

Large Cap Blend (S&P 500) IVV



Mid Cap Blend (S&P 400) IJH

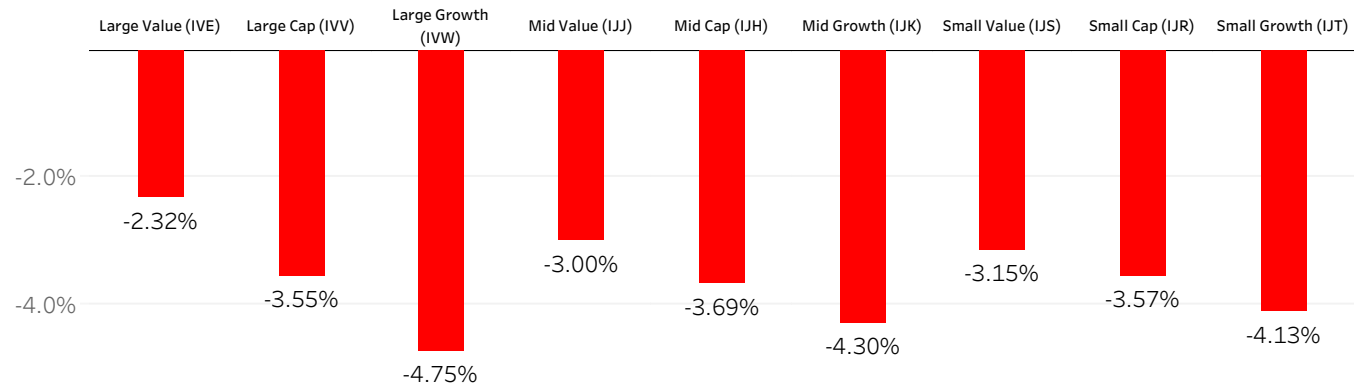


Small Cap Blend (S&P 600) IJR



■ Closing Price ■ 50 Day Moving Average ■ 200 Day Moving Average

U.S. Size & Style 1-Day Performance



Size & Style 1-Day Performance Leaders

Ticker	Fund	Performance
SPC	CrossingBridge Pre-Merger SPAC ETF	0.19%
PTLC	Pacer Trendpilot US Large Cap ETF	0.00%
PTNQ	Pacer Trendpilot 100 ETF	-0.09%
PTMC	Pacer Trendpilot US Mid Cap ETF	-0.12%
ONOF	Global X Adaptive U.S. Risk Management ETF	-0.17%
CLRG	IQ Chaikin U.S. Large Cap ETF	-0.75%
CSF	VictoryShares US Discovery Enhanced Volatility Wtd ETF	-0.77%
CFO	VictoryShares US 500 Enhanced Volatility Wtd ETF	-0.79%
TPLE	Timothy Plan US Large/Mid Cap Core Enhanced ETF	-0.82%
QVMM	Invesco S&P MidCap 400 QVM Multi-factor ETF	-0.90%

Size & Style Most Overbought

Ticker	Fund	Price
SPC	CrossingBridge Pre-Merger SPAC ETF	57.37
EQRR	ProShares Equities for Rising Rates ETF	51.05
SDOG	ALPS Sector Dividend Dogs ETF	50.13
WBIY	WBI Power Factor High Dividend ETF	49.54
QVAL	Alpha Architect U.S. Quantitative Value ETF	49.52
COWZ	Pacer US Cash Cows 100 ETF	48.82
SPDV	AAM S&P 500 High Dividend Value ETF	48.60
SPYD	SPDR Portfolio S&P 500 High Dividend ETF	48.50
SYLD	Cambria Shareholder Yield ETF	48.47
FDL	First Trust Morningstar Dividend Leaders Index Fund	48.43

Size & Style 1-Day Performance Laggards

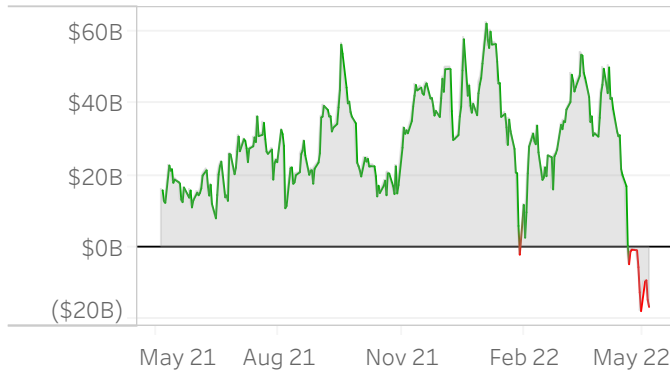
Ticker	Fund	Performance
IPO	Renaissance IPO ETF	-7.60%
MMLG	First Trust Multi-Manager Large Growth ETF	-5.68%
LCG	Sterling Capital Focus Equity ETF	-5.49%
TMFM	Motley Fool Mid-Cap Growth ETF	-5.47%
TMFS	Motley Fool Small-Cap Growth ETF	-5.42%
BUZZ	VanEck Social Sentiment ETF	-5.27%
MGK	Vanguard Mega Cap Growth ETF	-5.14%
NUMG	Nuveen ESG Mid-Cap Growth ETF	-5.14%
SCHG	Schwab U.S. Large-Cap Growth ETF	-5.11%
FPX	First Trust US Equity Opportunities ETF	-5.06%

Size & Style Most Oversold

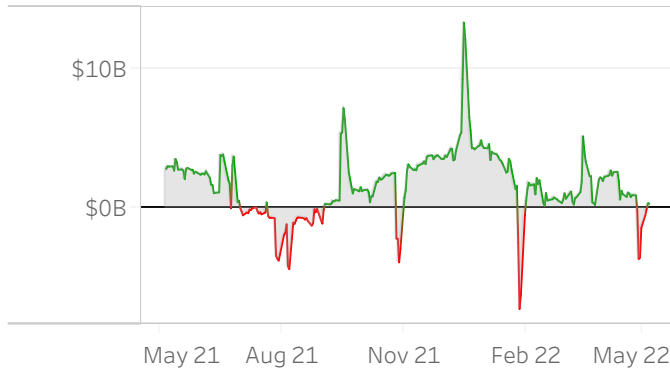
Ticker	Fund	Price
MXDU	Nationwide Maximum Diversification US Core Equit..	27.87
PABU	iShares Paris-Aligned Climate MSCI USA ETF	29.51
FFTY	Innovator IBD 50 ETF	29.64
LCG	Sterling Capital Focus Equity ETF	32.53
TMFM	Motley Fool Mid-Cap Growth ETF	33.40
LGH	HCM Defender 500 Index ETF	33.76
IPO	Renaissance IPO ETF	34.34
TMFS	Motley Fool Small-Cap Growth ETF	34.67
QQH	HCM Defender 100 Index ETF	34.69
DVOL	First Trust Dorsey Wright Momentum & Low Volatili..	35.51

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

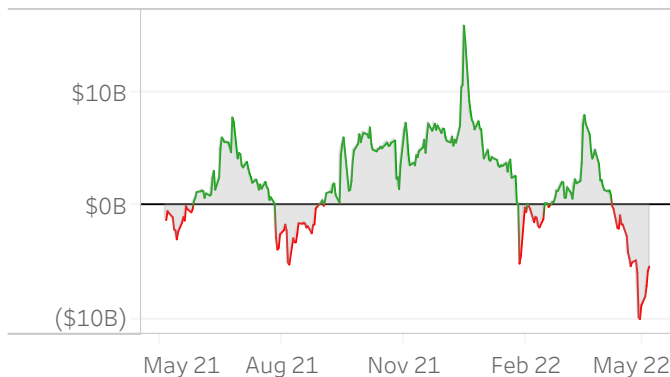
Large-Cap 30-Day Rolling Flows



Mid-Cap 30-Day Rolling Flows



Small-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	26	\$1,266B	(\$0.05B)	(\$4.21B)	\$33.74B	\$113.16B
Large Cap, Beta Growth, Beta: Growth	10	\$235B	\$0.63B	\$3.72B	\$4.12B	\$13.88B
Large Cap, Beta Growth, Beta: Value	11	\$225B	\$0.42B	\$9.12B	\$16.40B	\$27.65B
Mid Cap, Beta, Beta	10	\$184B	(\$0.22B)	\$2.11B	\$7.28B	\$10.10B
Mid Cap, Beta, Beta: Growth	6	\$34B	\$0.02B	(\$0.22B)	(\$0.45B)	(\$0.54B)
Mid Cap, Beta, Beta: Value	6	\$42B	(\$0.15B)	(\$0.78B)	\$0.07B	\$1.04B
Small Cap, Beta, Beta	12	\$201B	(\$0.75B)	(\$1.17B)	\$2.32B	\$10.90B
Small Cap, Beta, Beta: Growth	7	\$32B	\$0.18B	\$0.30B	\$1.00B	\$0.82B
Small Cap, Beta, Beta: Value	7	\$53B	(\$0.18B)	(\$3.76B)	(\$2.25B)	(\$1.92B)

