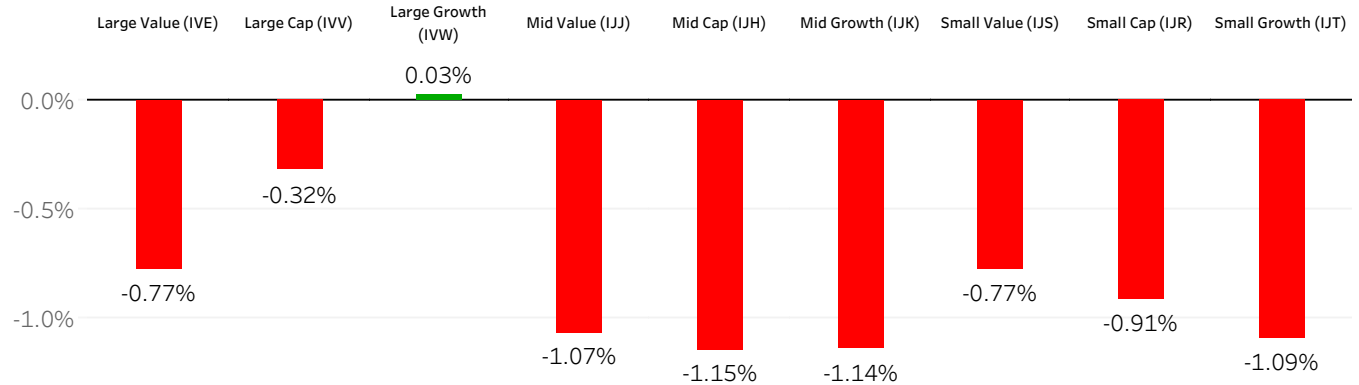


Large Cap Blend (S&P 500) IVV



U.S. Size & Style 1-Day Performance



Mid Cap Blend (S&P 400) IJH



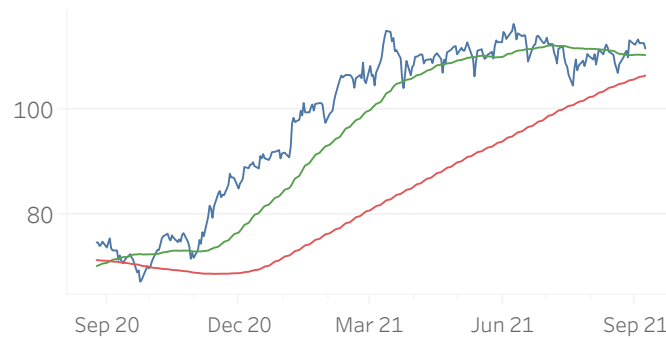
Size & Style 1-Day Performance Leaders

Ticker	Fund	1-Day Performance
BUZZ	VanEck Social Sentiment ETF	0.87%
IPO	Renaissance IPO ETF	0.64%
QQH	HCM Defender 100 Index ETF	0.43%
TMFC	Motley Fool 100 Index ETF	0.31%
MGK	Vanguard Mega Cap Growth ETF	0.29%
DUSA	Davis Select U.S. Equity ETF	0.27%
QMOM	Alpha Architect U.S. Quantitative Momentum ETF	0.18%
IWY	iShares Russell Top 200 Growth ETF	0.17%
XLG	Invesco S&P 500 Top 50 ETF	0.15%
QQQ	Invesco QQQ Trust	0.14%

Size & Style Most Overbought

Ticker	Fund	Price
FFTY	Innovator IBD 50 ETF	75.47
MMLG	First Trust Multi-Manager Large Growth ETF	74.66
PTNQ	Pacer Trendpilot 100 ETF	73.48
ONEQ	Fidelity Nasdaq Composite Index ETF	72.46
IPO	Renaissance IPO ETF	72.24
QQQM	Invesco NASDAQ 100 ETF	72.16
QQQ	Invesco QQQ Trust	71.85
SPYG	SPDR Portfolio S&P 500 Growth ETF	71.45
VOOG	Vanguard S&P 500 Growth ETF	71.40
IVW	iShares S&P 500 Growth ETF	71.03

Small Cap Blend (S&P 600) IJR



Size & Style 1-Day Performance Laggards

Ticker	Fund	1-Day Performance
CALF	Pacer US Small Cap Cash Cows 100 ETF	-1.80%
RZG	Invesco S&P Smallcap 600 Pure Growth ETF	-1.74%
XMHQ	Invesco S&P MidCap Quality ETF	-1.63%
DWEQ	AdvisorShares Dorsey Wright Alpha Equal Weight ETF	-1.62%
XSMO	Invesco S&P SmallCap Momentum ETF	-1.61%
REGL	ProShares S&P MidCap 400 Dividend Aristocrats ETF	-1.53%
XMLV	Invesco S&P MidCap Low Volatility ETF	-1.49%
QVAL	Alpha Architect U.S. Quantitative Value ETF	-1.45%
SDY	SPDR S&P Dividend ETF	-1.43%
PSET	Principal Quality ETF	-1.40%

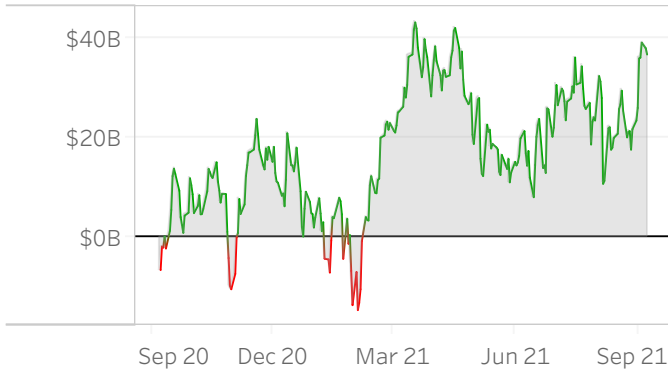
Size & Style Most Oversold

Ticker	Fund	Price
REGL	ProShares S&P MidCap 400 Dividend Aristocrats ETF	40.88
SDY	SPDR S&P Dividend ETF	42.12
VSDA	VictoryShares Dividend Accelerator ETF	43.87
CALF	Pacer US Small Cap Cash Cows 100 ETF	44.74
HDV	iShares Core High Dividend ETF	45.22
ABEQ	Absolute Core Strategy ETF	45.39
FTA	First Trust Large Cap Value AlphaDEX Fund	45.87
SYLD	Cambria Shareholder Yield ETF	46.03
VLUE	iShares MSCI USA Value Factor ETF	46.10
NOBL	ProShares S&P 500 Dividend Aristocrats ETF	46.12

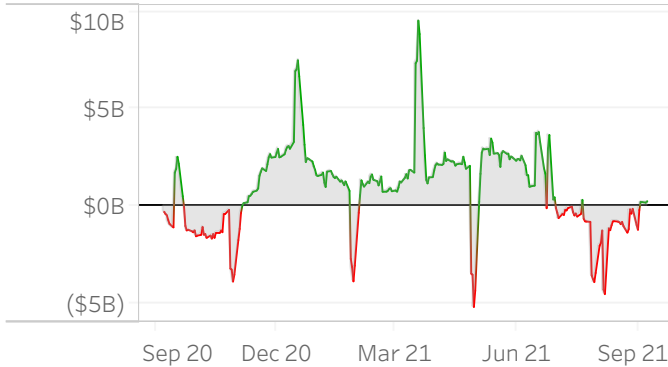
■ Closing Price
 ■ 50 Day Moving Average
 ■ 200 Day Moving Average

