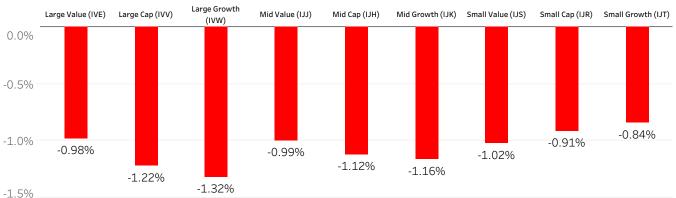


U.S. Size & Style Performance



U.S. Size & Style 1-Day Performance



Mid Cap Blend (S&P 400) IJH



Size & Style 1-Day Performance Leaders

Ticker	Fund	
FLQL	Franklin LibertyQ U.S. Equity ETF	4.86%
RPHS	Regents Park Hedged Market Strategy ETF	0.59%
FDM	First Trust Dow Jones Select MicroCap Index Fund	0.15%
ONOF	Global X Adaptive U.S. Risk Management ETF	0.11%
FYT	First Trust Small Cap Value AlphaDEX Fund	-0.07%
PTLC	Pacer Trendpilot US Large Cap ETF	-0.08%
SPC	CrossingBridge Pre-Merger SPAC ETF	-0.14%
ABEQ	Absolute Select Value ETF	-0.21%
SMMV	iShares MSCI USA Small-Cap Min Vol Factor ETF	-0.26%
DFNV	TrimTabs Donoghue Forlines Risk Managed Innovation E	-0.27%

Size & Style Most Overbought

Ticker	Fund	_
SPC	CrossingBridge Pre-Merger SPAC ETF	60.67
PTLC	Pacer Trendpilot US Large Cap ETF	60.03
ONOF	Global X Adaptive U.S. Risk Management ETF	51.03
DURA	VanEck Durable High Dividend ETF	49.42
TMFS	Motley Fool Small-Cap Growth ETF	49.33
LVHD	Franklin U.S. Low Volatility High Dividend Index ETF	49.29
XRLV	Invesco S&P 500 ex-Rate Sensitive Low Volatility ETF	48.77
ALTL	Pacer Lunt Large Cap Alternator ETF	48.22
SPLV	Invesco S&P 500 Low Volatility ETF	47.86
HUSV	First Trust Horizon Managed Volatility Domestic ETF	47.33

Small Cap Blend (S&P 600) IJR



Size & Style 1-Day Performance Laggards

Ticker	Fund	
ACSI	American Customer Satisfaction ETF	-4.14%
NZUS	SPDR MSCI USA Climate Paris Aligned ETF	-3.93%
GUSA	Goldman Sachs MarketBeta U.S. 1000 Equity ETF	-3.61%
SSPY	Syntax Stratified LargeCap ETF	-3.18%
CLRG	IQ Chaikin U.S. Large Cap ETF	-3.13%
SIXS	ETC 6 Meridian Small Cap Equity ETF	-2.82%
QVML	Invesco S&P 500 QVM Multi-factor ETF	-2.52%
BUZZ	VanEck Social Sentiment ETF	-2.44%
DDIV	First Trust Dorsey Wright Momentum & Dividend ETF	-1.82%
CSD	Invesco S&P Spin-Off ETF	-1.77%

Size & Style Most Oversold

Ticker	Fund	
LSAT	Leadershares Alphafactor Tactical Focused ETF	29.71
JMEE	JPMorgan Market Expansion Enhanced Equity ETF	30.73
FFTY	Innovator IBD 50 ETF	30.81
CSF	VictoryShares US Discovery Enhanced Volatility Wt	30.84
ACSI	American Customer Satisfaction ETF	31.22
NUMV	Nuveen ESG Mid-Cap Value ETF	32.06
XSVM	Invesco S&P SmallCap Value with Momentum ETF	32.42
SVAL	iShares US Small Cap Value Factor ETF	32.51
WBIG	WBI BullBear Yield 3000 ETF	33.15
SMLV	SPDR SSGA US Small Cap Low Volatility Index ETF	33.62

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



Large-Cap 30-Day Rolling Flows



U.S. Size & Style Landscape Flows

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Large Cap, Beta Growth, Beta	25	\$1,208B	(\$5.87B)	\$30.01B	\$39.67B	\$80.15B
Large Cap, Beta Growth, Beta: Growth	10	\$219B	\$1.26B	\$9.50B	\$15.79B	\$15.65B
Large Cap, Beta Growth, Beta: Value	11	\$232B	\$12.01B	\$11.74B	\$12.08B	\$25.56B
Mid Cap, Beta, Beta	10	\$180B	\$1.96B	\$5.50B	\$6.69B	\$10.14B
Mid Cap, Beta, Beta: Growth	6	\$33B	\$0.35B	\$0.34B	\$1.15B	(\$0.54B)
Mid Cap, Beta, Beta: Value	6	\$43B	\$3.09B	\$3.73B	\$3.86B	\$2.48B
Small Cap, Beta, Beta	13	\$190B	\$2.92B	\$6.86B	\$3.02B	\$1.86B
Small Cap, Beta, Beta: Growth	7	\$31B	\$0.32B	\$1.03B	\$0.69B	\$0.11B
Small Cap, Beta, Beta: Value	7	\$51B	\$2.18B	\$2.67B	\$0.82B	(\$3.00B)