U.S. Size & Style Flow Leaders

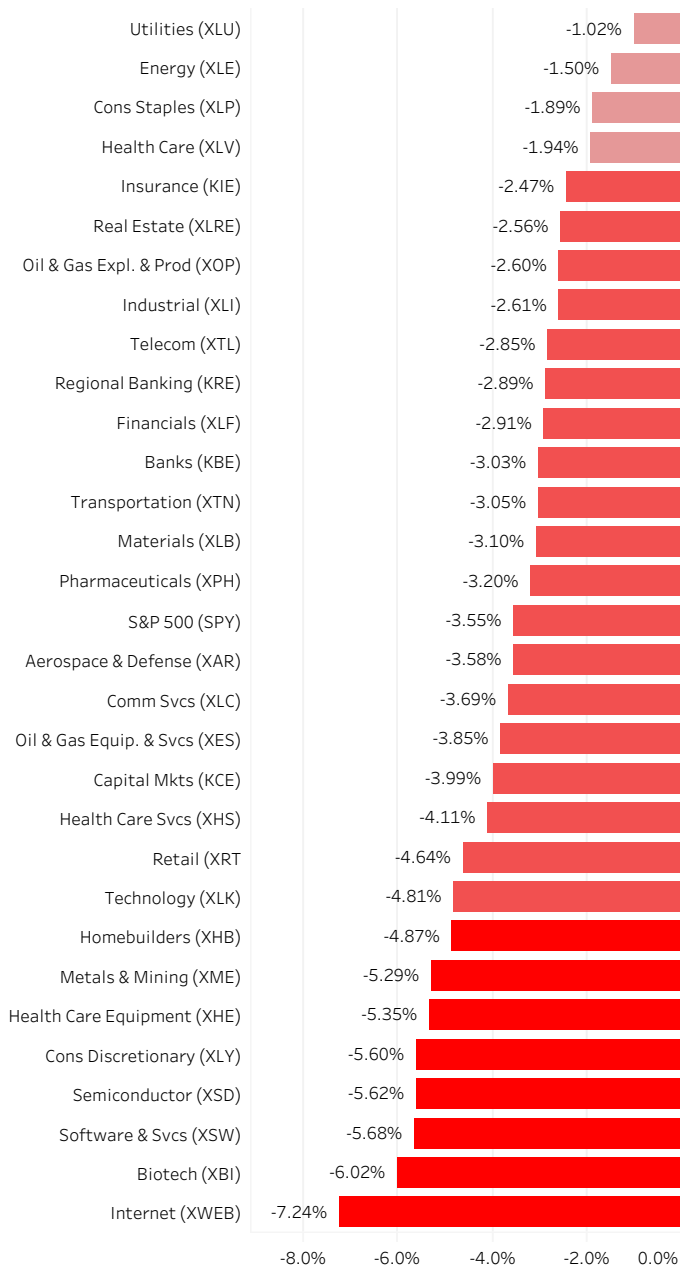
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IWF	iShares Russell 1000 Growth ETF	\$0.59B	(\$0.55B)	(\$1.65B)	(\$1.14B)	\$64.86B
VOO	Vanguard S&P 500 ETF	\$0.48B	(\$0.55B)	\$16.18B	\$41.10B	\$267.12B
VTI	Vanguard Total Stock Market ETF	\$0.48B	\$5.97B	\$19.62B	\$40.37B	\$277.23B
IWB	iShares Russell 1000 ETF	\$0.47B	\$0.37B	\$0.64B	\$0.31B	\$29.14B
DIA	SPDR Dow Jones Industrial Average ETF Trust	\$0.29B	\$0.89B	\$1.58B	(\$0.06B)	\$29.65B
VTV	Vanguard Value ETF	\$0.27B	\$7.56B	\$11.84B	\$18.28B	\$102.10B
FNDX	Schwab Fundamental US Large Co. Index ETF	\$0.25B	\$0.87B	\$2.83B	\$3.52B	\$10.80B
QQQM	Invesco NASDAQ 100 ETF	\$0.24B	\$0.95B	\$2.34B	\$3.93B	\$4.33B
COWZ	Pacer US Cash Cows 100 ETF	\$0.23B	\$2.83B	\$3.78B	\$4.26B	\$5.03B
SPLV	Invesco S&P 500 Low Volatility ETF	\$0.22B	\$0.48B	\$1.63B	\$1.42B	\$10.06B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
SDY	SPDR S&P Dividend ETF	(\$2.19B)	\$0.74B	\$1.07B	\$1.35B	\$21.70B
IWM	iShares Russell 2000 ETF	(\$0.59B)	(\$1.70B)	(\$3.84B)	(\$1.53B)	\$56.66B
IVV	iShares Core S&P 500 ETF	(\$0.33B)	(\$3.05B)	\$8.23B	\$18.89B	\$304.35B
MDY	SPDR S&P Midcap 400 ETF Trust	(\$0.32B)	(\$0.31B)	(\$1.00B)	(\$1.72B)	\$19.19B
SCHX	Schwab U.S. Large-Cap ETF	(\$0.30B)	(\$1.38B)	(\$0.85B)	\$0.83B	\$30.36B
RSP	Invesco S&P 500 Equal Weight ETF	(\$0.27B)	\$1.69B	\$3.66B	\$5.55B	\$33.30B
RDIV	Invesco S&P Ultra Dividend Revenue ETF	(\$0.25B)	\$0.02B	\$0.03B	\$0.01B	\$0.80B
IVW	iShares S&P 500 Growth ETF	(\$0.17B)	(\$0.28B)	(\$0.85B)	(\$0.39B)	\$32.62B
IWN	iShares Russell 2000 Value ETF	(\$0.16B)	(\$1.69B)	(\$1.97B)	(\$2.79B)	\$13.19B
SCHA	Schwab U.S. Small-Cap ETF	(\$0.14B)	(\$0.49B)	(\$0.01B)	\$1.07B	\$14.78B

\* 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)
XLE	Energy Select Sector SPDR Fund	-1.50%	75.85%	5.41%	30.84%	58.39
XLP	Consumer Staples Select Sector SPDR Fund	-4.88%	11.40%	0.44%	3.63%	45.19
XLB	Materials Select Sector SPDR Fund	-5.35%	8.41%	-0.49%	0.18%	46.48
XLU	Utilities Select Sector SPDR Fund	-6.91%	13.30%	-1.54%	3.84%	41.61
XLV	Health Care Select Sector SPDR Fund	-8.85%	7.30%	-3.36%	-2.32%	40.29
XLI	Industrial Select Sector SPDR Fund	-10.22%	1.08%	-3.84%	-5.98%	41.42
XLRE	Real Estate Select Sector SPDR Fund	-12.58%	8.12%	-4.77%	-4.62%	36.19
SPY	SPDR S&P 500 ETF Trust	-13.38%	0.72%	-5.18%	-7.71%	40.03
XLF	Financial Select Sector SPDR Fund	-15.52%	1.39%	-6.39%	-9.34%	38.44
XLK	Technology Select Sector SPDR Fund	-19.78%	5.46%	-5.84%	-10.45%	42.69
XLY	Consumer Discretionary Select Sector SPDR Fund	-24.24%	0.00%	-9.20%	-14.53%	35.64
XLC	Communication Services Select Sector SPDR Fund	-29.55%	3.13%	-8.21%	-19.68%	40.73