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

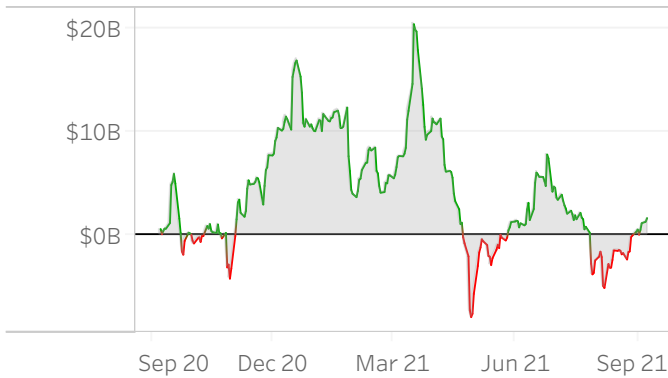
Large-Cap 30-Day Rolling Flows



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	24	\$1,295B	\$0.54B	\$52.05B	\$68.35B	\$85.49B
Large Cap, Beta Growth, Beta: Growth	10	\$265B	\$0.27B	\$8.80B	\$9.52B	\$2.93B
Mid Cap, Beta, Beta	10	\$189B	\$0.25B	\$0.50B	\$3.44B	\$7.63B
Small Cap, Beta, Beta: Value	7	\$56B	\$0.18B	(\$1.09B)	\$1.50B	\$8.84B
Large Cap, Beta Growth, Beta: Value	10	\$202B	\$0.08B	\$1.89B	\$16.80B	\$32.19B
Small Cap, Beta, Beta: Growth	7	\$40B	\$0.07B	\$0.24B	(\$0.12B)	\$1.41B
Small Cap, Beta, Beta	12	\$219B	\$0.06B	\$2.72B	\$2.37B	\$23.13B
Mid Cap, Beta, Beta: Growth	6	\$41B	\$0.03B	\$0.05B	(\$1.76B)	(\$2.63B)
Mid Cap, Beta, Beta: Value	6	\$41B	(\$0.01B)	(\$0.95B)	\$1.51B	\$3.77B

U.S. Size & Style Flow Leaders

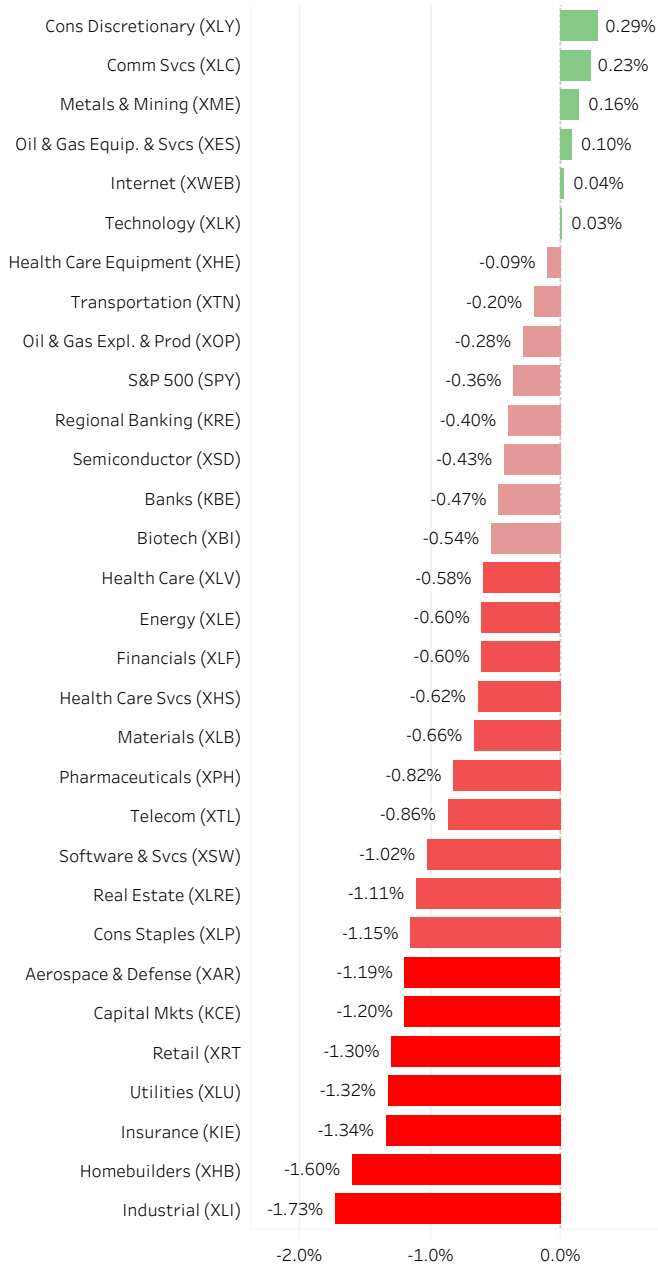
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IVV	iShares Core S&P 500 ETF	\$0.82B	\$6.28B	\$8.82B	\$19.01B	\$307.32B
QQQ	Invesco QQQ Trust	\$0.32B	\$13.48B	\$15.52B	\$11.73B	\$195.79B
VBR	Vanguard Small Cap Value ETF	\$0.27B	\$0.65B	\$1.59B	\$4.13B	\$25.21B
VUG	Vanguard Growth ETF	\$0.23B	\$2.35B	\$4.06B	\$4.39B	\$86.92B
VOO	Vanguard S&P 500 ETF	\$0.19B	\$12.18B	\$22.69B	\$37.25B	\$256.96B
IJH	iShares Core S&P Mid-Cap ETF	\$0.17B	(\$0.22B)	\$0.82B	\$0.05B	\$64.67B
IJR	iShares Core S&P Small Cap ETF	\$0.16B	(\$0.94B)	(\$0.28B)	\$3.22B	\$70.22B
ESGU	iShares ESG Aware MSCI USA ETF	\$0.15B	\$3.40B	\$5.17B	\$9.25B	\$22.50B
SCHD	Schwab US Dividend Equity ETF	\$0.15B	\$2.22B	\$6.23B	\$9.86B	\$28.13B
SCHA	Schwab U.S. Small-Cap ETF	\$0.15B	\$0.57B	\$0.97B	\$2.01B	\$16.89B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
SPHB	Invesco S&P 500 High Beta ETF	(\$0.42B)	(\$0.79B)	(\$0.50B)	\$0.68B	\$1.25B
IWM	iShares Russell 2000 ETF	(\$0.36B)	\$0.78B	(\$2.38B)	\$7.13B	\$68.65B
VTI	Vanguard Total Stock Market ETF	(\$0.31B)	\$11.03B	\$22.40B	\$46.24B	\$274.28B
IWB	iShares Russell 1000 ETF	(\$0.28B)	(\$0.11B)	\$0.32B	(\$0.60B)	\$31.24B
DIA	SPDR Dow Jones Industrial Average ETF Trust	(\$0.18B)	(\$0.91B)	\$1.31B	\$1.43B	\$30.63B
IWF	iShares Russell 1000 Growth ETF	(\$0.10B)	\$2.08B	\$0.56B	(\$2.41B)	\$76.08B
IWN	iShares Russell 2000 Value ETF	(\$0.07B)	(\$1.12B)	(\$0.79B)	\$2.22B	\$15.74B
SIZE	iShares MSCI USA Size Factor ETF	(\$0.05B)	(\$0.38B)	(\$0.37B)	(\$0.50B)	\$0.61B
IWW	iShares S&P 500 Growth ETF	(\$0.05B)	\$0.46B	(\$0.35B)	(\$3.01B)	\$37.57B
IVE	iShares S&P 500 Value ETF	(\$0.05B)	(\$0.29B)	\$0.55B	\$1.72B	\$23.02B

