	-3.78%	ЛЛИ	Nickel	4.02%	-15.92%	3.40%	FAF		-0.3170		
BKLN	Senior Loan	-0.14%	1.59%	-3.70%	JJU	Aluminum	3.54%	-4.86%	-12.88%					
PFF	Preferred & Income Securities	e Securities 0.54%	5.38%	-12.78%	JJT	Tin	2.32%	-21.31%	-33.98%	FXY	Japanese Yen	0.000	-2.39%	-16.95%
FFF					DBA	Agriculture	0.00%	-8.49%	1.01%			-0.06%		
MUB	Municipal Bonds	0.17%	2.03%	-6.80%	CORN	Corn	-0.83%	-17.26%	10.86%					
					SOYB	Soybeans	-1.85%	-12.22%	9.85%					
MBB	MBS	-0.26%	2.25%	-8.38%	WEAT	Wheat	0.95%	-20.09%	14.61%	FXC	Canadian Dollar	-0.07%	1.12%	-2.04%
			4.4.007	00.010	CANE	Sugar	-1.71%	-2.03%	-0.11%					
EMB	Dollar Denominated EM Bonds	0.79%	-1.12%	-20.61%	BAL	Cotton	1.67%	-20.19%	1.00%				-0.70%	-5.42%
LEMB		-0.24%	-2.58%	-15.22%	NIB	Сосоа	-0.04%	-3.72%	-13.18%	FXA	Australian Dollar -0.16%	-0.16%		
LEIVIB	Local Currency EM Bond	-0.2470	-2.30%	-13.2270	JO	Coffee	0.05%	-4.87%	-4.34%					

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