Mid-Cap 30-Day Rolling Flows



U.S. Size & Style Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
SPYV	SPDR Portfolio S&P 500 Value ETF	\$4.54B	\$6.20B	\$6.28B	\$4.63B	\$19.31B
IVE	iShares S&P 500 Value ETF	\$4.48B	\$4.84B	\$4.53B	\$5.24B	\$28.94B
IUSV	iShares Core S&P US Value ETF	\$2.65B	\$3.03B	\$3.62B	\$3.47B	\$15.12B
IWM	iShares Russell 2000 ETF	\$1.85B	\$4.42B	(\$0.99B)	(\$1.35B)	\$53.63B
· IJJ	iShares S&P Mid-Cap 400 Value ETF	\$1.69B	\$1.73B	\$1.83B	(\$0.51B)	\$8.94B
VTV	Vanguard Value ETF	\$1.50B	(\$3.04B)	(\$1.72B)	\$11.77B	\$100.29B
VO	Vanguard Mid-Cap ETF	\$1.43B	\$1.28B	\$1.26B	\$3.32B	\$52.06B
VTI	Vanguard Total Stock Market ETF	\$1.34B	\$6.37B	\$11.99B	\$25.58B	\$265.69B
RPV	Invesco S&P 500 Pure Value ETF	\$1.17B	\$1.32B	\$1.09B	\$1.38B	\$4.74B
COWZ	Pacer US Cash Cows 100 ETF	\$1.08B	\$3.33B	\$4.82B	\$10.01B	\$11.16B

Small-Cap 30-Day Rolling Flows

\$10B				
\$0B			7/	Man J
(\$10B)	Dec 21 Mar 22	Jun 22	Sep 22	Dec 22

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
QQQ	Invesco QQQ Trust	(\$3.62B)	(\$1.06B)	(\$1.46B)	\$2.00B	\$149.85B
IVV	iShares Core S&P 500 ETF	(\$1.42B)	\$5.00B	\$7.26B	\$23.86B	\$295.85B
SPY	SPDR S&P 500 ETF Trust	(\$1.17B)	\$16.54B	\$10.07B	(\$2.13B)	\$367.97B
DGRW	WisdomTree US Quality Dividend Growth Fund	(\$0.90B)	\$0.33B	\$0.99B	\$0.93B	\$7.54B
DON	WisdomTree U.S. MidCap Dividend Fund	(\$0.71B)	\$0.13B	\$0.17B	\$0.29B	\$3.24B
SPLG	SPDR Portfolio S&P 500 ETF	(\$0.50B)	\$0.80B	\$1.97B	\$3.47B	\$14.89B
DHS	WisdomTree U.S. High Dividend Fund	(\$0.38B)	\$0.18B	\$0.25B	\$0.53B	\$1.44B
PKW	Invesco Buyback Achievers ETF	(\$0.26B)	\$0.35B	\$0.23B	\$0.18B	\$1.53B
ESML	iShares ESG Aware MSCI USA Small-Cap ETF	(\$0.13B)	(\$0.12B)	(\$0.07B)	\$0.28B	\$1.33B
VLUE	iShares MSCI USA Value Factor ETF	(\$0.09B)	(\$0.48B)	(\$1.50B)	(\$6.30B)	\$7.76B

^{*}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

Select Sector SPDRs Technicals



Ticker	Fund Name	% From 52W High	% From 52W Low	% Abv/Below 50 SMA	% Abv/Below 200 SMA	RSI (14D)
XLV	Health Care Select Sector SPDR Fund	-5.11%	13.05%	2.06%	3.53%	47.14
XLP	Consumer Staples Select Sector SPDR Fund	-7.09%	12.57%	2.43%	1.52%	47.68
XLI	Industrial Select Sector SPDR Fund	-8.36%	18.42%	2.52%	4.08%	46.62
XLU	Utilities Select Sector SPDR Fund	-9.78%	14.56%	4.06%	-1.21%	51.17
XLE	Energy Select Sector SPDR Fund	-10.33%	52.38%	-4.17%	5.00%	40.08
XLB	Materials Select Sector SPDR Fund	-12.72%	17.47%	2.37%	-0.11%	45.25
XLF	Financial Select Sector SPDR Fund	-18.64%	11.26%	-1.10%	-1.33%	38.17
SPY	SPDR S&P 500 ETF Trust	-19.77%	7.49%	-0.83%	-4.45%	40.53
XLK	Technology Select Sector SPDR Fund	-27.37%	9.37%	-0.27%	-6.37%	43.41
XLRE	Real Estate Select Sector SPDR Fund	-27.62%	11.05%	1.26%	-10.21%	44.53
XLY	Consumer Discretionary Select Sector SPDR Fund	-36.33%	1.42%	-4.91%	-13.18%	34.30
XLC	Communication Services Select Sector SPDR Fund	-39.00%	5.81%	-2.33%	-14.22%	40.89

