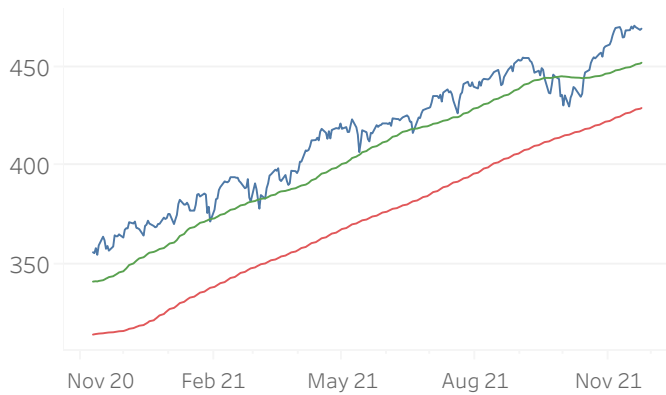


Large Cap Blend (S&P 500) IVV



Mid Cap Blend (S&P 400) IJH

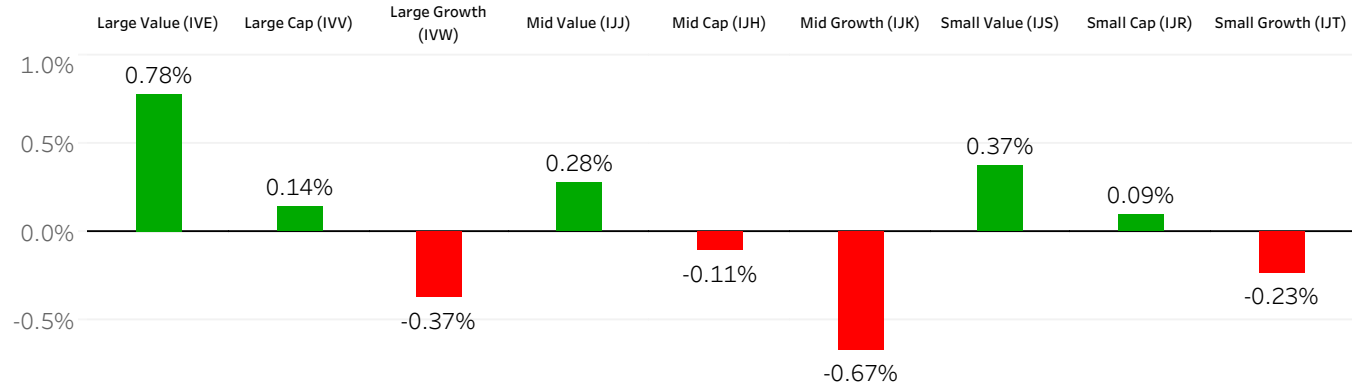


Small Cap Blend (S&P 600) IJR



■ 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	1-Day Performance
LGH	HCM Defender 500 Index ETF	2.34%
RPV	Invesco S&P 500 Pure Value ETF	1.28%
SPVU	Invesco S&P 500 Enhanced Value ETF	1.11%
PEY	Invesco High Yield Equity Dividend Achievers ETF	1.07%
HDV	iShares Core High Dividend ETF	1.04%
PWV	Invesco Dynamic Large Cap Value ETF	1.01%
UTRN	Vesper U.S. Large Cap Short-Term Reversal Strategy ETF	1.00%
CDL	VictoryShares US Large Cap High Dividend Volatility Wt..	0.98%
FDVV	Fidelity High Dividend ETF	0.94%
VYM	Vanguard High Dividend Yield Index ETF	0.94%

Size & Style Most Overbought

Ticker	Fund	Price
LGH	HCM Defender 500 Index ETF	73.31
HLAL	Wahed FTSE USA Shariah ETF	72.87
ALTL	Pacer Lunt Large Cap Alternator ETF	71.37
SPUS	SP Funds S&P 500 Sharia Industry Exclusions ETF	70.91
LGLV	SPDR SSGA US Large Cap Low Volatility Index ETF	70.33
LEAD	Siren DIVCON Leaders Dividend ETF	70.14
QDEF	FlexShares Quality Dividend Defensive Index Fund	69.54
SNPE	Xtrackers S&P 500 ESG ETF	69.50
EFIV	SPDR S&P 500 ESG ETF	69.17
KLCD	KFA Large Cap Quality Dividend Index ETF	69.12

Size & Style 1-Day Performance Laggards

Ticker	Fund	1-Day Performance
IPO	Renaissance IPO ETF	-2.30%
FAD	First Trust Multi Cap Growth AlphaDEX Fund	-1.85%
BUZZ	VanEck Social Sentiment ETF	-1.77%
JSML	Janus Henderson Small Cap Growth Alpha ETF	-1.71%
FFTY	Innovator IBD 50 ETF	-1.62%
JSMD	Janus Henderson Small/Mid Cap Growth Alpha ETF	-1.51%
CSD	Invesco S&P Spin-Off ETF	-1.28%
FPX	First Trust US Equity Opportunities ETF	-1.21%
IWP	iShares Russell Mid-Cap Growth ETF	-1.07%
RPG	Invesco S&P 500 Pure Growth ETF	-1.06%