* 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)
XLK	Technology Select Sector SPDR Fund	-0.19%	44.04%	3.56%	14.27%	65.51
XLY	Consumer Discretionary Select Sector SPDR Fund	-0.31%	30.07%	1.59%	7.25%	60.13
SPY	SPDR S&P 500 ETF Trust	-0.38%	39.93%	2.41%	10.77%	62.08
XLC	Communication Services Select Sector SPDR Fund	-0.44%	48.63%	3.42%	13.19%	65.97
XLV	Health Care Select Sector SPDR Fund	-0.58%	34.18%	2.92%	11.99%	60.03
XLRE	Real Estate Select Sector SPDR Fund	-1.11%	42.36%	3.75%	16.58%	63.92
XLP	Consumer Staples Select Sector SPDR Fund	-1.34%	15.65%	0.87%	4.83%	49.49
XLU	Utilities Select Sector SPDR Fund	-2.14%	20.02%	2.49%	6.52%	52.11
XLI	Industrial Select Sector SPDR Fund	-2.61%	37.28%	-0.68%	5.26%	43.37
XLF	Financial Select Sector SPDR Fund	-2.97%	63.10%	1.42%	9.84%	48.68
XLB	Materials Select Sector SPDR Fund	-4.36%	37.97%	1.40%	6.22%	50.25
XLE	Energy Select Sector SPDR Fund	-13.99%	74.41%	-2.65%	0.60%	47.56

Sector & Industry 1 Day Performance Leaders

Ticker	Fund	Performance
PNQI	Invesco NASDAQ Internet ETF	0.74%
VOX	Vanguard Communication Services ETF	0.35%
FCOM	Fidelity MSCI Communication Services Index ETF	0.33%
XNTK	SPDR NYSE Technology ETF	0.30%
PSCE	Invesco S&P SmallCap Energy ETF	0.30%
XLY	Consumer Discretionary Select Sector SPDR Fund	0.29%
XLC	Communication Services Select Sector SPDR Fund	0.23%
XME	SPDR S&P Metals & Mining ETF	0.16%
PEJ	Invesco Dynamic Leisure & Entertainment ETF	0.12%
IHI	iShares U.S. Medical Devices ETF	0.12%

Sector & Industry Most Overbought

Ticker	Fund	RSI (14D)
IHI	iShares U.S. Medical Devices ETF	76.90
FXH	First Trust Health Care AlphaDEX Fund	71.03
XNTK	SPDR NYSE Technology ETF	70.43
RYH	Invesco S&P 500 Equal Weight Health Care ETF	69.45
IYW	iShares U.S. Technology ETF	69.38
XHE	SPDR S&P Health Care Equipment ETF	69.11
IETC	iShares Evolved US Technology ETF	68.33
XSD	SPDR S&P Semiconductor ETF	67.52
FDN	First Trust Dow Jones Internet Index Fund	67.32
VOX	Vanguard Communication Services ETF	67.16

Sector & Industry 1 Day Performance Laggards

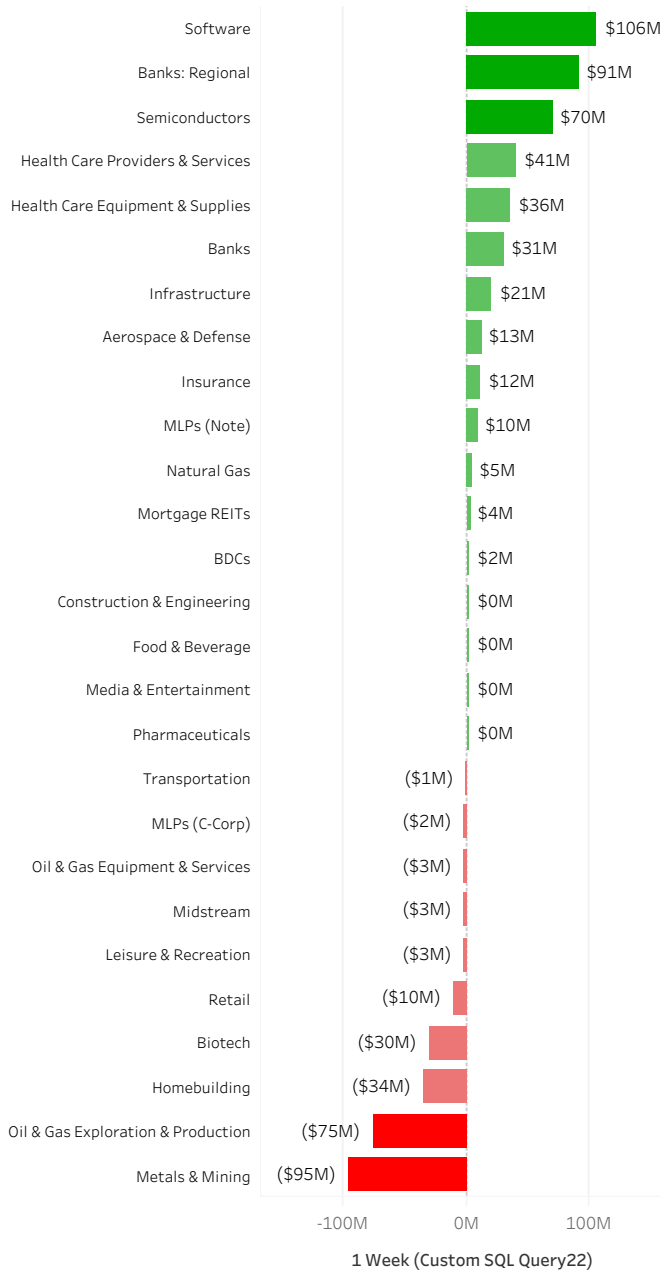
Ticker	Fund	Performance
XLI	Industrial Select Sector SPDR Fund	-1.73%
REZ	iShares Residential and Multisector Real Estate ETF	-1.71%
RGI	Invesco S&P 500 Equal Weight Industrials ETF	-1.69%
PSCD	Invesco S&P SmallCap Consumer Discretionary ETF	-1.67%
NURE	Nuveen Short-Term REIT ETF	-1.62%
XHB	SPDR S&P Homebuilders ETF	-1.60%
PJP	Invesco Dynamic Pharmaceuticals ETF	-1.58%
FIDU	Fidelity MSCI Industrial Index ETF	-1.54%
FXR	First Trust Industrials/Producer Durables AlphaDEX F..	-1.50%
VIS	Vanguard Industrials ETF	-1.49%

Sector & Industry Most Oversold

Ticker	Fund	RSI (14D)
ITA	iShares U.S. Aerospace & Defense ETF	39.62
XAR	SPDR S&P Aerospace & Defense ETF	39.73
XPH	SPDR S&P Pharmaceuticals ETF	41.54
PPA	Invesco Aerospace & Defense ETF	42.53
PSCD	Invesco S&P SmallCap Consumer Discretionary ETF	42.62
XLI	Industrial Select Sector SPDR Fund	43.37
KBWP	Invesco KBW Property & Casualty Insurance ETF	44.00
RHS	Invesco S&P 500 Equal Weight Consumer Staples ETF	44.02
PJP	Invesco Dynamic Pharmaceuticals ETF	44.56
XRT	SPDR S&P Retail ETF	44.84

* 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	\$23B	\$148M	\$1,641M	\$1,566M	\$2,072M
Consumer Discretionary	13	\$34B	(\$235M)	(\$579M)	\$531M	\$2,903M
Consumer Staples	12	\$22B	(\$120M)	\$1,138M	\$1,431M	(\$3,148M)
Energy	34	\$47B	(\$82M)	(\$2,605M)	\$2,156M	\$9,306M
Financials	28	\$78B	(\$558M)	(\$3,569M)	\$5,833M	\$20,754M
Health Care	25	\$95B	\$179M	\$4,910M	\$4,736M	\$3,673M
Industrial	14	\$37B	(\$430M)	(\$3,118M)	(\$1,060M)	\$5,068M
Materials	10	\$17B	(\$628M)	(\$2,263M)	\$2,260M	\$6,102M
Multi-Sector	16	\$25B	(\$15M)	\$316M	\$2,635M	\$4,027M
Real Estate	21	\$77B	\$1,718M	\$3,422M	\$7,665M	\$11,681M
Technology	24	\$145B	(\$279M)	\$3,697M	\$2,678M	\$1,452M
Utilities	10	\$22B	(\$77M)	\$2,051M	\$925M	(\$109M)