Sector & Industry 1 Day Performance Leaders

Sector & Industry Most Overbought

Ticker	Fund		Ticker	Fund	
XAR	SPDR S&P Aerospace & Defense ETF	2.14%	ITB	iShares U.S. Home Construction ETF	59.15
ITA	iShares U.S. Aerospace & Defense ETF	0.43%	FBT	First Trust NYSE Arca Biotechnology Index Fund	57.21
XBI	SPDR S&P BIOTECH ETF	0.33%	XAR	SPDR S&P Aerospace & Defense ETF	52.08
XME	SPDR S&P Metals & Mining ETF	0.28%	XHB	SPDR S&P Homebuilders ETF	51.63
PPA	Invesco Aerospace & Defense ETF	0.26%	XLU	Utilities Select Sector SPDR Fund	51.17
PSCC	Invesco S&P SmallCap Consumer Staples ETF	0.23%	FXH	First Trust Health Care AlphaDEX Fund	51.08
MLPA	Global X MLP ETF	0.22%	PTH	Invesco DWA Healthcare Momentum ETF	50.91
FXZ	First Trust Materials AlphaDEX Fund	0.20%	ITA	iShares U.S. Aerospace & Defense ETF	50.54
PBJ	Invesco Dynamic Food & Beverage ETF	0.04%	RYU	Invesco S&P 500 Equal Weight Utilities ETF	50.15
PBE	Invesco Dynamic Biotechnology & Genome ETF	0.03%	NETL	NETLease Corporate Real Estate ETF	49.71

Sector & Industry 1 Day Performance Laggards

Sector & Industry Most Oversold

Ticker	Fund		Ticker	Fund	
INDS	Pacer Industrial Real Estate ETF	-3.50%	KBWR	Invesco KBW Regional Banking ETF	26.55
EWRE	Invesco S&P 500 Equal Weight Real Estate ETF	-3.07%	QABA	First Trust NASDAQ ABA Community Bank Index Fund	27.71
XLRE	Real Estate Select Sector SPDR Fund	-2.95%	KRE	SPDR S&P Regional Banking ETF	27.85
REZ	iShares Residential and Multisector Real Estate ETF	-2.78%	KBE	SPDR S&P Bank ETF	29.96
USRT	iShares Core U.S. REIT ETF	-2.76%	FTXO	First Trust Nasdaq Bank ETF	30.58
RWR	SPDR Dow Jones REIT ETF	-2.73%	JPRE	JPMorgan Realty Income ETF	30.87
ICF	iShares Cohen & Steers REIT ETF	-2.72%	IAT	iShares U.S. Regional Banks ETF	31.39
DFAR	Dimensional US Real Estate ETF	-2.72%	PFI	Invesco DWA Financial Momentum ETF	33.12
SCHH	Schwab U.S. REIT ETF	-2.71%	XLY	Consumer Discretionary Select Sector SPDR Fund	34.30
FRI	First Trust S&P REIT Index Fund	-2.71%	KBWB	Invesco KBW Bank ETF	34.80

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U.S. Sector & Industry 1-Week Flows

Biotech \$420M Semiconductors \$151M \$98M Aerospace & Defense \$60M Homebuilding \$26M Midstream \$20M Insurance \$15M MLPs: Note \$15M MLPs: C-Corp \$12M Banks: Regional \$8M Transportation \$6M Food & Beverage \$4M Pharmaceuticals BDCs \$2M \$0M Construction & Engineering (\$1M) Media & Entertainment (\$3M) Health Care Providers & Services (\$4M) Leisure & Recreation Oil & Gas Equipment & Services (\$4M) (\$6M) Mortgage REITs Natural Gas (\$9M) (\$12M) Infrastructure Health Care Equipment & Supplies (\$15M) (\$29M) Oil & Gas Exploration & Production (\$59M) Retail

(\$73M)

(\$95M)

200M

1 Week (Custom SQL Query22)

400M

(\$176M) -400M -200M

Software

Metals & Mining

U.S. Sector Landscape

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services		\$12B	\$84M	\$187M	\$109M	(\$1,687M)
Consumer Discretionary	12	\$20B	\$244M	(\$688M)	(\$1,099M)	(\$7,765M)
Consumer Staples	10	\$30B	\$47M	\$1,199M	\$2,848M	\$8,223M
Energy	33	\$78B	\$85M	\$1,097M	(\$3,379M)	\$464M
Financials	26	\$58B	\$4M	\$314M	(\$1,321M)	(\$11,407M)
Health Care	23	\$98B	\$335M	\$2,208M	\$4,150M	\$12,256M
Industrial	13	\$30B	\$348M	\$727M	(\$518M)	(\$2,438M)
Materials	9	\$13B	(\$97M)	(\$287M)	(\$3,063M)	(\$1,128M)
Multi-Sector	19	\$13B	(\$87M)	(\$841M)	(\$2,209M)	(\$6,932M)
Real Estate	25	\$61B	\$298M	(\$155M)	(\$1,724M)	(\$2,857M)
Technology	23	\$115B	\$191M	\$2,551M	\$1,647M	(\$1,565M)
Utilities	9	\$27B	\$184M	(\$779M)	\$1,142M	\$5,422M