Size & Style Most Oversold

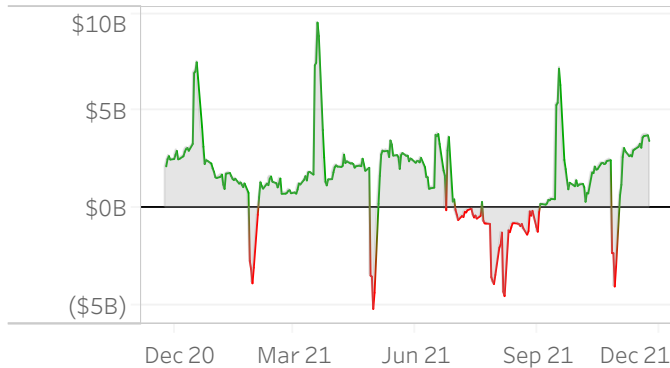
Ticker	Fund	Price
MFMS	Motley Fool Small-Cap Growth ETF	32.51
IPO	Renaissance IPO ETF	33.67
GURU	Global X Guru Index ETF	35.98
VBK	Vanguard Small-Cap Growth ETF	36.35
SHE	SPDR SSGA Gender Diversity Index ETF	37.03
FPX	First Trust US Equity Opportunities ETF	37.28
MMLG	First Trust Multi-Manager Large Growth ETF	37.62
FFTY	Innovator IBD 50 ETF	37.87
CSD	Invesco S&P Spin-Off ETF	38.44
JSML	Janus Henderson Small Cap Growth Alpha ETF	38.48

*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
Small Cap, Beta, Beta	12	\$233B	\$1.38B	\$10.52B	\$11.79B	\$27.95B
Large Cap, Beta Growth, Beta: Value	11	\$210B	\$0.78B	\$6.08B	\$9.55B	\$32.34B
Mid Cap, Beta, Beta	10	\$198B	\$0.51B	\$3.63B	\$3.31B	\$9.63B
Mid Cap, Beta, Beta: Growth	6	\$42B	\$0.29B	\$0.84B	\$0.62B	(\$1.70B)
Small Cap, Beta, Beta: Value	7	\$60B	\$0.23B	\$0.94B	\$0.31B	\$7.81B
Mid Cap, Beta, Beta: Value	6	\$43B	\$0.05B	\$0.56B	\$0.00B	\$3.97B
Large Cap, Beta Growth, Beta	24	\$1,372B	(\$0.08B)	\$45.39B	\$85.62B	\$103.32B
Small Cap, Beta, Beta: Growth	7	\$40B	(\$0.10B)	\$0.39B	\$0.45B	\$1.02B
Large Cap, Beta Growth, Beta: Growth	10	\$278B	(\$0.94B)	\$1.59B	\$8.58B	\$5.22B

U.S. Size & Style Flow Leaders

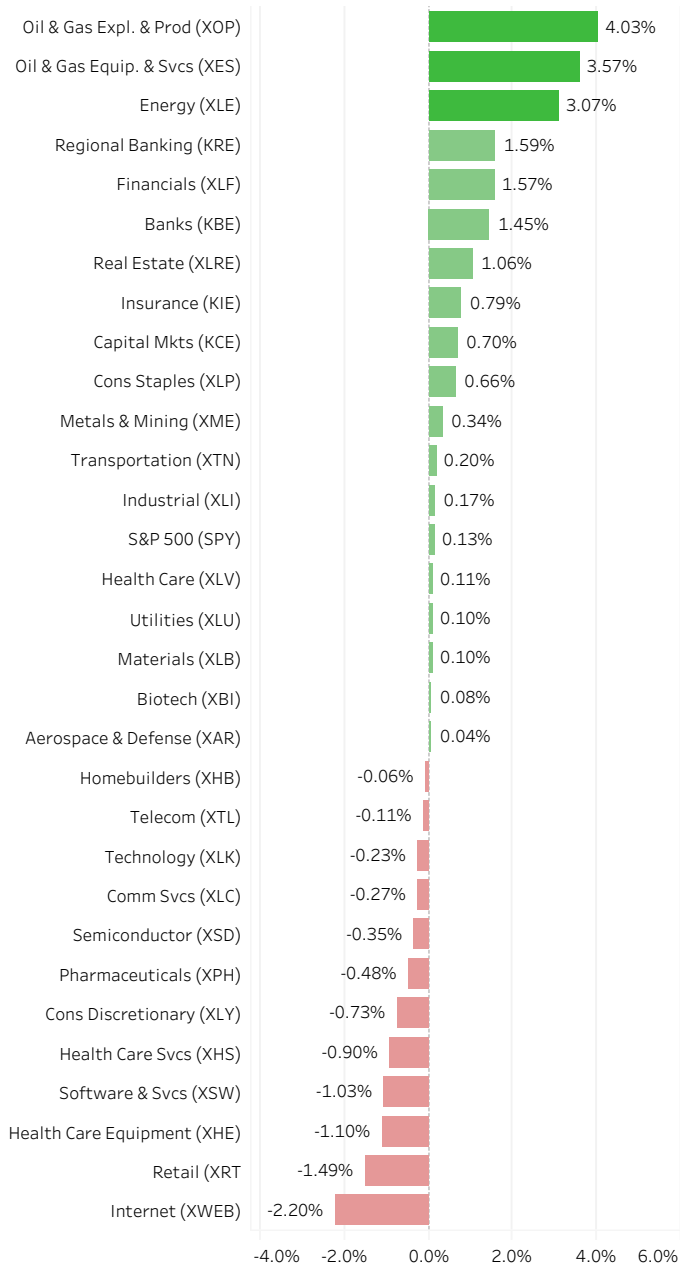
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IVV	iShares Core S&P 500 ETF	\$1.43B	\$11.35B	\$14.43B	\$21.83B	\$326.41B
VTI	Vanguard Total Stock Market ETF	\$0.89B	\$11.23B	\$22.25B	\$44.17B	\$291.25B
IWM	iShares Russell 2000 ETF	\$0.79B	\$4.81B	\$4.19B	\$9.17B	\$73.22B
QQQM	Invesco NASDAQ 100 ETF	\$0.55B	\$1.58B	\$2.22B	\$2.71B	\$3.41B
MTUM	iShares MSCI USA Momentum Factor ETF	\$0.50B	\$1.76B	(\$0.32B)	\$2.11B	\$17.32B
VTV	Vanguard Value ETF	\$0.50B	\$3.29B	\$6.00B	\$16.04B	\$89.71B
QQQ	Invesco QQQ Trust	\$0.45B	\$7.30B	\$16.58B	\$16.65B	\$209.33B
DIA	SPDR Dow Jones Industrial Average ETF Trust	\$0.38B	(\$0.27B)	(\$1.10B)	(\$0.06B)	\$30.05B
VB	Vanguard Small-Cap ETF	\$0.30B	\$1.56B	\$2.78B	\$6.67B	\$50.61B
IJR	iShares Core S&P Small Cap ETF	\$0.29B	\$2.62B	\$1.72B	\$4.76B	\$75.73B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
VUG	Vanguard Growth ETF	(\$1.01B)	(\$0.09B)	\$2.12B	\$3.39B	\$89.99B
IUSG	iShares Core S&P U.S. Growth ETF	(\$0.39B)	(\$0.30B)	(\$0.03B)	(\$0.11B)	\$13.27B
IWF	iShares Russell 1000 Growth ETF	(\$0.37B)	(\$1.41B)	(\$0.26B)	(\$2.92B)	\$78.09B
SCHA	Schwab U.S. Small-Cap ETF	(\$0.18B)	\$0.46B	\$0.95B	\$2.11B	\$17.39B
VBK	Vanguard Small-Cap Growth ETF	(\$0.09B)	\$0.34B	\$0.55B	\$1.24B	\$16.53B
QUAL	iShares MSCI USA Quality Factor ETF	(\$0.07B)	(\$1.03B)	\$1.70B	(\$2.09B)	\$24.82B
DGRW	WisdomTree US Quality Dividend Growth Fund	(\$0.06B)	\$0.19B	\$0.46B	\$0.75B	\$6.78B
SNPE	Xtrackers S&P 500 ESG ETF	(\$0.06B)	\$0.06B	\$0.14B	\$0.28B	\$0.82B
FPX	First Trust US Equity Opportunities ETF	(\$0.03B)	(\$0.09B)	(\$0.03B)	(\$0.05B)	\$1.99B
IJH	iShares Core S&P Mid-Cap ETF	(\$0.03B)	\$1.17B	\$0.41B	\$1.46B	\$68.37B