U.S. Sector & Industry Flow Leaders

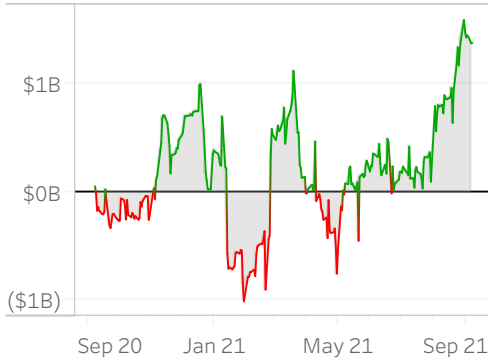
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IYR	iShares U.S. Real Estate ETF	\$1,465M	\$324M	\$1,403M	\$2,075M	\$7,066M
XLC	Communication Services Select Sector SPDR Fu..	\$137M	\$1,015M	\$763M	\$1,095M	\$15,986M
IGV	iShares Expanded Tech-Software Sector ETF	\$106M	(\$11M)	(\$809M)	(\$1,073M)	\$5,671M
XLRE	Real Estate Select Sector SPDR Fund	\$95M	\$1,115M	\$1,470M	\$1,331M	\$4,615M
KRE	SPDR S&P Regional Banking ETF	\$91M	(\$612M)	\$614M	\$2,336M	\$4,478M
VNQ	Vanguard Real Estate ETF	\$78M	\$1,101M	\$2,775M	\$5,671M	\$46,119M
SOXX	iShares Semiconductor ETF	\$70M	\$350M	\$549M	\$1,615M	\$7,509M
IYH	iShares U.S. Healthcare ETF	\$59M	\$260M	\$169M	\$135M	\$3,141M
FREL	Fidelity MSCI Real Estate Index ETF	\$46M	\$278M	\$406M	\$483M	\$2,033M
IYW	iShares U.S. Technology ETF	\$43M	\$781M	\$562M	\$349M	\$9,120M

U.S. Sector & Industry Flow Laggards

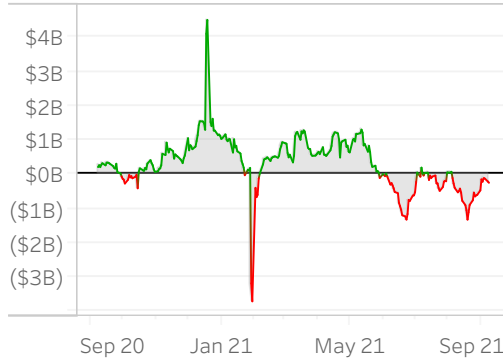
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLF	Financial Select Sector SPDR Fund	(\$710M)	(\$3,000M)	\$1,078M	\$11,622M	\$42,185M
XLK	Technology Select Sector SPDR Fund	(\$549M)	\$912M	\$704M	(\$1,041M)	\$46,313M
XLB	Materials Select Sector SPDR Fund	(\$487M)	(\$1,677M)	\$682M	\$2,716M	\$8,050M
XLI	Industrial Select Sector SPDR Fund	(\$356M)	(\$1,958M)	(\$1,205M)	\$2,326M	\$18,853M
XLY	Consumer Discretionary Select Sector SPDR Fu..	(\$165M)	(\$952M)	(\$1,255M)	\$20M	\$19,819M
XLP	Consumer Staples Select Sector SPDR Fund	(\$153M)	\$1,020M	\$1,497M	(\$2,461M)	\$13,262M
XME	SPDR S&P Metals & Mining ETF	(\$95M)	(\$482M)	\$75M	\$690M	\$1,846M
XOP	SPDR S&P Oil & Gas Exploration & Production E..	(\$58M)	(\$937M)	(\$872M)	(\$448M)	\$2,950M
IYJ	iShares U.S. Industrials ETF	(\$57M)	(\$147M)	\$108M	\$446M	\$1,737M
IYC	iShares U.S. Consumer Services ETF	(\$56M)	(\$221M)	(\$83M)	\$18M	\$1,380M