## Sector & Industry 1 Day Performance Leaders

Ticker	Fund	1 Day Performance
XLU	Utilities Select Sector SPDR Fund	-1.02%
RYU	Invesco S&P 500 Equal Weight Utilities ETF	-1.05%
IDU	iShares U.S. Utilities ETF	-1.07%
FUTY	Fidelity MSCI Utilities Index ETF	-1.09%
VPU	Vanguard Utilities ETF	-1.11%
FXU	First Trust Utilities AlphaDEX Fund	-1.14%
KBWY	Invesco KBW Premium Yield Equity REIT ETF	-1.32%
PUI	Invesco DWA Utilities Momentum ETF	-1.33%
XLE	Energy Select Sector SPDR Fund	-1.50%
RHS	Invesco S&P 500 Equal Weight Consumer Staples ..	-1.57%

## Sector & Industry Most Overbought

Ticker	Fund	RSI (14D)
IEO	iShares U.S. Oil & Gas Exploration & Production ETF	59.63
PXE	Invesco Dynamic Energy Exploration & Production ETF	59.16
XLE	Energy Select Sector SPDR Fund	58.39
RYE	Invesco S&P 500 Equal Weight Energy ETF	58.37
IYE	iShares U.S. Energy ETF	57.98
VDE	Vanguard Energy ETF	57.63
FENY	Fidelity MSCI Energy Index ETF	57.61
FXN	First Trust Energy AlphaDEX Fund	57.49
FTXN	First Trust Nasdaq Oil & Gas ETF	56.27
XOP	SPDR S&P Oil & Gas Exploration & Production ETF	55.65

## Sector & Industry 1 Day Performance Laggards

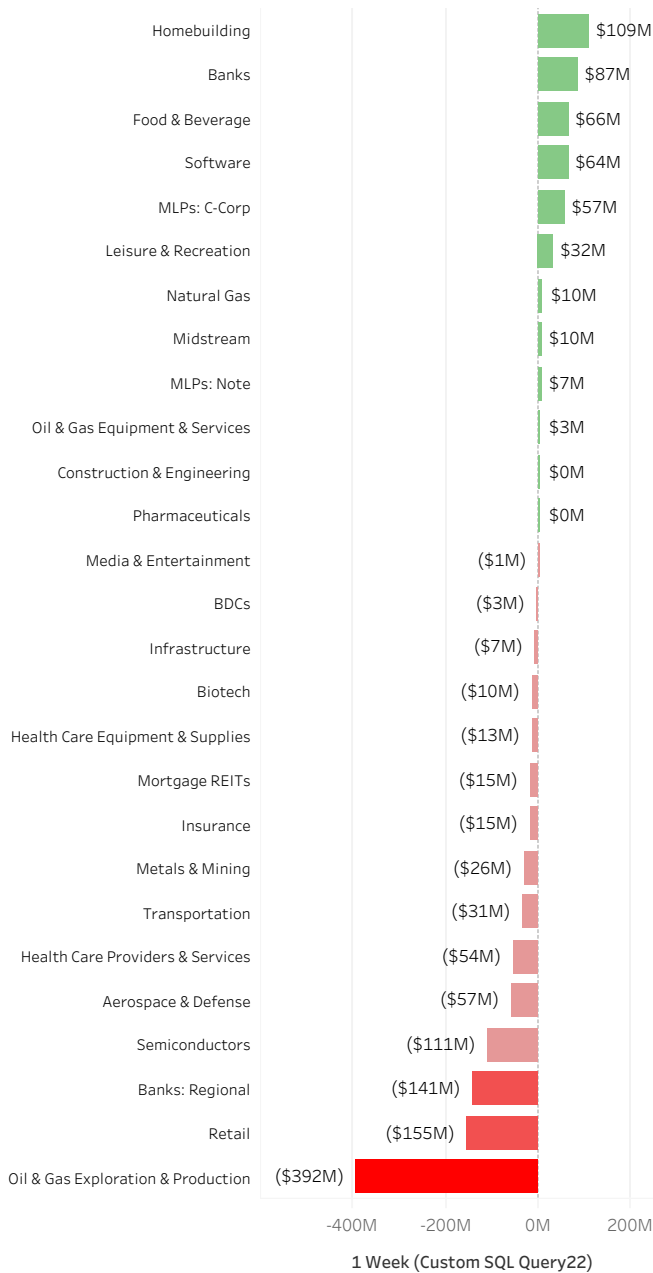
Ticker	Fund	1 Day Performance
FDN	First Trust Dow Jones Internet Index Fund	-6.62%
PNQI	Invesco NASDAQ Internet ETF	-6.08%
XBI	SPDR S&P BIOTECH ETF	-6.02%
IGV	iShares Expanded Tech-Software Sector ETF	-5.75%
QTEC	First Trust NASDAQ-100 Technology Sector Index Fund	-5.73%
XSW	SPDR S&P Software & Services ETF	-5.68%
VCR	Vanguard Consumer Discretionary ETF	-5.64%
XSD	SPDR S&P Semiconductor ETF	-5.62%
FDIS	Fidelity MSCI Consumer Discretionary Index ETF	-5.62%
XLY	Consumer Discretionary Select Sector SPDR Fund	-5.60%

## Sector & Industry Most Oversold

Ticker	Fund	RSI (14D)
INDS	Pacer Benchmark Industrial Real Estate SCTR ETF	29.89
PJP	Invesco Dynamic Pharmaceuticals ETF	31.08
REZ	iShares Residential and Multisector Real Estate ETF	31.17
NURE	Nuveen Short-Term REIT ETF	31.31
PSCH	Invesco S&P SmallCap Health Care ETF	32.02
XPH	SPDR S&P Pharmaceuticals ETF	32.82
PPTY	US Diversified Real Estate ETF	32.82
RWR	SPDR Dow Jones REIT ETF	33.35
XHE	SPDR S&P Health Care Equipment ETF	33.51
PEJ	Invesco Dynamic Leisure & Entertainment ETF	33.89

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

## U.S. Sector & Industry 1-Week Flows



## U.S. Sector Landscape

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services	9	\$15B	(\$20M)	(\$317M)	(\$1,574M)	\$442M
Consumer Discretionary	13	\$27B	\$18M	(\$1,659M)	(\$3,378M)	(\$4,052M)
Consumer Staples	12	\$29B	\$10M	\$2,670M	\$6,070M	\$7,290M
Energy	34	\$82B	(\$1,075M)	\$455M	\$4,354M	\$4,516M
Financials	28	\$71B	(\$1,288M)	(\$9,478M)	(\$4,820M)	(\$2,846M)
Health Care	26	\$90B	(\$259M)	\$4,099M	\$7,706M	\$12,296M
Industrial	14	\$33B	(\$151M)	\$277M	(\$573M)	(\$5,165M)
Materials	10	\$20B	(\$144M)	\$1,858M	\$1,994M	\$1,685M
Multi-Sector	18	\$17B	\$75M	(\$3,772M)	(\$4,007M)	(\$3,217M)
Real Estate	23	\$76B	(\$488M)	(\$2,127M)	\$720M	\$8,324M
Technology	24	\$132B	(\$120M)	(\$286M)	(\$147M)	\$5,493M
Utilities	10	\$25B	\$527M	\$2,509M	\$3,676M	\$4,107M