* 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)
XLP	Consumer Staples Select Sector SPDR Fund	-0.12%	15.48%	2.72%	4.38%	62.26
SPY	SPDR S&P 500 ETF Trust	-0.33%	28.39%	3.86%	9.41%	64.75
XLRE	Real Estate Select Sector SPDR Fund	-0.51%	38.28%	3.36%	9.77%	59.13
XLI	Industrial Select Sector SPDR Fund	-0.86%	25.28%	3.09%	4.52%	57.87
XLY	Consumer Discretionary Select Sector SPDR Fund	-0.97%	34.35%	8.14%	16.62%	66.25
XLF	Financial Select Sector SPDR Fund	-1.06%	42.87%	2.59%	8.69%	56.08
XLK	Technology Select Sector SPDR Fund	-1.34%	35.97%	6.33%	14.72%	64.69
XLB	Materials Select Sector SPDR Fund	-1.73%	26.49%	4.89%	6.72%	60.97
XLE	Energy Select Sector SPDR Fund	-3.03%	52.97%	3.31%	10.58%	52.49
XLV	Health Care Select Sector SPDR Fund	-3.17%	19.59%	1.24%	5.13%	50.14
XLU	Utilities Select Sector SPDR Fund	-3.27%	16.14%	2.50%	3.54%	58.60
XLC	Communication Services Select Sector SPDR Fund	-8.76%	20.64%	-2.90%	-1.02%	34.85

Sector & Industry 1 Day Performance Leaders

Ticker	Fund	1 Day Performance
FCG	First Trust Natural Gas ETF	4.44%
XOP	SPDR S&P Oil & Gas Exploration & Production ETF	4.03%
PXE	Invesco Dynamic Energy Exploration & Production ..	3.93%
PXI	Invesco DWA Energy Momentum ETF	3.87%
IEO	iShares U.S. Oil & Gas Exploration & Production ETF	3.72%
RYE	Invesco S&P 500 Equal Weight Energy ETF	3.72%
IEZ	iShares U.S. Oil Equipment & Services ETF	3.57%
XES	SPDR S&P Oil & Gas Equipment & Services ETF	3.57%
FTXN	First Trust Nasdaq Oil & Gas ETF	3.48%
PSCE	Invesco S&P SmallCap Energy ETF	3.23%

Sector & Industry Most Overbought

Ticker	Fund	Value
INDS	Pacer Benchmark Industrial Real Estate SCTR ETF	75.35
ITB	iShares U.S. Home Construction ETF	74.71
XHB	SPDR S&P Homebuilders ETF	74.65
PKB	Invesco Dynamic Building & Construction ETF	73.81
PRN	Invesco DWA Industrials Momentum ETF	71.54
HOMZ	Hoya Capital Housing ETF	68.80
PAVE	Global X U.S. Infrastructure Development ETF	68.28
AIRR	First Trust RBA American Industrial Renaissance ETF	68.27
PSCI	Invesco S&P SmallCap Industrials ETF	66.78
XLY	Consumer Discretionary Select Sector SPDR Fund	66.25