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

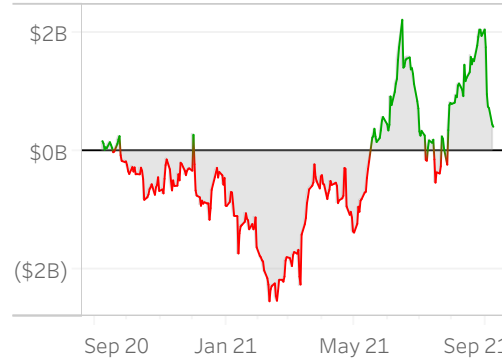
Communication Services



Consumer Discretionary



Consumer Staples



Energy



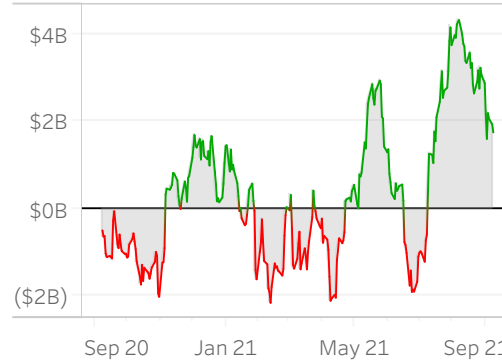
Financials



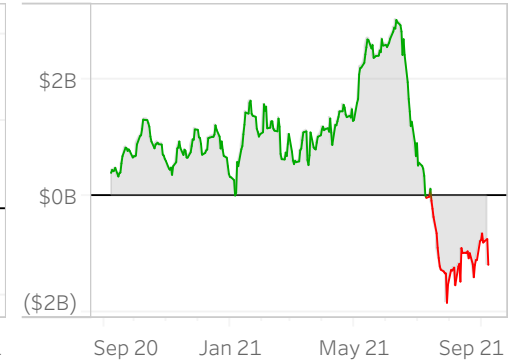
Industrial



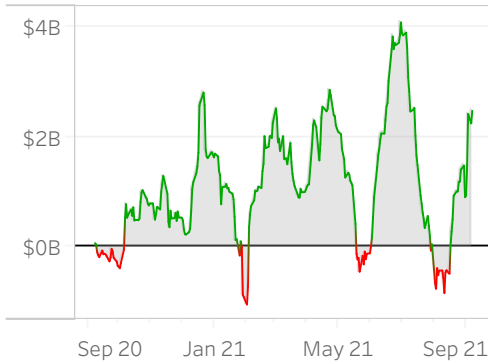
Health Care



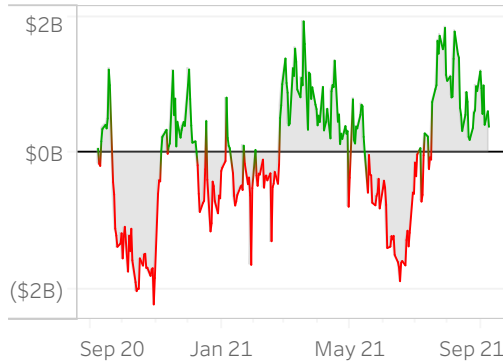
Materials



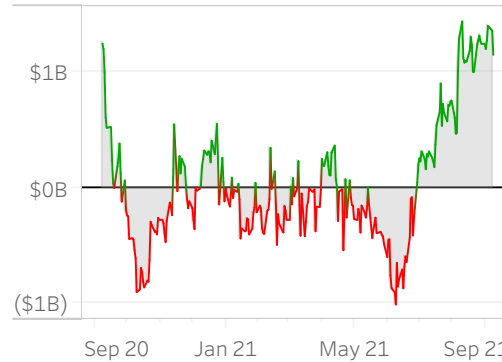
Real Estate



Technology



Utilities

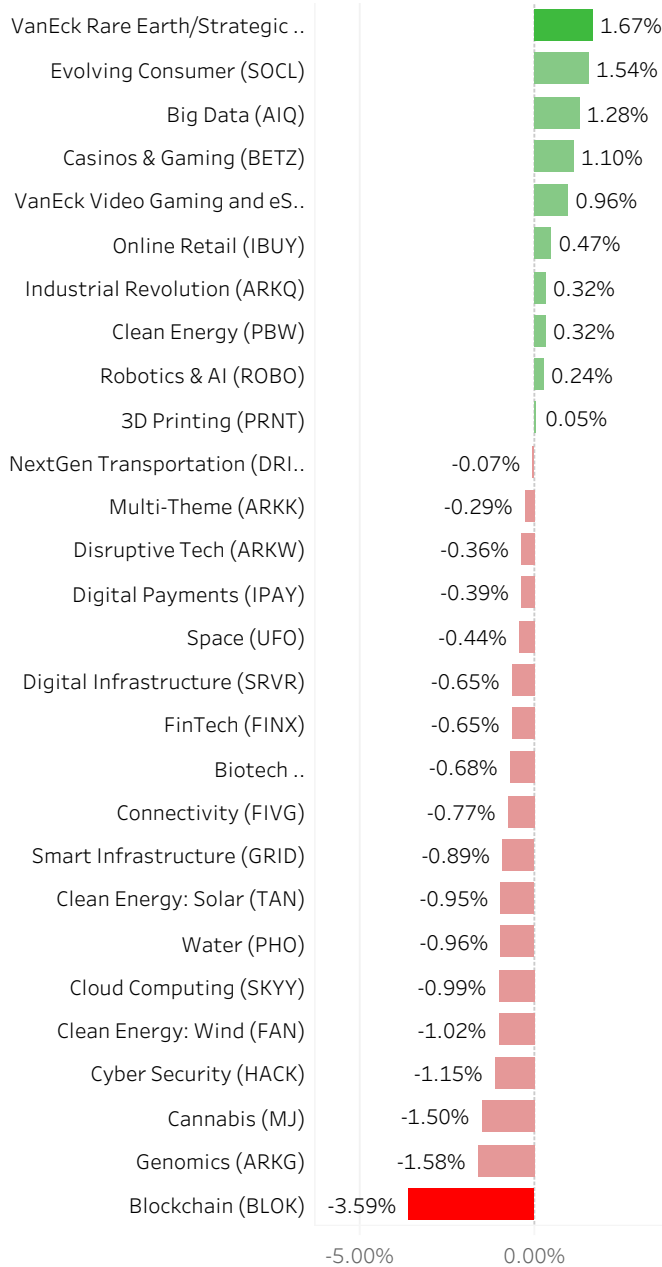


Multi-Sector

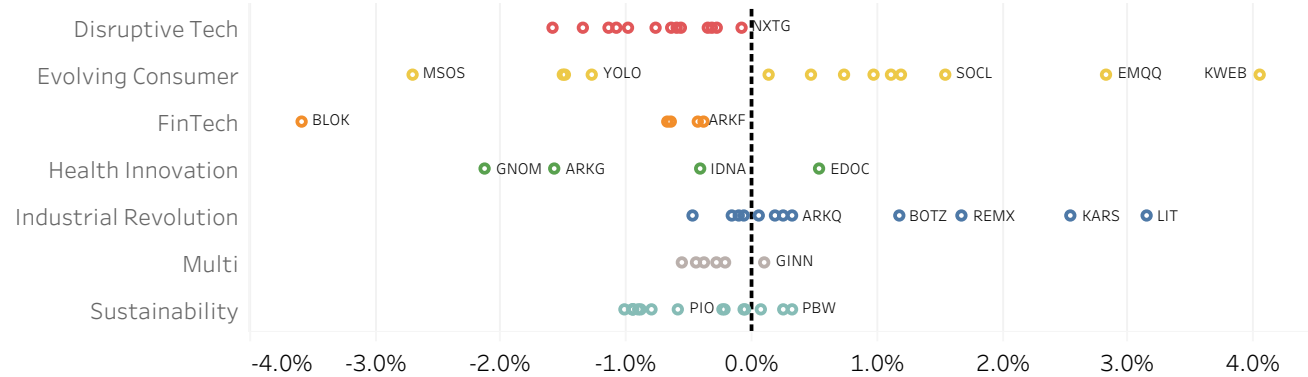


* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day

Global Thematic Segment 1-Day Performance



Global Thematic 1-Day Performance Landscape



Global Thematic 1-Day Performance Leaders

Ticker	Fund	Performance
KWEB	KraneShares CSI China Internet ETF	4.04%
LIT	Global X Lithium & Battery Tech ETF	3.14%
EMQQ	Emerging Markets Internet & Ecommerce ETF	2.82%
KARS	KraneShares Electric Vehicles & Future Mobility Index ETF	2.53%
KSTR	KraneShares SSE STAR Market 50 Index ETF	2.48%
BJK	VanEck Gaming ETF	2.13%
REMX	VanEck Rare Earth/Strategic Metals ETF	1.67%
KEMQ	KraneShares Emerging Markets Consumer Technology In..	1.66%
SOCL	Global X Social Media ETF	1.54%
KGRN	KraneShares MSCI China Clean Technology Index ETF	1.34%

Thematic Most Overbought

Ticker	Fund	Value
BOTZ	Global X Robotics & Artificial Intelligence ETF	79.63
IVES	Wedbush ETFMG Global Cloud Technology ETF	76.28
ROBO	ROBO Global Robotics & Automation Index ETF	73.66
CLOU	Global X Cloud Computing ETF	73.47
KLDW	Knowledge Leaders Developed World ETF	73.02
ANEW	ProShares MSCI Transformational Changes ETF	73.00
NXTG	First Trust Indxx NextG ETF	72.35
AIQ	Global X Artificial Intelligence & Technology ETF	71.93
TECB	iShares U.S. Tech Breakthrough Multisector ETF	71.80
ROBT	First Trust Nasdaq Artificial Intelligence & Robotics ETF	71.30

Global Thematic 1-Day Performance Laggards

Ticker	Fund	Performance
BITQ	Bitwise Crypto Industry Innovators ETF	-5.10%
DAPP	VanEck Digital Transformation ETF	-4.55%
BLOK	Amplify Transformational Data Sharing ETF	-3.59%
MSOS	AdvisorShares Pure US Cannabis ETF	-2.71%
GNOM	Global X Genomics & Biotechnology ETF	-2.14%
IHAK	iShares Cybersecurity & Tech ETF	-1.59%
ARKG	ARK Genomic Revolution ETF	-1.58%
PAWZ	ProShares Pet Care ETF	-1.51%
MJ	ETFMG Alternative Harvest ETF	-1.50%
CNBS	Amplify Seymour Cannabis ETF	-1.45%

Thematic Most Oversold

Ticker	Fund	Value
MSOS	AdvisorShares Pure US Cannabis ETF	35.75
PAWZ	ProShares Pet Care ETF	39.11
KSTR	KraneShares SSE STAR Market 50 Index ETF	39.66
POTX	Global X Cannabis ETF	40.96
MJ	ETFMG Alternative Harvest ETF	41.91
YOLO	AdvisorShares Pure Cannabis ETF	41.96
CNBS	Amplify Seymour Cannabis ETF	42.58
KFVG	KraneShares CICC China 5G & Semiconductor Index ETF	44.48
THCX	Cannabis ETF	45.14
IBUY	Amplify Online Retail ETF	47.18

* 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
KWEB	KraneShares CSI China Internet ETF	\$869M
LIT	Global X Lithium & Battery Tech ETF	\$76M
BUG	Global X Cybersecurity ETF	\$45M
META	Roundhill Ball Metaverse ETF	\$34M
BLOK	Amplify Transformational Data Sharing ETF	\$28M
KOMP	SPDR S&P Kensho New Economies Composite ETF	\$28M
FIW	First Trust Water ETF	\$27M
BOTZ	Global X Robotics & Artificial Intelligence ETF	\$25M
CIBR	First Trust NASDAQ Cybersecurity ETF	\$23M
REMX	VanEck Rare Earth/Strategic Metals ETF	\$18M