## U.S. Sector & Industry Flow Leaders

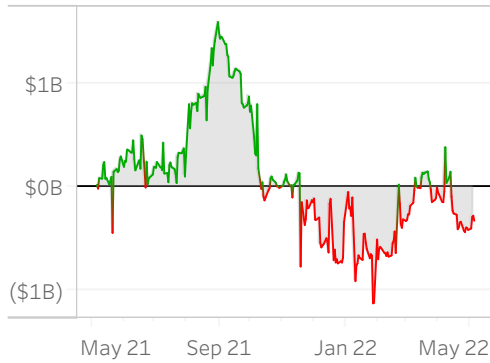
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLU	Utilities Select Sector SPDR Fund	\$505M	\$1,699M	\$2,491M	\$2,561M	\$15,890M
XLY	Consumer Discretionary Select Sector SPDR Fu..	\$389M	(\$324M)	(\$816M)	(\$1,216M)	\$18,277M
IYF	iShares U.S. Financials ETF	\$148M	(\$48M)	\$174M	\$11M	\$2,350M
XLI	Industrial Select Sector SPDR Fund	\$148M	(\$1,454M)	(\$1,702M)	(\$5,145M)	\$15,126M
IYW	iShares U.S. Technology ETF	\$102M	(\$73M)	(\$120M)	\$514M	\$7,760M
KBWB	Invesco KBW Bank ETF	\$99M	(\$522M)	(\$420M)	\$34M	\$2,510M
XHB	SPDR S&P Homebuilders ETF	\$92M	(\$370M)	(\$412M)	(\$513M)	\$1,335M
VDC	Vanguard Consumer Staples ETF	\$70M	\$315M	\$658M	\$867M	\$7,138M
IGV	iShares Expanded Tech-Software Sector ETF	\$60M	(\$294M)	(\$100M)	\$227M	\$4,667M
AML	Alerian MLP ETF	\$54M	\$306M	\$535M	\$391M	\$6,644M

## U.S. Sector & Industry Flow Laggards

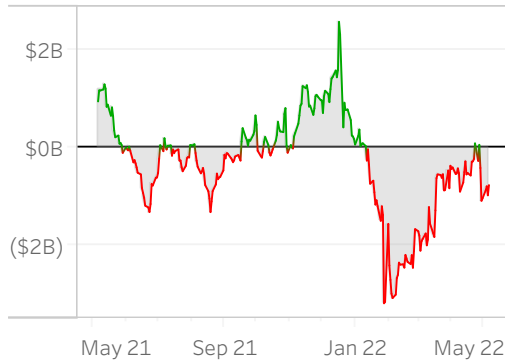
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLF	Financial Select Sector SPDR Fund	(\$1,257M)	(\$5,856M)	(\$2,500M)	(\$2,820M)	\$38,015M
XLE	Energy Select Sector SPDR Fund	(\$820M)	(\$2,008M)	(\$130M)	\$324M	\$39,316M
XOP	SPDR S&P Oil & Gas Exploration & Production E..	(\$395M)	(\$94M)	(\$81M)	(\$849M)	\$5,647M
VNQ	Vanguard Real Estate ETF	(\$287M)	(\$422M)	\$1,249M	\$4,563M	\$45,140M
XLP	Consumer Staples Select Sector SPDR Fund	(\$269M)	\$1,048M	\$3,759M	\$4,867M	\$16,767M
XLB	Materials Select Sector SPDR Fund	(\$192M)	(\$393M)	(\$565M)	(\$879M)	\$7,784M
VIS	Vanguard Industrials ETF	(\$188M)	(\$364M)	(\$631M)	(\$915M)	\$4,167M
XRT	SPDR S&P Retail ETF	(\$155M)	\$248M	(\$312M)	(\$305M)	\$455M
VCR	Vanguard Consumer Discretionary ETF	(\$151M)	(\$181M)	(\$525M)	(\$35M)	\$5,492M
VGT	Vanguard Information Technology ETF	(\$135M)	\$301M	(\$254M)	\$2,134M	\$47,243M