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IYR	iShares U.S. Real Estate ETF	\$560M	\$283M	(\$154M)	(\$958M)	\$4,016M
XBI	SPDR S&P BIOTECH ETF	\$359M	\$670M	\$1,291M	\$3,903M	\$8,226M
XLY	Consumer Discretionary Select Sector SPDR Fu	\$311M	(\$680M)	(\$712M)	(\$4,212M)	\$13,496M
XLK	Technology Select Sector SPDR Fund	\$259M	\$764M	\$1,233M	\$449M	\$39,755M
XLI	Industrial Select Sector SPDR Fund	\$256M	\$150M	(\$851M)	(\$2,701M)	\$13,722M
XLF	Financial Select Sector SPDR Fund	\$196M	\$587M	(\$397M)	(\$5,904M)	\$31,519M
XLU	Utilities Select Sector SPDR Fund	\$159M	(\$475M)	\$801M	\$3,696M	\$16,827M
XLE	Energy Select Sector SPDR Fund	\$159M	\$429M	(\$1,461M)	(\$742M)	\$39,594M
SOXX	iShares Semiconductor ETF	\$150M	(\$58M)	(\$413M)	(\$477M)	\$6,180M
ITA	iShares U.S. Aerospace & Defense ETF	\$83M	\$420M	\$367M	\$1,821M	\$4,482M

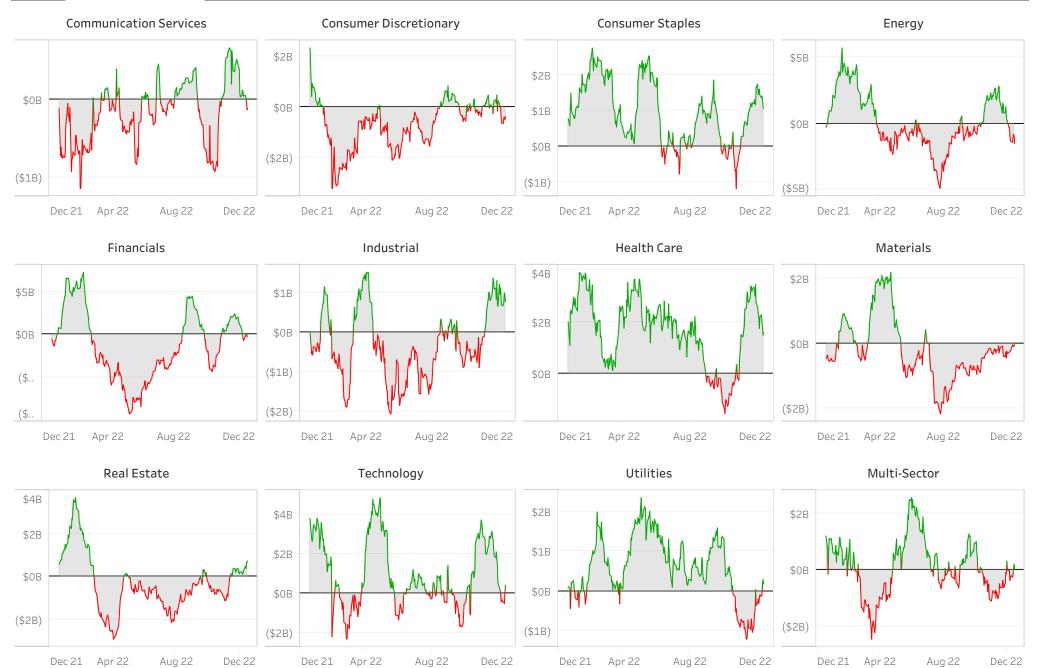
U.S. Sector & Industry Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
VNQ	Vanguard Real Estate ETF	(\$348M)	(\$589M)	(\$1,547M)	(\$1,971M)	\$35,111M
XLV	Health Care Select Sector SPDR Fund	(\$156M)	\$1,028M	\$1,339M	\$8,002M	\$42,379M
FDN	First Trust Dow Jones Internet Index Fund	(\$135M)	(\$365M)	(\$345M)	(\$2,612M)	\$3,716M
KBE	SPDR S&P Bank ETF	(\$112M)	(\$196M)	(\$542M)	(\$971M)	\$1,716M
IYW	iShares U.S. Technology ETF	(\$105M)	\$1,908M	\$1,851M	\$976M	\$8,055M
XME	SPDR S&P Metals & Mining ETF	(\$95M)	\$231M	(\$497M)	\$118M	\$1,991M
IGV	iShares Expanded Tech-Software Sector ETF	(\$75M)	\$898M	\$275M	\$455M	\$4,380M
XRT	SPDR S&P Retail ETF	(\$59M)	\$22M	(\$45M)	(\$92M)	\$234M
KBWB	Invesco KBW Bank ETF	(\$57M)	(\$157M)	(\$13M)	(\$189M)	\$1,798M
VFH	Vanguard Financials ETF	(\$51M)	(\$232M)	(\$550M)	(\$1,433M)	\$8,502M