Sector & Industry 1 Day Performance Laggards

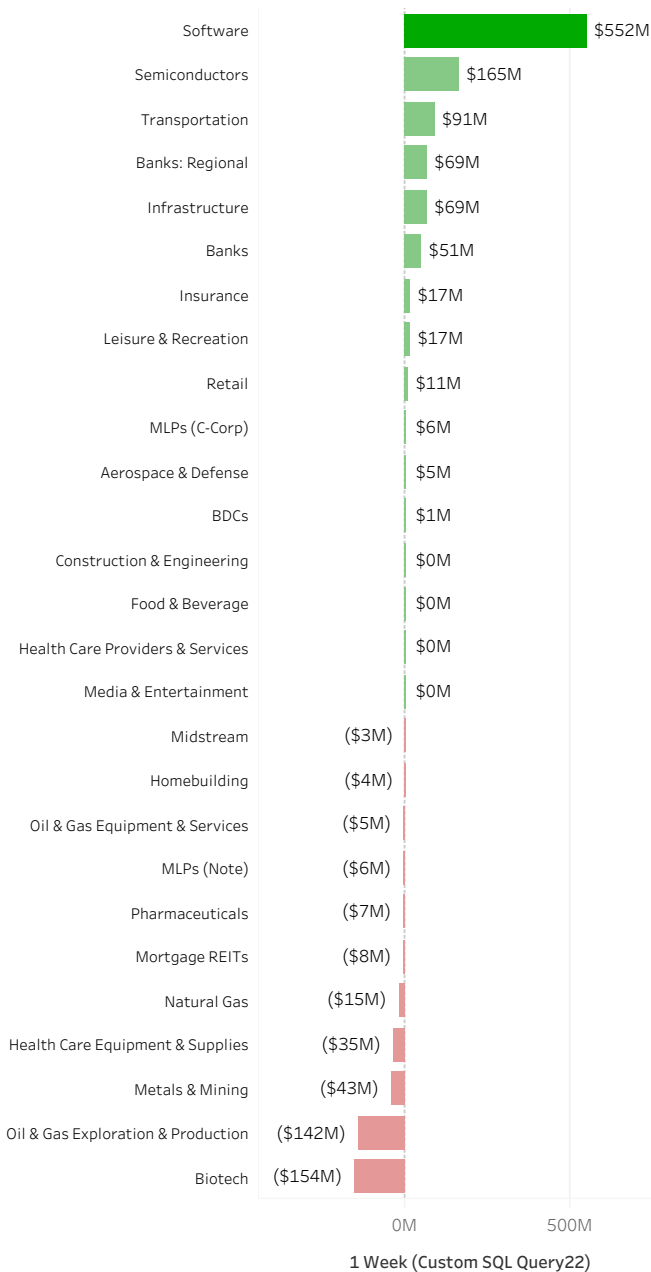
Ticker	Fund	1 Day Performance
PTH	Invesco DWA Healthcare Momentum ETF	-1.89%
PSJ	Invesco Dynamic Software ETF	-1.83%
IGV	iShares Expanded Tech-Software Sector ETF	-1.56%
XRT	SPDR S&P Retail ETF	-1.49%
PSCH	Invesco S&P SmallCap Health Care ETF	-1.33%
PBS	Invesco Dynamic Media ETF	-1.25%
FDN	First Trust Dow Jones Internet Index Fund	-1.18%
PTF	Invesco DWA Technology Momentum ETF	-1.15%
PEZ	Invesco DWA Consumer Cyclical Momentum ETF	-1.14%
PNQI	Invesco NASDAQ Internet ETF	-1.13%

Sector & Industry Most Oversold

Ticker	Fund	Value
XSW	SPDR S&P Software & Services ETF	29.91
XHE	SPDR S&P Health Care Equipment ETF	30.17
PTH	Invesco DWA Healthcare Momentum ETF	30.18
PSJ	Invesco Dynamic Software ETF	31.03
PBS	Invesco Dynamic Media ETF	31.11
PEJ	Invesco Dynamic Leisure & Entertainment ETF	31.71
PNQI	Invesco NASDAQ Internet ETF	31.85
VOX	Vanguard Communication Services ETF	33.68
FCOM	Fidelity MSCI Communication Services Index ETF	33.71
XBI	SPDR S&P BIOTECH ETF	33.75

* 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	\$20B	(\$530M)	(\$99M)	\$1,412M	\$1,582M
Consumer Discretionary	13	\$39B	(\$158M)	\$1,015M	\$248M	\$3,283M
Consumer Staples	12	\$21B	(\$88M)	(\$1,390M)	\$663M	(\$3,207M)
Energy	34	\$53B	(\$379M)	\$798M	(\$372M)	\$9,486M
Financials	28	\$84B	(\$654M)	\$2,139M	(\$1,013M)	\$21,670M
Health Care	26	\$89B	(\$183M)	\$344M	\$3,532M	\$4,036M
Industrial	14	\$36B	\$51M	(\$1,579M)	(\$4,049M)	\$981M
Materials	10	\$17B	(\$46M)	(\$603M)	(\$1,435M)	\$4,310M
Multi-Sector	17	\$27B	\$80M	\$1,126M	\$993M	\$3,955M
Real Estate	22	\$79B	\$573M	\$4,536M	\$8,408M	\$13,345M
Technology	24	\$157B	\$1,325M	\$4,461M	\$7,130M	\$5,266M
Utilities	10	\$20B	\$50M	(\$687M)	\$742M	\$59M