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

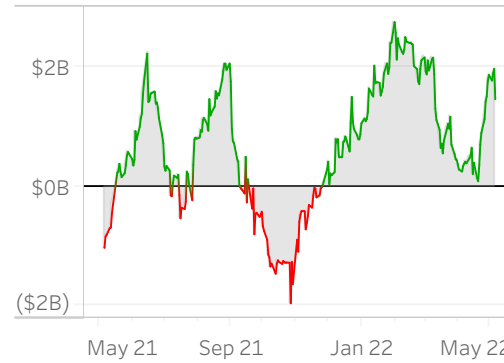
Communication Services



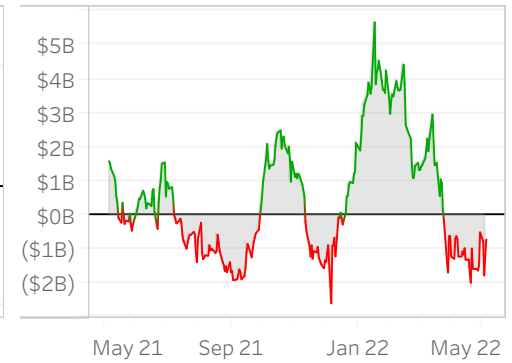
Consumer Discretionary



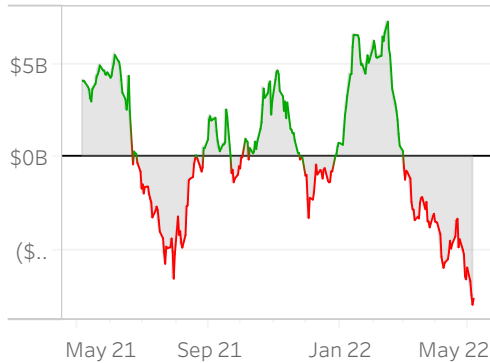
Consumer Staples



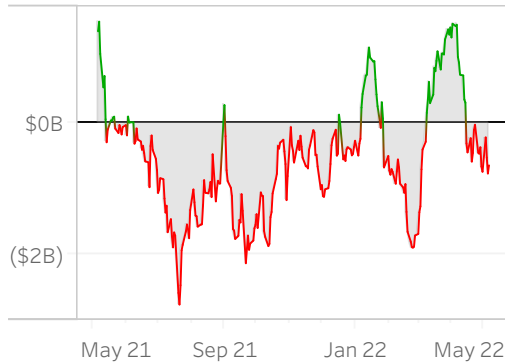
Energy



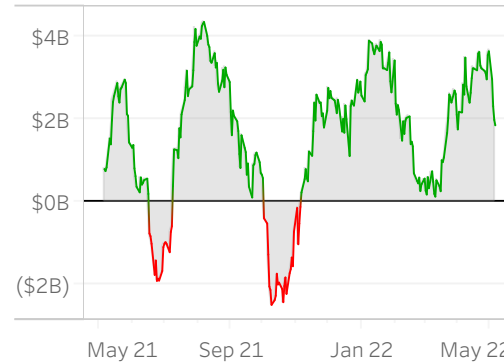
Financials



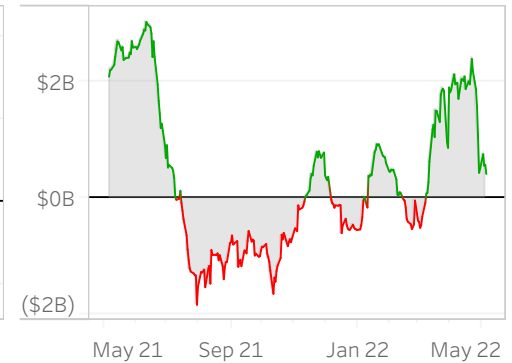
Industrial



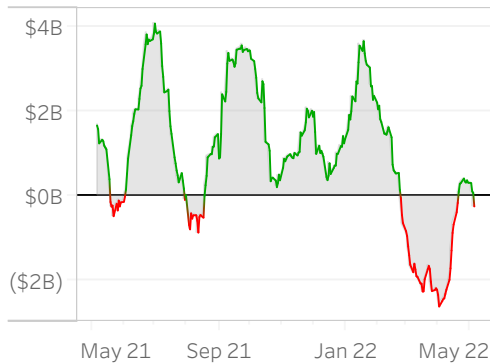
Health Care



Materials



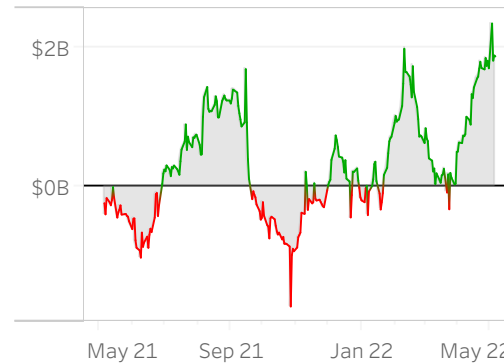
Real Estate



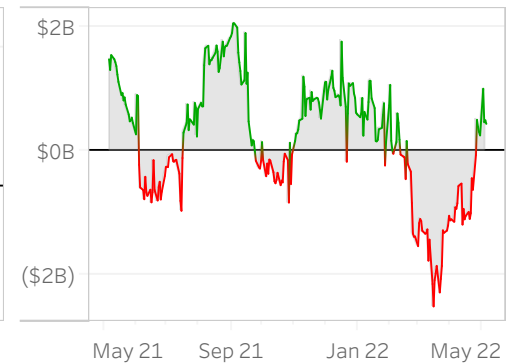
Technology



Utilities

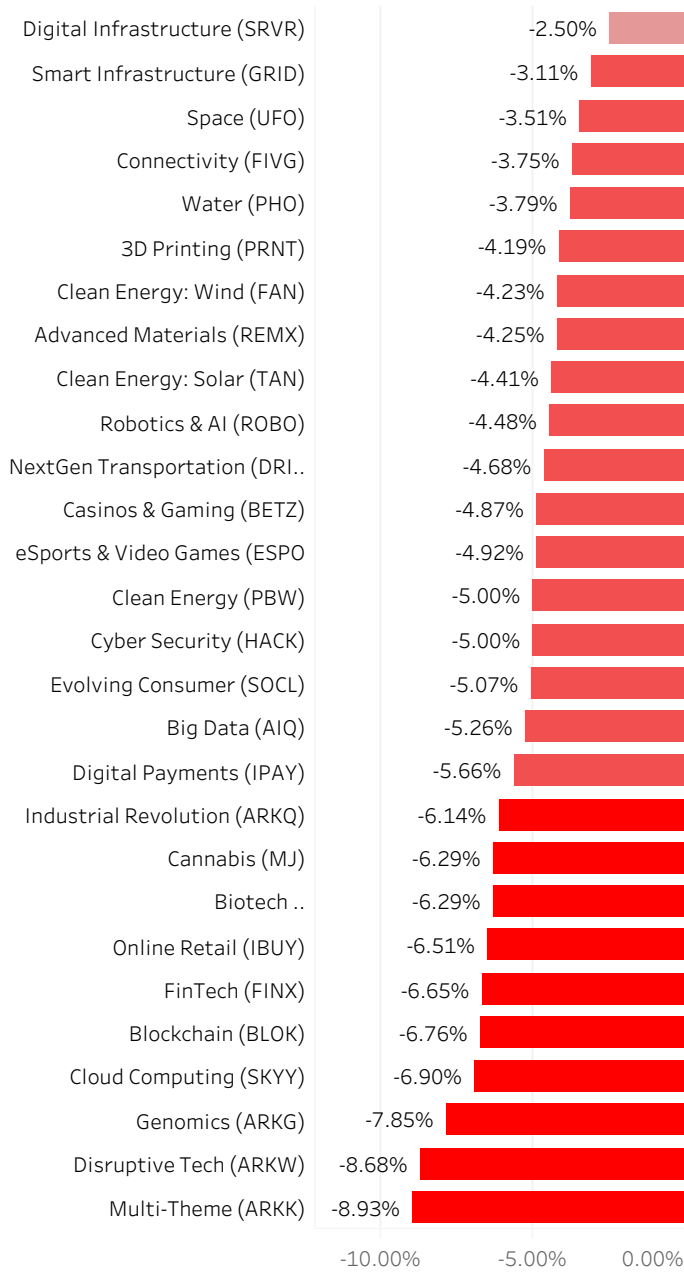


Multi-Sector

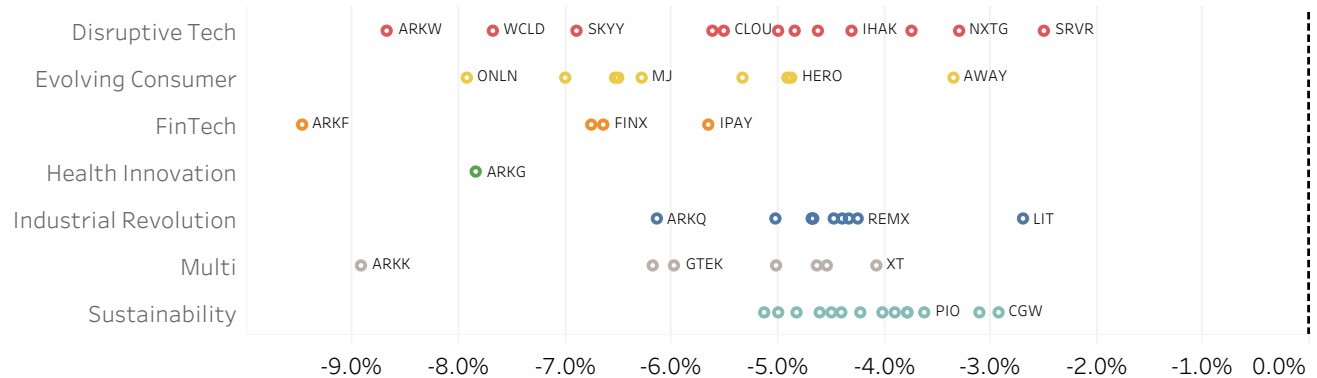


\*ETF Landscape represented using the ETF Action classification system\*\*Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify \*\*\*Flows delayed one day

## Global Thematic Segment 1-Day Performance



## Global Thematic 1-Day Performance Landscape



## Global Thematic 1-Day Performance Leaders

Ticker	Fund	1-Day Performance
KSTR	KraneShares SSE STAR Market 50 Index ETF	-2.01%
SRVR	Pacer Benchmark Data & Infrastructure Real Estate SCTR..	-2.50%
AGNG	Global X Aging Population ETF	-2.67%
LIT	Global X Lithium & Battery Tech ETF	-2.70%
VPN	Global X Data Center REITs & Digital Infrastructure ETF	-2.90%
CGW	Invesco S&P Global Water Index ETF	-2.93%
GRID	First Trust Nasdaq Clean Edge Smart GRID Infrastructure..	-3.11%
NXTG	First Trust Indxx NextG ETF	-3.30%
AWAY	ETFMG Travel Tech ETF	-3.35%
EBLU	Ecofin Global Water ESG Fund	-3.41%

## Thematic Most Overbought

Ticker	Fund	Price
TAN	Invesco Solar ETF	46.39
KWEB	KraneShares CSI China Internet ETF	46.29
QCLN	First Trust Nasdaq Clean Edge Green Energy Index Fund	44.63
DRIV	Global X Autonomous & Electric Vehicles ETF	43.58
CNRG	SPDR S&P Kensho Clean Power ETF	43.32
LIT	Global X Lithium & Battery Tech ETF	43.28
ACES	ALPS Clean Energy ETF	43.22
QTUM	Defiance Quantum ETF	42.88
SOCL	Global X Social Media ETF	42.28
PBW	Invesco WilderHill Clean Energy ETF	42.27

## Global Thematic 1-Day Performance Laggards

Ticker	Fund	1-Day Performance
DAPP	VanEck Digital Transformation ETF	-9.92%
ARKF	ARK Fintech Innovation ETF	-9.48%
BITQ	Bitwise Crypto Industry Innovators ETF	-9.23%
BKCH	Global X Blockchain ETF	-9.21%
ARKK	ARK Innovation ETF	-8.93%
ARKW	ARK Next Generation Internet ETF	-8.68%
ONLN	ProShares Online Retail ETF	-7.93%
ARKG	ARK Genomic Revolution ETF	-7.85%
WCLD	WisdomTree Cloud Computing Fund	-7.69%
KWEB	KraneShares CSI China Internet ETF	-7.01%