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





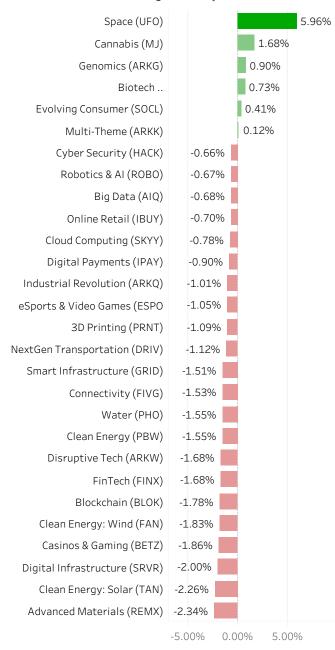


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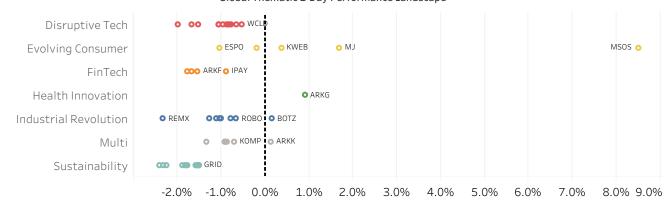
Global Thematic Performance



Global Thematic Segment 1-Day Performance



Global Thematic 1-Day Performance Landscape



Global Thematic 1-Day Performance Leaders

Thematic Most Overbought

Ticker	Fund		Ticker	Fund	
MSOS	AdvisorShares Pure US Cannabis ETF	8.50%	KWEB	KraneShares CSI China Internet ETF	60.59
UFO	Procure Space ETF	5.96%	EMQQ	EMQQ The Emerging Markets Internet & Ecommerce ETF	55.67
MJUS	ETFMG U.S. Alternative Harvest ETF	5.48%	SOCL	Global X Social Media ETF	54.75
YOLO	AdvisorShares Pure Cannabis ETF	2.94%	ВЈК	VanEck Gaming ETF	51.91
MJ	ETFMG Alternative Harvest ETFMG Alternative Harvest	1.68%	KGRN	KraneShares MSCI China Clean Technology Index ETF	51.77
ARKG	ARK Genomic Revolution ETF	0.90%	UFO	Procure Space ETF	51.51
SBIO	ALPS Medical Breakthroughs ETF	0.73%	WCLD	WisdomTree Cloud Computing Fund	50.60
SAMT	Strategas Macro Thematic Opportunities ETF	0.67%	CTEC	Global X CleanTech ETF	50.40
HERO	Global X Video Games & Esports ETF	0.60%	IRBO	iShares Robotics and Artificial Intelligence Multisector ETF	50.35
SOCL	Global X Social Media ETF	0.41%	FAN	First Trust Global Wind Energy ETF	50.28

Global Thematic 1-Day Performance Laggards

Thematic Most Oversold

Ticker	Fund		Ticker	Fund	
QCLN	First Trust Nasdaq Clean Edge Green Energy Index Fund	-2.42%	YOLO	AdvisorShares Pure Cannabis ETF	33.62
REMX	VanEck Rare Earth/Strategic Metals ETF	-2.34%	BLOK	Amplify Transformational Data Sharing ETF	34.76
ACES	ALPS Clean Energy ETF	-2.33%	QCLN	First Trust Nasdaq Clean Edge Green Energy Index Fund	35.63
TAN	Invesco Solar ETF	-2.26%	MSOS	AdvisorShares Pure US Cannabis ETF	35.71
BLCN	Siren ETF Trust Siren Nasdaq NexGen Economy ETF	-2.13%	REMX	VanEck Rare Earth/Strategic Metals ETF	35.74
SRVR	Pacer Data & Infrastructure Real Estate ETF	-2.00%	HAIL	SPDR S&P Kensho Smart Mobility ETF	36.12
ONLN	ProShares Online Retail ETF	-1.94%	BLCN	Siren ETF Trust Siren Nasdaq NexGen Economy ETF	36.70
CNRG	SPDR S&P Kensho Clean Power ETF	-1.89%	LIT	Global X Lithium & Battery Tech ETF	36.72
BETZ	Roundhill Sports Betting & iGaming ETF	-1.86%	MJ	ETFMG Alternative Harvest ETFMG Alternative Harvest	36.83
FAN	First Trust Global Wind Energy ETF	-1.83%	MJUS	ETFMG U.S. Alternative Harvest ETF	37.07

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Thematic 1 Week Flow Leaders