U.S. Sector & Industry Flow Leaders

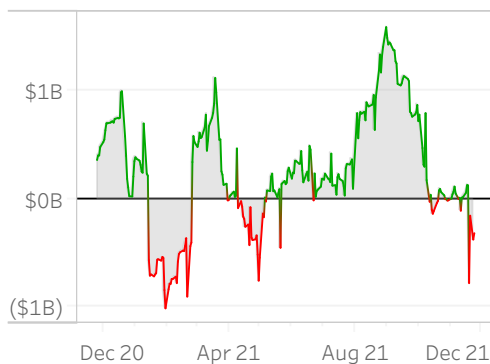
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IGV	iShares Expanded Tech-Software Sector ETF	\$554M	\$1,079M	\$777M	(\$357M)	\$6,636M
XLRE	Real Estate Select Sector SPDR Fund	\$438M	\$648M	\$1,657M	\$2,113M	\$5,142M
XLK	Technology Select Sector SPDR Fund	\$390M	\$89M	\$1,337M	(\$517M)	\$49,534M
SOXX	iShares Semiconductor ETF	\$136M	\$945M	\$1,103M	\$2,245M	\$9,215M
VDE	Vanguard Energy ETF	\$130M	\$335M	\$407M	\$973M	\$5,877M
VNQ	Vanguard Real Estate ETF	\$110M	\$1,336M	\$3,175M	\$6,752M	\$46,389M
VHT	Vanguard Health Care ETF	\$109M	\$362M	\$1,130M	\$2,010M	\$16,646M
VGT	Vanguard Information Technology ETF	\$95M	\$1,552M	\$2,221M	\$2,374M	\$55,274M
XTN	SPDR S&P Transportation ETF	\$91M	\$402M	\$230M	\$455M	\$987M
IYW	iShares U.S. Technology ETF	\$81M	\$411M	\$905M	\$610M	\$9,734M

U.S. Sector & Industry Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLF	Financial Select Sector SPDR Fund	(\$761M)	\$679M	(\$2,083M)	\$10,901M	\$44,187M
XLC	Communication Services Select Sector SPDR Fu..	(\$362M)	(\$61M)	\$779M	\$646M	\$14,464M
XLE	Energy Select Sector SPDR Fund	(\$336M)	\$504M	(\$79M)	\$6,272M	\$25,802M
VOX	Vanguard Communication Services ETF	(\$200M)	(\$84M)	\$457M	\$629M	\$4,351M
XLY	Consumer Discretionary Select Sector SPDR Fu..	(\$179M)	\$931M	(\$114M)	\$712M	\$23,951M
XOP	SPDR S&P Oil & Gas Exploration & Production E..	(\$125M)	(\$370M)	(\$872M)	(\$623M)	\$3,411M
XBI	SPDR S&P BIOTECH ETF	(\$109M)	(\$98M)	\$525M	\$842M	\$6,843M
XLP	Consumer Staples Select Sector SPDR Fund	(\$98M)	(\$1,571M)	\$473M	(\$2,866M)	\$11,908M
XLV	Health Care Select Sector SPDR Fund	(\$93M)	\$156M	\$3,015M	\$3,299M	\$32,682M
XLI	Industrial Select Sector SPDR Fund	(\$59M)	(\$1,353M)	(\$2,814M)	(\$1,218M)	\$18,026M