## Thematic Most Oversold

Ticker	Fund	Price
MSOS	AdvisorShares Pure US Cannabis ETF	16.92
YOLO	AdvisorShares Pure Cannabis ETF	20.84
CNBS	Amplify Seymour Cannabis ETF	23.91
PAWZ	ProShares Pet Care ETF	25.81
GBUY	Goldman Sachs Future Consumer Equity ETF	26.85
GDOC	Goldman Sachs Future Health Care Equity ETF	27.01
EDOC	Global X Telemedicine & Digital Health ETF Registered	29.67
POTX	Global X Cannabis ETF	30.77
HACK	ETFMG Prime Cyber Security ETF	30.96
AGNG	Global X Aging Population ETF	32.22

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

## Thematic 1 Week Flow Leaders

Ticker	Fund	Flow
ARKK	ARK Innovation ETF	\$450M
KWEB	KraneShares CSI China Internet ETF	\$25M
ARKG	ARK Genomic Revolution ETF	\$25M
ARKW	ARK Next Generation Internet ETF	\$17M
KOMP	SPDR S&P Kensho New Economies Composite ETF	\$14M
QCLN	First Trust Nasdaq Clean Edge Green Energy Index Fund	\$6M
DAPP	VanEck Digital Transformation ETF	\$5M
BKCH	Global X Blockchain ETF	\$5M
RAYS	Global X Solar ETF	\$4M
FMET	Fidelity Metaverse ETF	\$4M

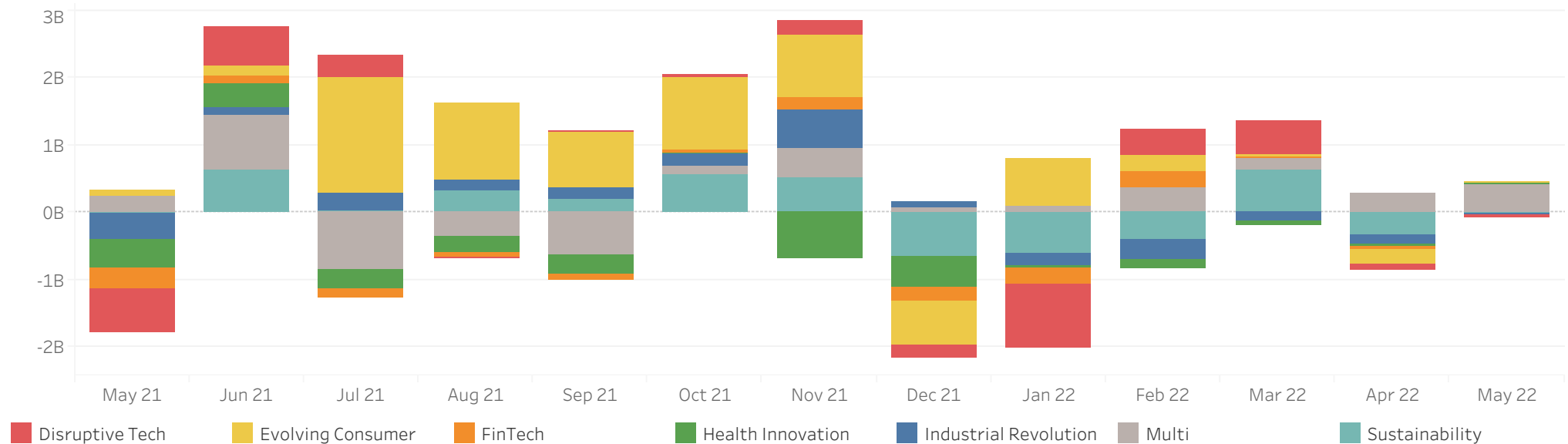
## Thematic 1 Week Flow Laggards

Ticker	Fund	Flow
REMX	VanEck Rare Earth/Strategic Metals ETF	(\$19M)
HACK	ETFMG Prime Cyber Security ETF	(\$19M)
ICLN	iShares Global Clean Energy ETF	(\$17M)
SRVR	Pacer Benchmark Data & Infrastructure Real Estate SCTR ETF	(\$17M)
CIBR	First Trust NASDAQ Cybersecurity ETF	(\$16M)
ARKQ	ARK Autonomous Technology & Robotics ETF	(\$12M)
SKYY	First Trust Cloud Computing ETF	(\$12M)
NXTG	First Trust Indxx NextG ETF	(\$11M)
SNSR	Global X Internet of Things ETF	(\$8M)
IDNA	iShares Genomics Immunology and Healthcare ETF Genomics Im..	(\$7M)

## Thematic Landscape Assets & Flows

Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	35	\$22B	(\$48M)	\$823M	(\$331M)	\$141M
Evolving Consumer	47	\$11B	\$23M	\$59M	\$1,050M	\$6,059M
FinTech	24	\$4B	(\$6M)	\$144M	(\$139M)	(\$490M)
Health Innovation	19	\$4B	\$11M	(\$216M)	(\$1,420M)	(\$2,226M)
Industrial Revolution	31	\$13B	(\$20M)	(\$416M)	(\$85M)	\$334M
Multi	41	\$18B	\$428M	\$1,680M	\$1,938M	\$1,206M
Sustainability	40	\$19B	(\$12M)	(\$42M)	(\$1,167M)	\$889M
Grand Total	237	\$91B	\$375M	\$2,032M	(\$155M)	\$5,913M