Ticker	Fund	
ARKK	ARK Innovation ETF	\$111M
PHO	Invesco Water Resources ETF	\$108M
PBW	Invesco WilderHill Clean Energy ETF	\$54M
BJK	VanEck Gaming ETF	\$21M
BETZ	Roundhill Sports Betting & iGaming ETF	\$15M
REMX	VanEck Rare Earth/Strategic Metals ETF	\$13M
XT	iShares Exponential Technologies ETF	\$8M
GNOM	Global X Genomics & Biotechnology ETF	\$4M
TIME	Clockwise Capital Innovation ETF	\$3M_
METV	Roundhill Ball Metaverse ETF	\$3M

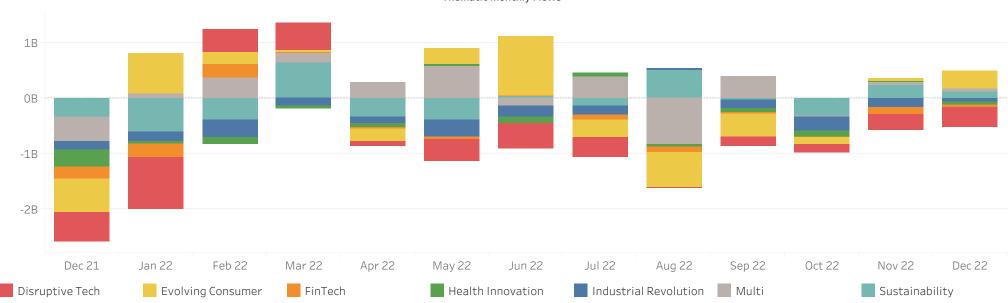
Thematic 1 Week Flow Laggards

Ticker	Fund	
CIBR	First Trust NASDAQ Cybersecurity ETF	(\$60M)
KWEB	KraneShares CSI China Internet ETF	(\$38M)
NXTG	First Trust Indxx NextG ETF	(\$35M)
KOMP	SPDR S&P Kensho New Economies Composite ETF	(\$32M)
SKYY	First Trust Cloud Computing ETF	(\$28M)
LIT	Global X Lithium & Battery Tech ETF	(\$26M)
TAN	Invesco Solar ETF	(\$19M)
SRVR	Pacer Data & Infrastructure Real Estate ETF	(\$17M)
QCLN	First Trust Nasdaq Clean Edge Green Energy Index Fund	(\$17M)
HACK	ETFMG Prime Cyber Security ETFMG Prime Cyber Security Fund	(\$11M)

Thematic Landscape Assets & Flows

Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	35	\$16B	(\$172M)	(\$850M)	(\$1,460M)	(\$2,858M)
Evolving Consumer	46	\$10B	(\$48M)	(\$96M)	(\$641M)	\$371M
FinTech	22	\$2B	(\$12M)	(\$207M)	(\$405M)	(\$692M)
Health Innovation	19	\$3B	\$11M	(\$154M)	(\$294M)	(\$876M)
Industrial Revolution	32	\$10B	(\$43M)	(\$591M)	(\$898M)	(\$2,203M)
Multi	41	\$13B	\$60M	\$561M	\$73M	\$969M
Sustainability	40	\$19B	\$113M	(\$194M)	\$557M	(\$1,016M)
Grand Total	235	\$73B	(\$90M)	(\$1,531M)	(\$3,069M)	(\$6,307M)

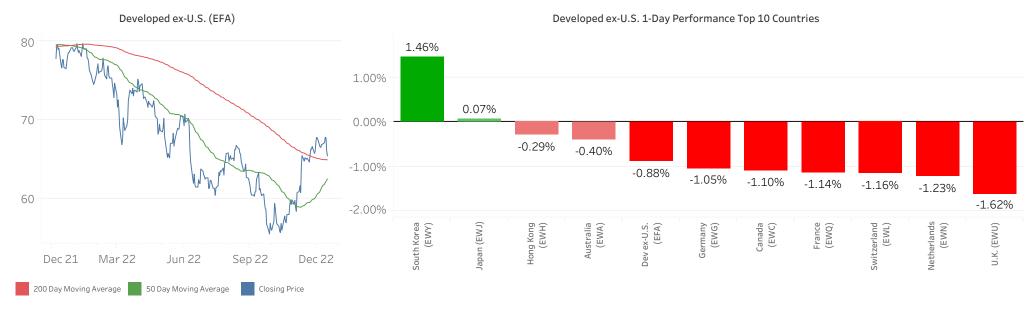
Thematic Monthly Flows



^{*} 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 ex-U.S. 30-Day Rolling Flows

Dec 21 Mar 22 Jun 22 Sep 22 Dec 22

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

Ticker	Fund	
FLKR	Franklin FTSE South Korea ETF	1.47%
EWY	iShares MSCI South Korea ETF	1.46%
SCJ	iShares MSCI Japan Small-Cap ETF	0.80%
DFJ	WisdomTree Japan SmallCap Dividend Fund	0.44%
FJP	First Trust Japan AlphaDEX Fund	0.35%
ENZL	iShares MSCI New Zealand ETF	0.31%
AIA	iShares Asia 50 ETF	0.19%
IPAC	iShares Core MSCI Pacific ETF	0.19%
VPL	Vanguard FTSE Pacific ETF	0.18%
RR IP	JPMorgan BetaBuilders Japan ETE	0.10%