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

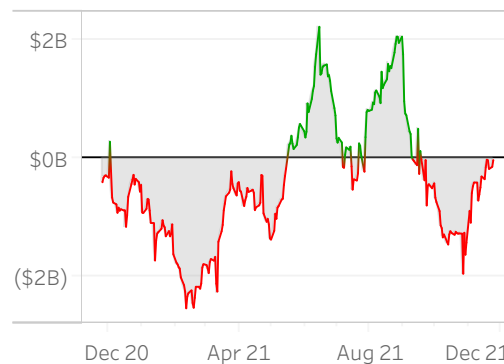
Communication Services



Consumer Discretionary



Consumer Staples



Energy



Financials



Industrial



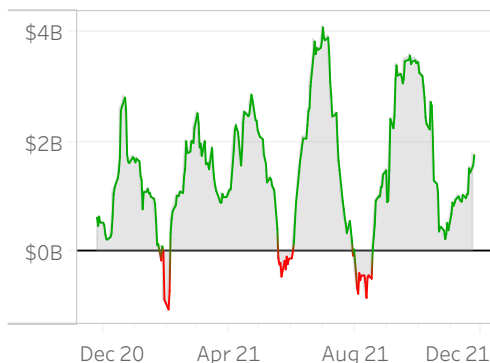
Health Care



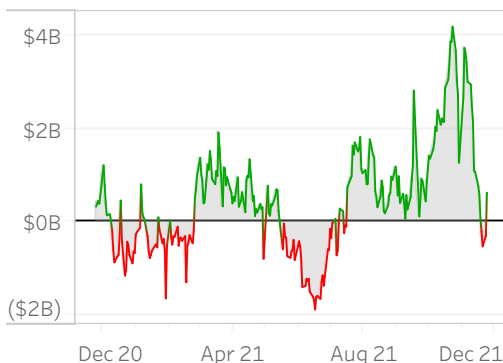
Materials



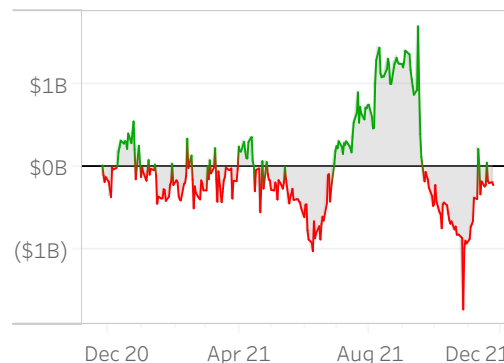
Real Estate



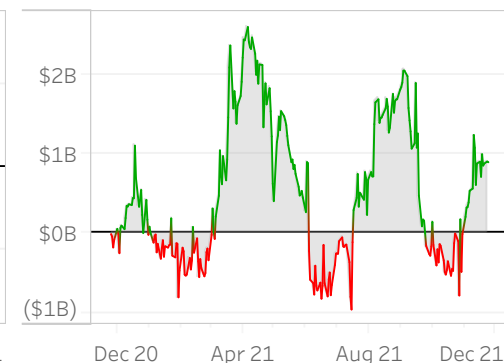
Technology



Utilities

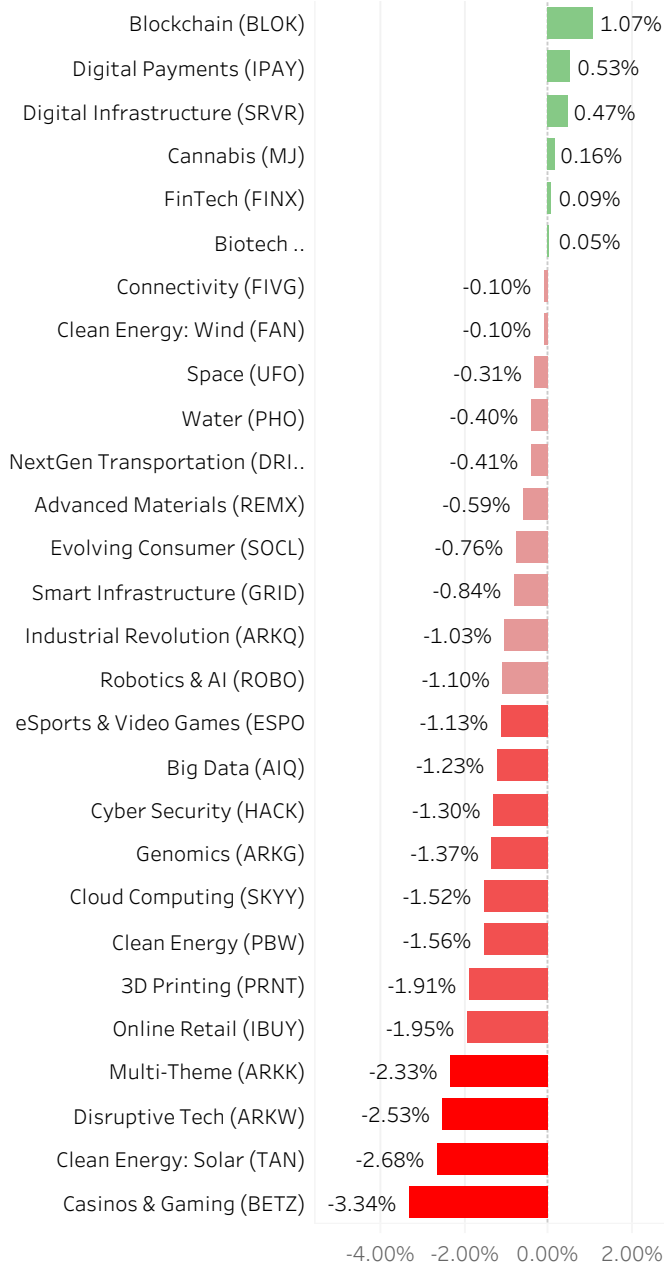


Multi-Sector

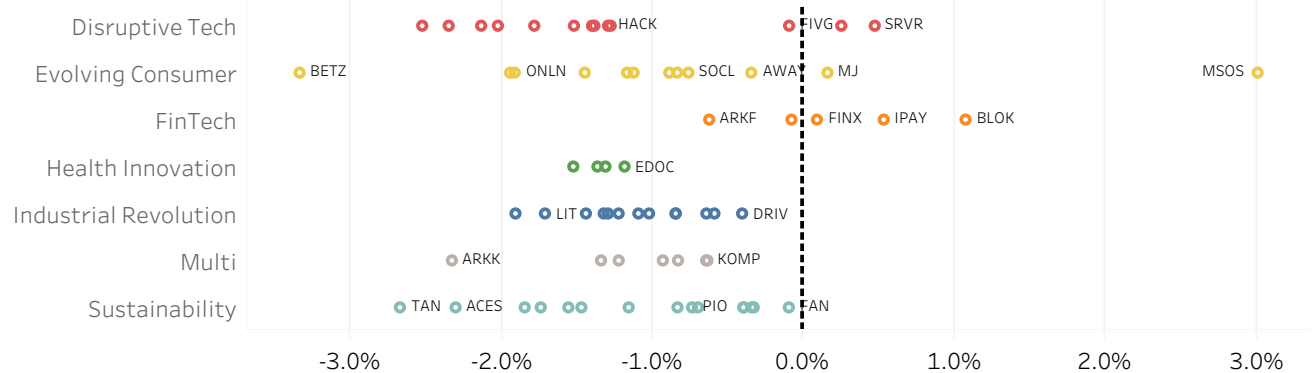


*ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day

Global Thematic Segment 1-Day Performance



Global Thematic 1-Day Performance Landscape



Global Thematic 1-Day Performance Leaders

Ticker	Fund	Performance
MSOS	AdvisorShares Pure US Cannabis ETF	3.01%
DAPP	VanEck Digital Transformation ETF	2.27%
BKCH	Global X Blockchain ETF	1.86%
BITQ	Bitwise Crypto Industry Innovators ETF	1.70%
CNBS	Amplify Seymour Cannabis ETF	1.41%
BLOK	Amplify Transformational Data Sharing ETF	1.07%
YOLO	AdvisorShares Pure Cannabis ETF	0.73%
IPAY	ETFMG Prime Mobile Payments ETF	0.53%
SRVR	Pacer Benchmark Data & Infrastructure Real Estate SCTR..	0.47%
LEGR	First Trust Indxx Innovative Transaction & Process ETF	0.39%

Thematic Most Overbought

Ticker	Fund	Price
KSTR	KraneShares SSE STAR Market 50 Index ETF	67.74
IDRV	iShares Self-driving EV & Tech ETF	67.60
FIW	First Trust Water ETF	66.04
EVX	VanEck Environmental Services ETF	65.10
PHO	Invesco Water Resources ETF	64.86
NXTG	First Trust Indxx NextG ETF	63.73
FIVG	Defiance Next Gen Connectivity ETF	63.01
DRIV	Global X Autonomous & Electric Vehicles ETF	62.69