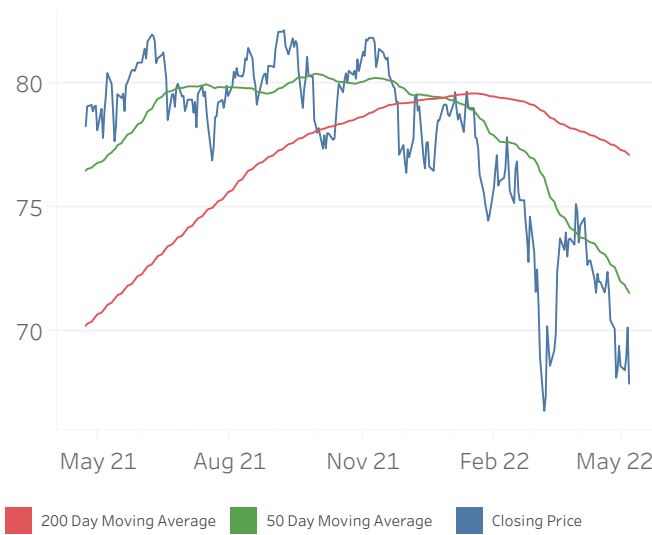
## Thematic Monthly Flows



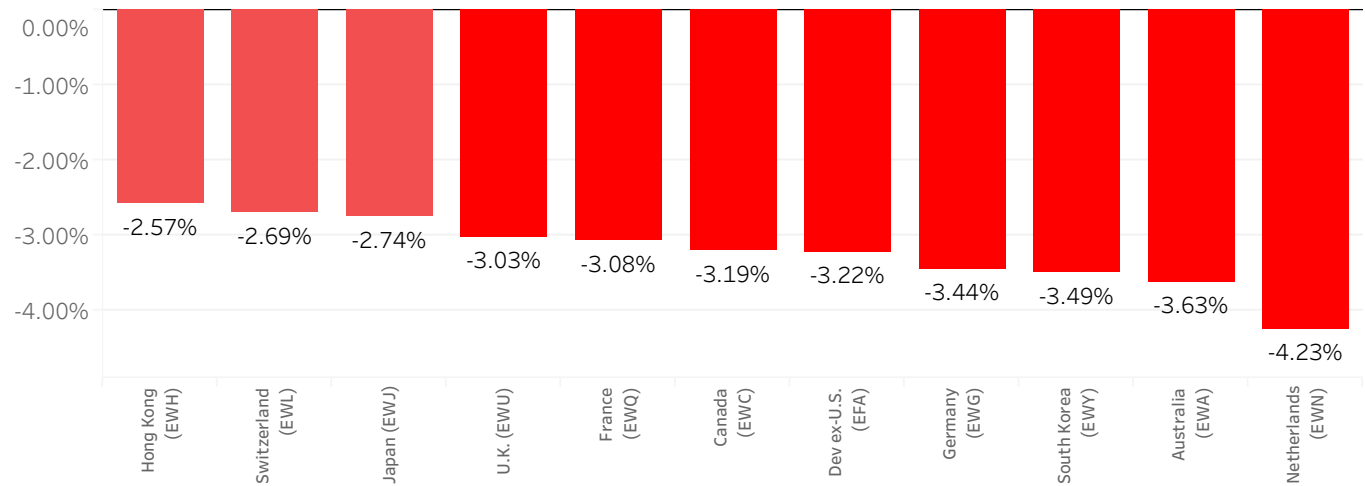
\* ETF Landscape represented using the ETF Action classification system\*\*Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify \*\*\*Flows delayed one day



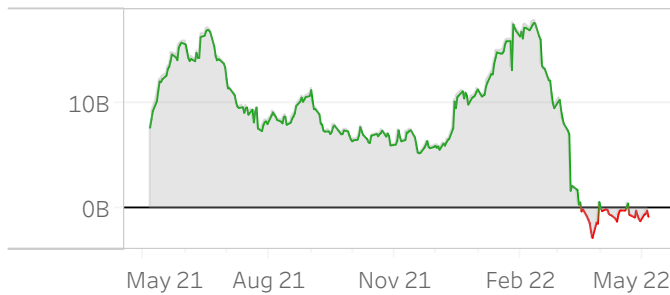
Developed ex-U.S. (EFA)



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



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



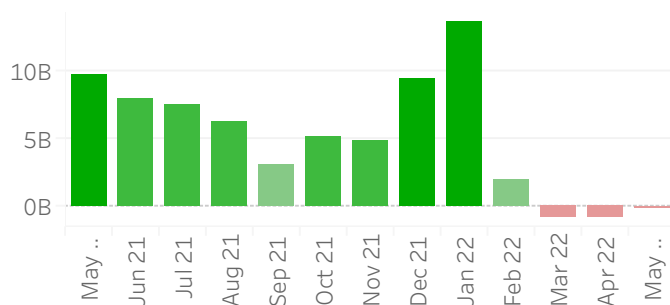
Developed ex-U.S. 1-Day Performance Leaders

Ticker	Fund	1-Day Performance
FKU	First Trust United Kingdom AlphaDEX Fund	0.89%
PTIN	Pacer Trendpilot International ETF	0.29%
IQIN	IQ 500 International ETF	-0.25%
WPS	iShares International Developed Property ETF	-1.79%
DXJ	WisdomTree Japan Hedged Equity Fund	-1.85%
HEWJ	iShares Currency Hedged MSCI Japan ETF	-2.02%
LVHI	Legg Mason International Low Volatility High Dividend ETF	-2.03%
DBEU	Xtrackers MSCI Europe Hedged Equity ETF	-2.03%
DFJ	WisdomTree Japan SmallCap Dividend Fund	-2.12%
HEFA	iShares Currency Hedged MSCI EAFE ETF	-2.12%

Developed ex-U.S. Most Overbought

Ticker	Fund	Value
DXJ	WisdomTree Japan Hedged Equity Fund	51.50
HEWJ	iShares Currency Hedged MSCI Japan ETF	48.80
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	48.43
LVHI	Legg Mason International Low Volatility High Dividend ETF	48.19
DBEF	Xtrackers MSCI EAFE Hedged Equity ETF	44.28
HEFA	iShares Currency Hedged MSCI EAFE ETF	44.16
EUSC	WisdomTree Europe Hedged SmallCap Equity Fund	43.54
HEZU	iShares Currency Hedged MSCI Eurozone ETF	43.43
DBEU	Xtrackers MSCI Europe Hedged Equity ETF	43.23
DDWM	WisdomTree Dynamic Currency Hedged International Equi..	42.88

Developed ex-U.S. Monthly Flows



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

Ticker	Fund	1-Day Performance
EWO	iShares MSCI Austria ETF	-5.75%
GREK	Global X MSCI Greece ETF	-5.21%
EWD	iShares MSCI Sweden ETF	-4.91%
ISRA	VanEck Israel ETF	-4.76%
NORW	Global X MSCI Norway ETF	-4.42%
CIL	VictoryShares International Volatility Wtd ETF	-4.33%
AIA	iShares Asia 50 ETF	-4.27%
EWN	iShares MSCI Netherlands ETF	-4.23%
EWUS	iShares MSCI United Kingdom Small Cap ETF	-4.09%
IEUS	iShares MSCI Europe Small-Cap ETF	-4.05%

Developed ex-U.S. Most Oversold

Ticker	Fund	Value
EWUS	iShares MSCI United Kingdom Small Cap ETF	25.34
WPS	iShares International Developed Property ETF	25.58
EIS	iShares MSCI Israel ETF	28.22
IEUS	iShares MSCI Europe Small-Cap ETF	29.94
ENZL	iShares MSCI New Zealand ETF	30.41
ISRA	VanEck Israel ETF	30.84
EWL	iShares MSCI Switzerland ETF	31.29
PTIN	Pacer Trendpilot International ETF	32.94
IQDG	WisdomTree International Quality Dividend Growth ..	33.01
NORW	Global X MSCI Norway ETF	33.07

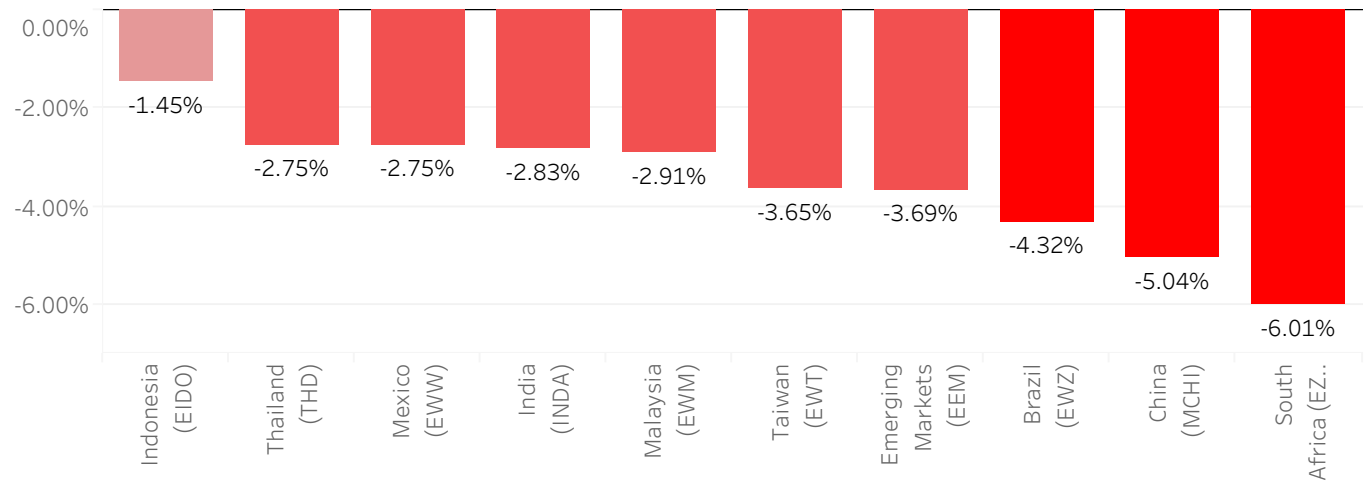
\* ETF Landscape represented using the ETF Action classification system\*\*Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify \*\*\*Flows delayed one day