Developed ex-U.S. Most Overbought

	Ticker	Fund	
6	EWH	iShares MSCI Hong Kong ETF	63.16
6	EDEN	iShares MSCI Denmark ETF	60.85
6	GREK	Global X MSCI Greece ETF	60.74
6	ENZL	iShares MSCI New Zealand ETF	57.78
6	MINV	Matthews Asia Innovators Active ETF	56.36
6	FJP	First Trust Japan AlphaDEX Fund	56.07
6	SCJ	iShares MSCI Japan Small-Cap ETF	55.56
6	IMFL	Invesco International Developed Dynamic Multifactor ETF	54.92
6	IMOM	Alpha Architect International Quantitative Momentum ETF	53.99
6	DFJ	WisdomTree Japan SmallCap Dividend Fund	53.72

Developed ex-U.S. Monthly Flows



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

Ticker	Fund	
EWD	iShares MSCI Sweden ETF	-2.25%
IEUS	iShares MSCI Europe Small-Cap ETF	-2.00%
EWU	iShares MSCI United Kingdom ETF	-1.62%
FLGB	Franklin FTSE United Kingdom ETF	-1.53%
FDD	First Trust Stoxx European Select Dividend Index Fund	-1.40%
FSZ	First Trust Switzerland AlphaDEX Fund	-1.40%
EIS	iShares MSCI Israel ETF	-1.33%
VGK	Vanguard FTSE Europe ETF	-1.26%
BBEU	JPMorgan BetaBuilders Europe ETF	-1.24%
FLSW	Franklin FTSE Switzerland FTE	-1 24%

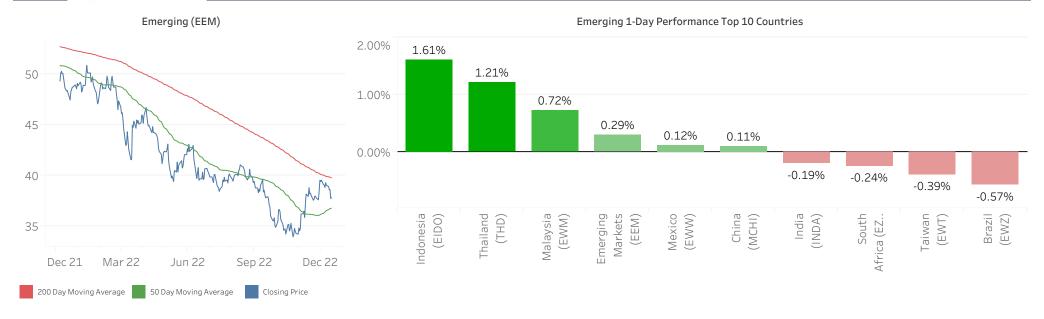
Developed ex-U.S. Most Oversold

Ticker	Fund	
HEWJ	iShares Currency Hedged MSCI Japan ETF	14.80
HSCZ	iShares Currency Hedged MSCI EAFE Small-Cap ETF	19.65
HEFA	iShares Currency Hedged MSCI EAFE ETF	21.03
DBEF	Xtrackers MSCI EAFE Hedged Equity ETF	23.27
HEZU	iShares Currency Hedged MSCI Eurozone ETF	24.52
IHDG	WisdomTree International Hedged Quality Dividend	26.86
FLCA	Franklin FTSE Canada ETF	31.18
EWC	iShares MSCI Canada ETF	33.89
LVHI	Franklin International Low Volatility High Dividend I	34.37
EIS	iShares MSCI Israel ETF	36.25

^{*}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



Emerging 30-Day Rolling Flows



Emerging 1-Day Performance Leaders

Ticker	Fund	
LDEM	iShares ESG MSCI EM Leaders ETF	3.17%
EIDO	iShares MSCI Indonesia ETF	1.61%
PIE	Invesco DWA Emerging Markets Momentum ETF	1.23%
THD	iShares MSCI Thailand ETF	1.21%
FEM	First Trust Emerging Markets AlphaDEX Fund	0.78%
ECNS	iShares MSCI China Small-Cap ETF	0.77%
EEMA	iShares MSCI Emerging Markets Asia ETF	0.73%
EWM	iShares MSCI Malaysia ETF	0.72%
UEVM	VictoryShares Emerging Markets Value Momentum ETF	0.59%
QAT	iShares MSCI Qatar ETF	0.48%

Emerging Most Overbought

Ticker	Fund	
TUR	iShares MSCI Turkey ETF	65.53
GXC	SPDR S&P China ETF	60.94
FEMS	First Trust Emerging Markets Small Cap AlphaDEX Fu	60.54
PGJ	Invesco Golden Dragon China ETF	59.81
ECNS	iShares MSCI China Small-Cap ETF	59.58
PIE	Invesco DWA Emerging Markets Momentum ETF	59.58
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	58.50
MCHI	iShares MSCI China ETF	58.10
FEM	First Trust Emerging Markets AlphaDEX Fund	58.04
EPOL	iShares MSCI Poland ETF	57.78