GRID	First Trust Nasdaq Clean Edge Smart GRID Infrastructure ..	60.67
KARS	KraneShares Electric Vehicles & Future Mobility Index ETF	59.95

Global Thematic 1-Day Performance Laggards

Ticker	Fund	Performance
BETZ	Roundhill Sports Betting & iGaming ETF	-3.34%
CTEC	Global X CleanTech ETF	-2.70%
TAN	Invesco Solar ETF	-2.68%
GAMR	Wedbush ETFMG Video Game Tech ETF	-2.60%
ARKW	ARK Next Generation Internet ETF	-2.53%
WCLD	WisdomTree Cloud Computing Fund	-2.35%
ARKK	ARK Innovation ETF	-2.33%
ACES	ALPS Clean Energy ETF	-2.31%
BUG	Global X Cybersecurity ETF	-2.14%
GENY	Principal Millennials ETF	-2.03%

Thematic Most Oversold

Ticker	Fund	Price
BETZ	Roundhill Sports Betting & iGaming ETF	20.09
IPAY	ETFMG Prime Mobile Payments ETF	24.19
ARKG	ARK Genomic Revolution ETF	25.64
BTEC	Principal Healthcare Innovators ETF	25.84
EDOC	Global X Telemedicine & Digital Health ETF	25.96
UFO	Procure Space ETF	27.80
IBUY	Amplify Online Retail ETF	28.21
AGNG	Global X Aging Population ETF	28.33
BJK	VanEck Gaming ETF	28.33
CLOU	Global X Cloud Computing ETF	29.02

* 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	
META	Roundhill Ball Metaverse ETF	\$307M
LIT	Global X Lithium & Battery Tech ETF	\$121M
DRIV	Global X Autonomous & Electric Vehicles ETF	\$63M
CIBR	First Trust NASDAQ Cybersecurity ETF	\$58M
KWEB	KraneShares CSI China Internet ETF	\$55M
GRID	First Trust Nasdaq Clean Edge Smart GRID Infrastructure Index	\$26M
QCLN	First Trust Nasdaq Clean Edge Green Energy Index Fund	\$24M
FIW	First Trust Water ETF	\$24M
IDRV	iShares Self-driving EV & Tech ETF	\$23M
BLOK	Amplify Transformational Data Sharing ETF	\$18M