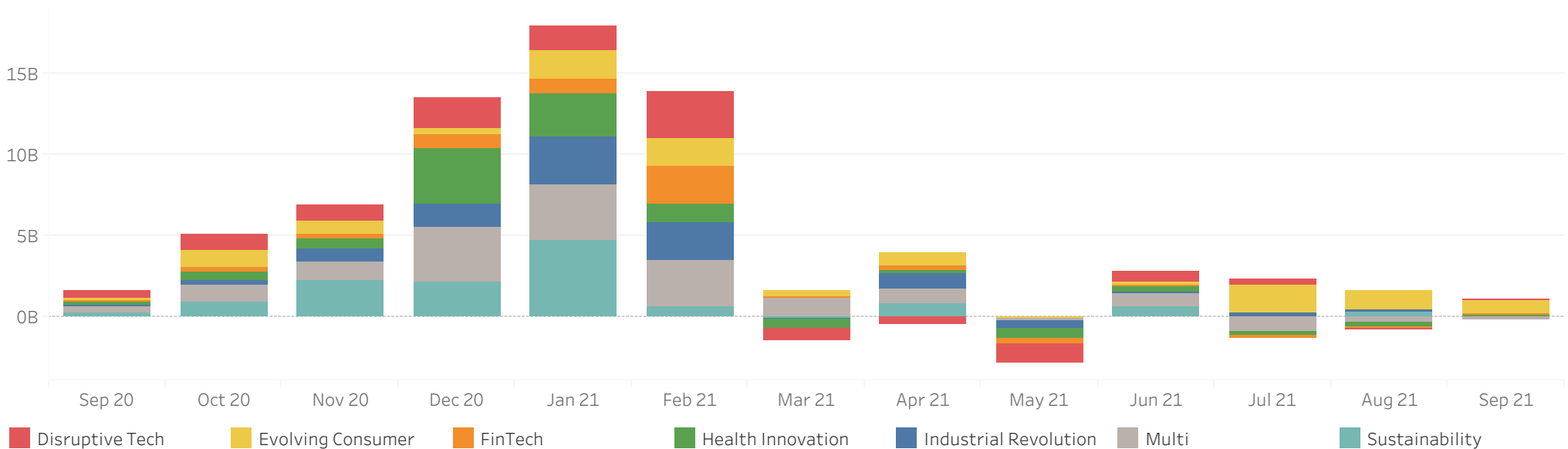
Thematic 1 Week Flow Laggards

Ticker	Fund	Flow
ARKK	ARK Innovation ETF	(\$218M)
PBW	Invesco WilderHill Clean Energy ETF	(\$52M)
GXTG	Global X Thematic Growth ETF	(\$32M)
KFVG	KraneShares CICC China 5G & Semiconductor Index ETF	(\$14M)
ESPO	VanEck Video Gaming and eSports ETF	(\$11M)
ERTH	Invesco MSCI Sustainable Future ETF	(\$10M)
FINX	Global X FinTech ETF	(\$8M)
ARKW	ARK Next Generation Internet ETF	(\$7M)
SKYY	First Trust Cloud Computing ETF	(\$6M)
CLOU	Global X Cloud Computing ETF	(\$5M)

Thematic Landscape Assets & Flows

Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	29	\$30B	\$66M	\$1,008M	(\$763M)	\$7,317M
Evolving Consumer	38	\$18B	\$600M	\$3,861M	\$4,876M	\$11,022M
FinTech	12	\$8B	\$27M	(\$127M)	\$127M	\$4,863M
Health Innovation	14	\$11B	\$3M	(\$159M)	(\$516M)	\$7,449M
Industrial Revolution	22	\$18B	\$51M	\$531M	\$1,132M	\$8,472M
Multi	27	\$31B	(\$139M)	(\$292M)	\$873M	\$13,539M
Sustainability	31	\$23B	\$5M	\$1,015M	\$1,967M	\$12,964M
Grand Total	173	\$140B	\$613M	\$5,836M	\$7,697M	\$65,625M

Thematic Monthly Flows

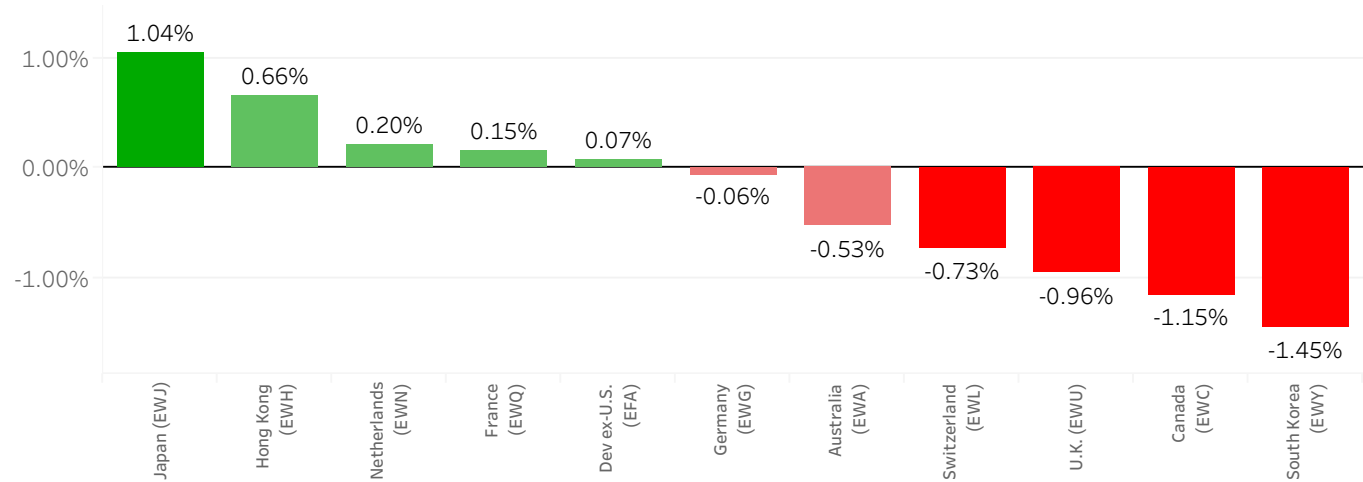


* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day

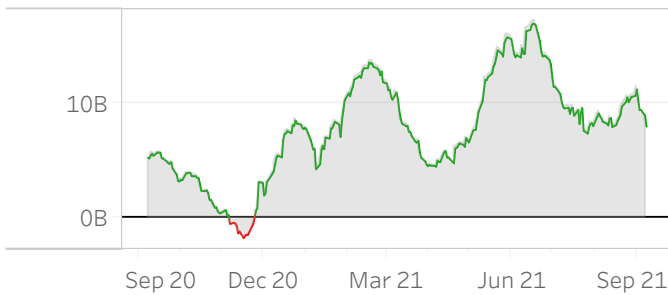
Developed ex-U.S. (EFA)



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



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



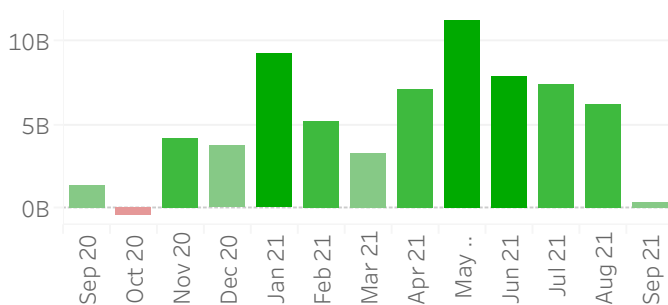
Developed ex-U.S. 1-Day Performance Leaders