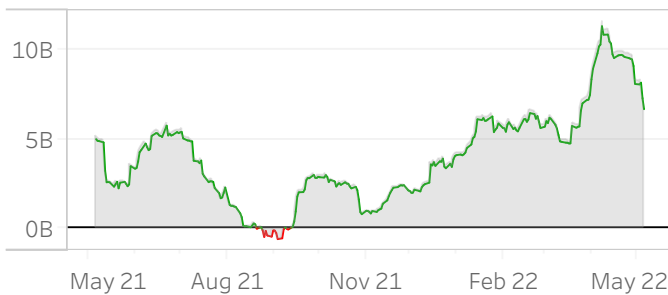
Emerging (EEM)



Emerging 1-Day Performance Top 10 Countries



Emerging 30-Day Rolling Flows



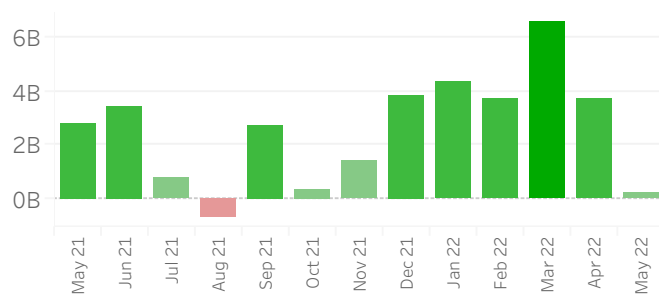
Emerging 1-Day Performance Leaders

Ticker	Fund	Performance
TUR	iShares MSCI Turkey ETF	0.54%
EPHE	iShares MSCI Philippines ETF	-0.72%
KSA	iShares MSCI Saudi Arabia ETF	-0.87%
IDX	VanEck Indonesia Index ETF	-1.25%
EIDO	iShares MSCI Indonesia ETF	-1.45%
ECH	iShares MSCI Chile ETF	-2.40%
EELV	Invesco S&P Emerging Markets Low Volatility ETF	-2.40%
QAT	iShares MSCI Qatar ETF	-2.44%
EEMV	iShares MSCI Emerging Markets Min Vol Factor ETF	-2.50%
CNYA	iShares MSCI China A ETF	-2.54%

Emerging Most Overbought

Ticker	Fund	Value
IDX	VanEck Indonesia Index ETF	58.31
EIDO	iShares MSCI Indonesia ETF	54.99
TUR	iShares MSCI Turkey ETF	54.35
KSA	iShares MSCI Saudi Arabia ETF	53.92
PGJ	Invesco Golden Dragon China ETF	44.30
ECH	iShares MSCI Chile ETF	43.47
FXI	iShares China Large-Cap ETF	43.38
MCHI	iShares MSCI China ETF	42.09
FLCH	Franklin FTSE China ETF	41.94
FNI	First Trust Chindia ETF	41.73

Emerging Monthly Flows



Emerging 1-Day Performance Laggards

Ticker	Fund	Performance
PGJ	Invesco Golden Dragon China ETF	-7.65%
EPOL	iShares MSCI Poland ETF	-6.43%
EZA	iShares MSCI South Africa ETF	-6.01%
EPU	iShares MSCI Peru ETF	-5.59%
EWZS	iShares MSCI Brazil Small-Cap ETF	-5.41%
FNI	First Trust Chindia ETF	-5.36%
FXI	iShares China Large-Cap ETF	-5.24%
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	-5.14%
MCHI	iShares MSCI China ETF	-5.04%
FLCH	Franklin FTSE China ETF	-4.79%

Emerging Most Oversold

Ticker	Fund	Value
EPU	iShares MSCI Peru ETF	24.84
EPOL	iShares MSCI Poland ETF	27.35
AFK	VanEck Africa Index ETF	29.66
EZA	iShares MSCI South Africa ETF	30.52
VNM	VanEck Vietnam ETF	31.11
FM	iShares MSCI Frontier and Select EM ETF	31.55
FRDM	Freedom 100 Emerging Markets ETF	32.39
ILF	iShares Latin America 40 ETF	32.75
SMIN	iShares MSCI India Small Cap ETF	32.91
EWZ	iShares MSCI Brazil ETF	33.19

\*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 (AGG)



Commodities (DJP)



Currencies (UUP)



■ 200 Day Moving Average 
 ■ 50 Day Moving Average 
 ■ Closing Price

Fixed Income Performance

Ticker	Name	1 Day	1 Month	YTD
AGG	U.S. Aggregate	-0.99%	-3.38%	-10.04%
SHY	1-3 Year Treasury Bonds	-0.17%	-0.13%	-2.95%
IEF	7-10 Year Treasury Bonds	-1.00%	-3.34%	-11.22%
TLT	20+ Year Treasury Bonds	-2.74%	-10.06%	-21.68%
TIP	TIPS Bonds	-1.05%	-2.20%	-6.47%
FLOT	Floating Rate Bonds	-0.06%	-0.01%	-0.31%
LQD	Investment Grade Corporate	-1.53%	-6.17%	-14.96%
HYG	High Yield Corporate	-1.77%	-3.88%	-8.94%
BKLN	Senior Loan	-0.46%	-1.83%	-1.86%
PFF	Preferred & Income Securities	-1.93%	-5.76%	-13.86%
MUB	Municipal Bonds	-0.24%	-2.65%	-8.17%
MBB	MBS	-1.08%	-3.01%	-9.00%
EMB	Dollar Denominated EM Bonds	-1.50%	-5.79%	-15.69%
LEMB	Local Currency EM Bond	-1.86%	-5.07%	-11.24%

Commodities Performance

Ticker	Name	1 Day	1 Month	YTD
DJP	Broad Commodities	0.13%	6.32%	38.43%
DBE	Energy	-0.78%	13.24%	56.21%
USO	WTI Crude Oil	0.32%	7.59%	48.05%
BNO	Brent Crude Oil	0.41%	6.29%	51.94%
UNG	Natural Gas	3.76%	42.93%	140.99%
UGA	Gasoline	-0.05%	18.20%	59.38%
DBP	Precious Metals	-0.70%	-3.53%	0.73%
GLD	Gold	-0.38%	-2.29%	2.44%
SLV	Silver	-2.35%	-7.07%	-3.39%
PPLT	abrdn Physical Platin..	-0.96%	1.40%	1.72%
PALL	abrdn Physical Palla..	-3.58%	-1.58%	14.81%
DBB	Base Metals	-2.61%	-10.92%	4.09%
CPER	Copper	-2.04%	-10.24%	-4.59%
LD	Lead	0.35%	-4.52%	-0.60%
JJN	Nickel	-6.27%	-10.56%	43.66%
JJU	Aluminum	-1.88%	-15.25%	4.24%
JJT	Tin	-0.91%	-8.23%	4.67%
DBA	Agriculture	0.18%	0.64%	11.95%
CORN	Corn	0.38%	5.49%	36.54%
SOYB	Soybeans	0.28%	3.22%	23.87%
WEAT	Wheat	2.14%	6.19%	48.58%
CANE	Sugar	0.21%	-2.57%	3.04%
BAL	Cotton	-3.62%	10.55%	37.79%
NIB	Cocoa	-2.27%	-2.41%	-3.65%
JO	Coffee	-1.50%	-5.82%	-3.20%

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD
UUP	Long Dollar	0.84%	3.98%	7.92%
UDN	Short Dollar	-0.96%	-4.02%	-7.91%
FXE	Euro	-0.58%	-3.27%	-7.59%
FXB	British Pound Sterling	-2.03%	-5.47%	-8.67%
FXF	Swiss Franc	-1.15%	-5.74%	-7.78%
FXJ	Japanese Yen	-0.73%	-4.97%	-11.63%
FXC	Canadian Dollar	-0.79%	-2.71%	-1.68%
FXA	Australian Dollar	-2.00%	-6.15%	-2.21%

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

*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 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.

*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](mailto:team@etfaction.com)

[www.etfaction.com](http://www.etfaction.com)