Emerging Monthly Flows



Emerging 1-Day Performance Laggards

Ticker	Fund	
RAYC	Rayliant Quantamental China Equity ETF	-1.28%
EWZS	iShares MSCI Brazil Small-Cap ETF	-1.21%
FLBR	Franklin FTSE Brazil ETF	-0.87%
EPHE	iShares MSCI Philippines ETF	-0.81%
PIN	Invesco India ETF	-0.81%
ADRE	Invesco BLDRS Emerging Markets 50 ADR Index Fund	-0.71%
EWZ	iShares MSCI Brazil ETF	-0.57%
ILF	iShares Latin America 40 ETF	-0.50%
EPU	iShares MSCI Peru ETF	-0.43%
EWT	iShares MSCI Taiwan ETF	-0.39%

Emerging Most Oversold

ar ETF	24.72
erica 40 ETF	25.65
wan ETF	25.82
era MSCI China A 50 Connect Index	26.62
in America ETF	26.75
azil ETF	27.06
zil ETF	27.69
ıdi Arabia ETF	28.83
zil Small-Cap ETF	29.39
ETF	33.19
	erica 40 ETF wan ETF era MSCI China A 50 Connect Index cin America ETF azil ETF zil ETF idi Arabia ETF zil Small-Cap ETF

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







Fixed Income Performance

Ticker	Name	1 Day	1 Month	YTD
AGG	U.S. Aggregate	-0.26%	2.31%	-10.91%
SHY	1-3 Year Treasury Bonds	0.10%	0.64%	-3.57%
IEF	7-10 Year Treasury Bonds	-0.25%	1.92%	-12.65%
TLT	20+ Year Treasury Bonds	-1.12%	6.13%	-26.03%
TIP	TIPS Bonds	-0.54%	0.74%	-11.30%
FLOT	Floating Rate Bonds	0.14%	0.46%	0.90%
LQD	Investment Grade Corporate	-0.43%	3.15%	-15.11%
HYG	High Yield Corporate	-0.53%	1.24%	-9.82%
BKLN	Senior Loan	0.19%	0.22%	-1.78%
PFF	Preferred & Income Securities	-0.03%	-0.52%	-16.31%
MUB	Municipal Bonds	-0.11%	1.92%	-6.70%
МВВ	MBS	-0.26%	2.53%	-9.54%
EMB	Dollar Denominated EM Bonds	-0.52%	2.60%	-17.41%
LEMB	Local Currency EM Bond	-0.75%	2.08%	-11.53%

Commodities Performance

Ticker	Name	1 Day	1 Month	YTD
DJP	Broad Commodities	-1.00%	-3.42%	17.14%
DBE	Energy	-2.27%	-11.08%	28.75%
USO	WTI Crude Oil	-1.89%	-9.91%	19.39%
BNO	Brent Crude Oil	-2.72%	-13.62%	24.92%
UNG	Natural Gas	-3.92%	0.05%	60.93%
UGA	Gasoline	-1.80%	-13.08%	26.22%
DBP	Precious Metals	0.66%	2.08%	-3.65%
GLD	Gold	0.87%	1.01%	-2.44%
SLV	Silver	0.61%	8.26%	-0.65%
PPLT	abrdn Physical Platin	-1.48%	-1.10%	2.48%
PALL	abrdn Physical Palla	-4.21%	-16.78%	-9.31%
DBB	Base Metals	-1.40%	0.30%	-11.28%
CPER	Copper	-0.04%	0.40%	-16.28%
LD	Lead	-1.21%	-1.84%	-4.69%
JJN	Nickel	-0.05%	7.86%	38.91%
JJU	Aluminum	0.00%	-1.77%	-15.66%
JJT	Tin	-2.88%	1.13%	-36.78%
DBA	Agriculture	-0.30%	-1.50%	0.05%
CORN	Corn	0.12%	-1.92%	20.98%
SOYB	Soybeans	0.33%	2.37%	21.71%
WEAT	Wheat	0.13%	-9.14%	3.52%
CANE	Sugar	0.38%	-0.71%	3.40%
BAL	Cotton	1.09%	-5.17%	-9.13%
NIB	Cocoa	-2.14%	-1.56%	-8.64%

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD
UUP	Long Dollar	0.18%	-1.08%	10.46%
UDN	Short Dollar	-0.22%	1.38%	-9.14%
FXE	Euro	-0.34%	1.90%	-7.58%
FXB	British Pound Sterling	-0.11%	2.19%	-9.84%
FXF	Swiss Franc	-0.59%	1.07%	-3.32%
FXY	Japanese Yen	0.69%	1.94%	-16.27%
FXC	Canadian Dollar	-0.25%	-2.61%	-7.51%
FXA	Australian Dollar	-0.23%	-0.92%	-8.15%

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

Coffee

-3.93%

4.71%

-23.01%

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