Ticker	Fund	1-Day Performance
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	1.57%
HEWJ	iShares Currency Hedged MSCI Japan ETF	1.41%
AIA	iShares Asia 50 ETF	1.13%
DXJ	WisdomTree Japan Hedged Equity Fund	1.12%
JPXN	iShares JPX-Nikkei 400 ETF	1.08%
EWJ	iShares MSCI Japan ETF	1.04%
FLJP	Franklin FTSE Japan ETF	1.01%
BBJP	JPMorgan BetaBuilders Japan ETF	0.98%
IMOM	Alpha Architect International Quantitative Momentum ETF	0.91%
AAXJ	iShares MSCI All Country Asia ex Japan ETF	0.77%

Developed ex-U.S. Most Overbought

Ticker	Fund	Value
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	78.21
JPXN	iShares JPX-Nikkei 400 ETF	77.96
HEWJ	iShares Currency Hedged MSCI Japan ETF	77.82
SCJ	iShares MSCI Japan Small-Cap ETF	77.20
FLJP	Franklin FTSE Japan ETF	76.83
EWJ	iShares MSCI Japan ETF	76.80
BBJP	JPMorgan BetaBuilders Japan ETF	76.78
HSCZ	iShares Currency Hedged MSCI EAFE Small-Cap ETF	76.53
EWN	iShares MSCI Netherlands ETF	76.17
DFJ	WisdomTree Japan SmallCap Dividend Fund	75.23

Developed ex-U.S. Monthly Flows



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

Ticker	Fund	1-Day Performance
FKU	First Trust United Kingdom AlphaDEX Fund	-1.54%
EWY	iShares MSCI South Korea ETF	-1.45%
EWUS	iShares MSCI United Kingdom Small Cap ETF	-1.32%
FLKR	Franklin FTSE South Korea ETF	-1.27%
EWC	iShares MSCI Canada ETF	-1.15%
EWU	iShares MSCI United Kingdom ETF	-0.96%
BBCA	JPMorgan BetaBuilders Canada ETF	-0.95%
IDV	iShares International Select Dividend ETF	-0.95%
GREK	Global X MSCI Greece ETF	-0.93%
IDOG	ALPS International Sector Dividend Dogs ETF	-0.93%

Developed ex-U.S. Most Oversold

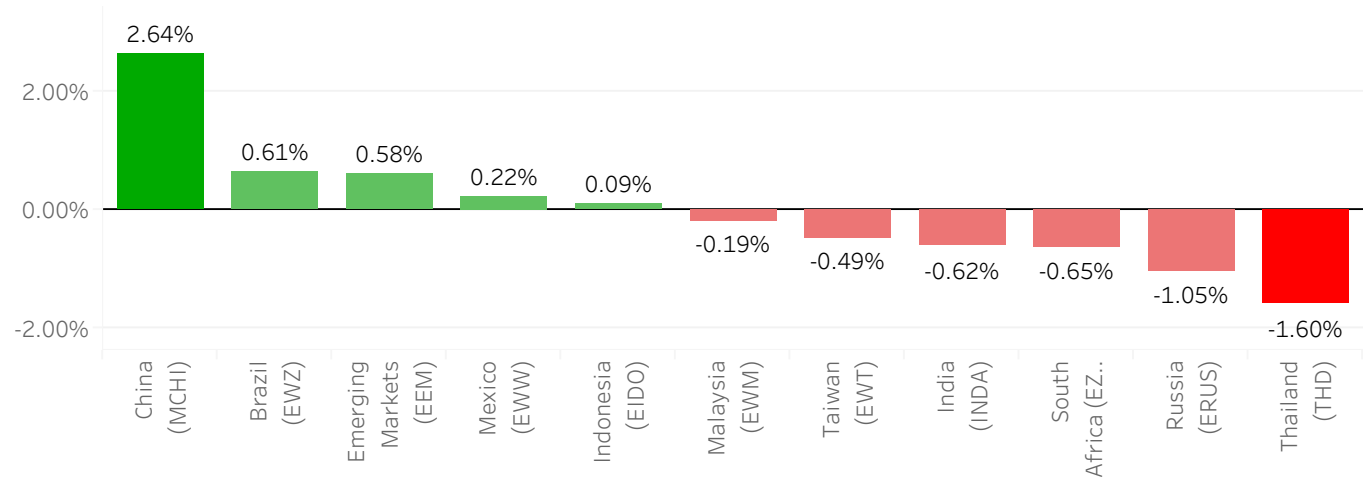
Ticker	Fund	Value
LVHI	Legg Mason International Low Volatility High Divide..	41.02
FDD	First Trust Stoxx European Select Dividend Index Fu..	43.36
EWL	iShares MSCI Switzerland ETF	46.17
EWY	iShares MSCI South Korea ETF	47.59
FLKR	Franklin FTSE South Korea ETF	47.69
IDV	iShares International Select Dividend ETF	47.84
FKU	First Trust United Kingdom AlphaDEX Fund	48.21
EWSP	iShares MSCI Spain ETF	48.62
HDEF	Xtrackers MSCI EAFE High Dividend Yield Equity ETF	49.61
EWI	iShares MSCI Italy ETF	49.78

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

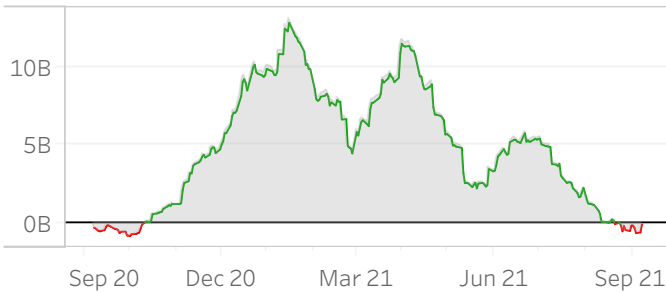
Emerging (EEM)



Emerging 1-Day Performance Top 10 Countries



Emerging 30-Day Rolling Flows



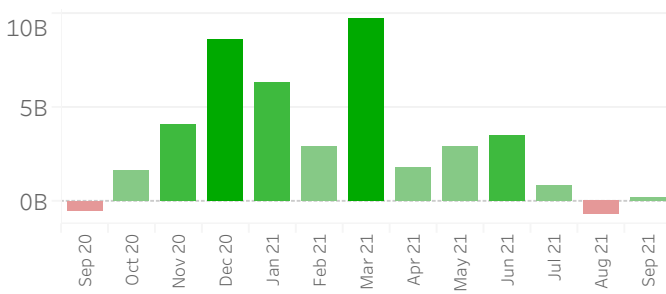
Emerging 1-Day Performance Leaders

Ticker	Fund	Performance
PGJ	Invesco Golden Dragon China ETF	3.40%
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	2.98%
ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	2.82%
GXC	SPDR S&P China ETF	2.75%
KBA	KraneShares Bosera MSCI China A Share ETF	2.74%
MCHI	iShares MSCI China ETF	2.64%
CNYA	iShares MSCI China A ETF	2.61%
FLCH	Franklin FTSE China ETF	2.45%
FXI	iShares China Large-Cap ETF	2.36%
BKF	iShares MSCI BRIC ETF	1.45%

Emerging Most Overbought

Ticker	Fund	Price
INDA	iShares MSCI India ETF	78.03
PIN	Invesco India ETF	77.63
INDY	iShares India 50 ETF	75.36
EPOL	iShares MSCI Poland ETF	74.63
GLIN	VanEck India Growth Leaders ETF	73.27
EPI	WisdomTree India Earnings Fund	72.13
EELV	Invesco S&P Emerging Markets Low Volatility ETF	71.45
SMIN	iShares MSCI India Small Cap ETF	70.50
DVYE	iShares Emerging Markets Dividend ETF	69.31
EEMV	iShares MSCI Emerging Markets Min Vol Factor ETF	68.27

Emerging Monthly Flows



Emerging 1-Day Performance Laggards

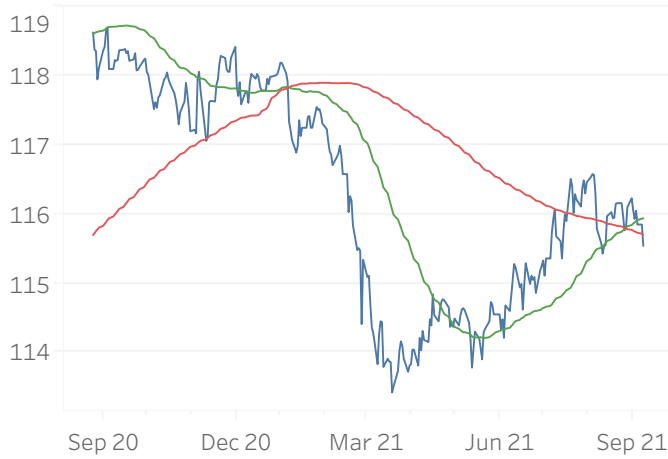
Ticker	Fund	Performance
ECH	iShares MSCI Chile ETF	-1.61%
THD	iShares MSCI Thailand ETF	-1.60%
NFTY	First Trust India NIFTY 50 Equal Weight ETF	-1.25%
TUR	iShares MSCI Turkey ETF	-1.21%
ERUS	iShares MSCI Russia ETF	-1.05%
DEM	WisdomTree Emerging Markets High Dividend Fund	-0.96%
RSX	VanEck Russia ETF	-0.86%
FRDM	Freedom 100 Emerging Markets ETF	-0.85%
GLIN	VanEck India Growth Leaders ETF	-0.71%
SDEM	Global X MSCI SuperDividend Emerging Markets ETF	-0.65%

Emerging Most Oversold

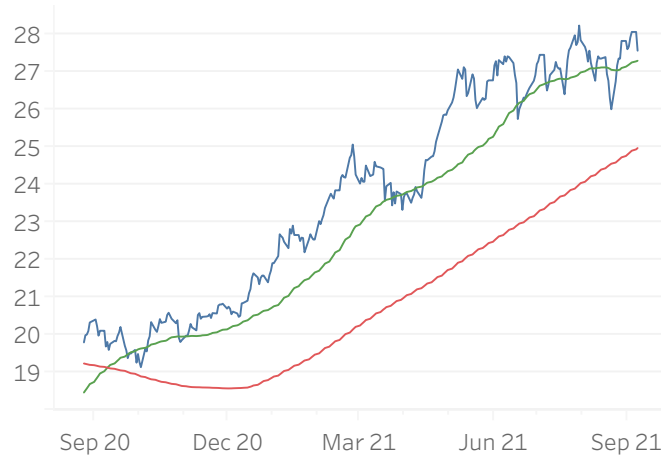
Ticker	Fund	Price
FLBR	Franklin FTSE Brazil ETF	44.44
ILF	iShares Latin America 40 ETF	44.64
EWZ	iShares MSCI Brazil ETF	45.07
EWZS	iShares MSCI Brazil Small-Cap ETF	46.14
EPU	iShares MSCI Peru ETF	51.51
AFK	VanEck Africa Index ETF	53.41
EZA	iShares MSCI South Africa ETF	54.32
PIE	Invesco DWA Emerging Markets Momentum ETF	54.39
BICK	First Trust BICK Index Fund	54.77
ECH	iShares MSCI Chile ETF	54.87

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

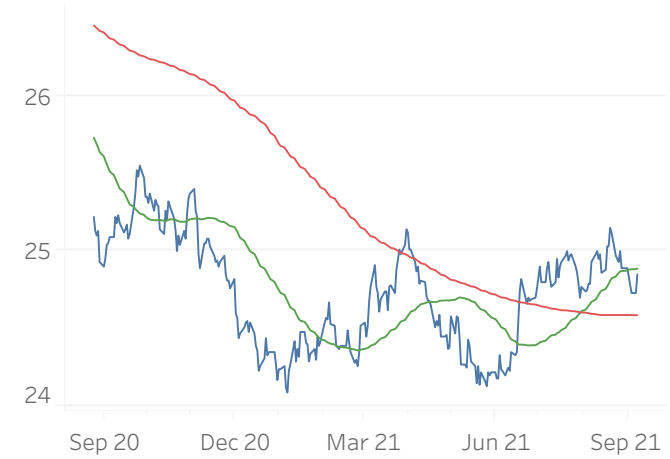
Fixed Income (AGG)



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	-0.27%	-0.07%	-1.06%
SHY	1-3 Year Treasury Bonds	-0.03%	0.00%	-0.05%
IEF	7-10 Year Treasury Bonds	-0.39%	-0.35%	-2.34%
TLT	20+ Year Treasury Bonds	-0.84%	-0.45%	-5.87%
TIP	TIPS Bonds	-0.25%	0.17%	3.69%
FLOT	Floating Rate Bonds	0.02%	0.03%	0.42%
LQD	Investment Grade Corporate	-0.47%	-0.06%	-1.24%
HYG	High Yield Corporate	-0.26%	0.77%	3.29%
BKLN	Senior Loan	-0.05%	1.16%	1.74%
PFF	Preferred & Income Securities	-0.43%	-0.10%	5.19%
MUB	Municipal Bonds	-0.22%	-0.52%	0.74%
MBB	MBS	-0.04%	0.13%	-0.48%
EMB	Dollar Denominated EM Bonds	-0.27%	1.12%	-0.14%
LEMB	Local Currency EM Bond	-0.43%	1.30%	-3.78%

Commodities Performance

Ticker	Name	1 Day	1 Month	YTD
DJP	Broad Commodities	-1.78%	1.17%	25.84%
DBE	Energy	-1.21%	1.17%	43.54%
USO	WTI Crude Oil	-1.27%	0.99%	45.53%
BNO	Brent Crude Oil	-1.42%	1.91%	45.03%
UNG	Natural Gas	-2.74%	10.29%	73.59%
UGA	Gasoline	-1.25%	0.33%	49.73%
DBP	Precious Metals	-1.80%	1.70%	-7.27%
GLD	Gold	-1.96%	1.86%	-5.97%
SLV	Silver	-1.62%	-0.04%	-8.38%
PPLT	Platinum	-2.56%	1.69%	-7.57%
PALL	Palladium	-2.45%	-9.91%	-3.70%
DBB	Base Metals	0.53%	2.10%	20.97%
CPER	Copper	-1.32%	-1.47%	20.15%
LD	Lead	-1.18%	0.16%	14.31%
JJN	Nickel	-2.12%	1.09%	16.29%
JJU	Aluminum	1.65%	7.12%	37.29%
JJT	Tin	-4.47%	-8.69%	75.27%
DBA	Agriculture	-0.63%	0.37%	17.41%
CORN	Corn	-1.93%	-6.87%	23.88%
SOYB	Soybeans	-1.11%	-3.35%	14.18%
WEAT	Wheat	-1.13%	-1.96%	12.92%
CANE	Sugar	-0.73%	6.82%	41.63%
BAL	Cotton	0.04%	2.43%	15.22%
NIB	Cocoa	2.40%	9.48%	2.60%
JO	Coffee	-0.32%	7.65%	42.61%

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD
UUP	Long Dollar	0.49%	-0.32%	2.52%
UDN	Short Dollar	-0.52%	0.24%	-3.45%
FXE	Euro	-0.37%	0.61%	-3.75%
FXB	British Pound Sterling	-0.62%	-0.75%	0.49%
FXF	Swiss Franc	-0.66%	-0.66%	-4.59%
FXJ	Japanese Yen	-0.58%	-0.14%	-6.78%
FXC	Canadian Dollar	-1.05%	-0.81%	0.23%
FXA	Australian Dollar	-0.89%	0.37%	-4.52%

* 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 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

www.etfaction.com