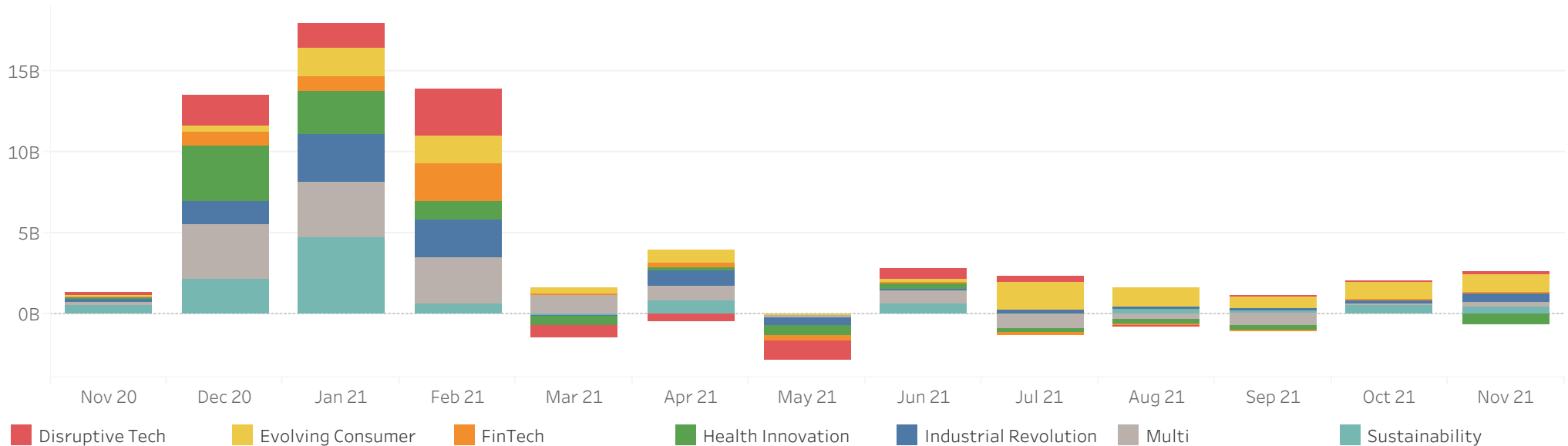
Thematic 1 Week Flow Laggards

Ticker	Fund	
ARKG	ARK Genomic Revolution ETF	(\$358M)
SRVR	Pacer Benchmark Data & Infrastructure Real Estate SCTR ETF	(\$84M)
TAN	Invesco Solar ETF	(\$78M)
ARKK	ARK Innovation ETF	(\$71M)
ONLN	ProShares Online Retail ETF	(\$57M)
ARKF	ARK Fintech Innovation ETF	(\$51M)
ARKQ	ARK Autonomous Technology & Robotics ETF	(\$38M)
SKYY	First Trust Cloud Computing ETF	(\$35M)
MSOS	AdvisorShares Pure US Cannabis ETF	(\$31M)
CLOU	Global X Cloud Computing ETF	(\$30M)

Thematic Landscape Assets & Flows

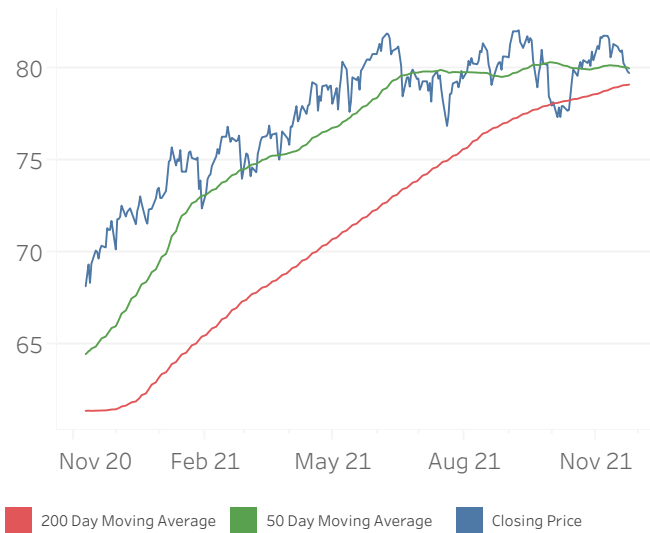
Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	36	\$30B	(\$93M)	\$384M	\$1,154M	\$5,399M
Evolving Consumer	43	\$18B	(\$133M)	\$3,433M	\$6,251M	\$10,971M
FinTech	16	\$8B	(\$17M)	\$124M	\$46M	\$4,371M
Health Innovation	16	\$8B	(\$303M)	(\$795M)	(\$1,030M)	\$5,347M
Industrial Revolution	24	\$19B	\$144M	\$880M	\$1,389M	\$8,428M
Multi	28	\$28B	\$107M	(\$117M)	(\$418M)	\$10,959M
Sustainability	36	\$26B	\$0M	\$1,336M	\$2,357M	\$11,268M
Grand Total	199	\$137B	(\$297M)	\$5,245M	\$9,749M	\$56,743M

Thematic Monthly Flows

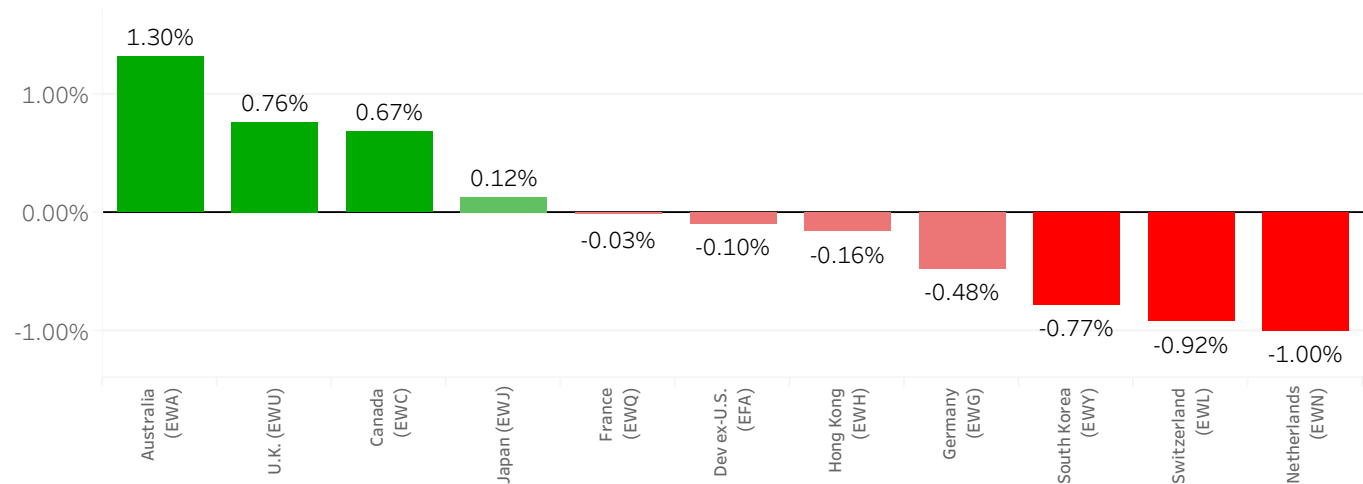


* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day

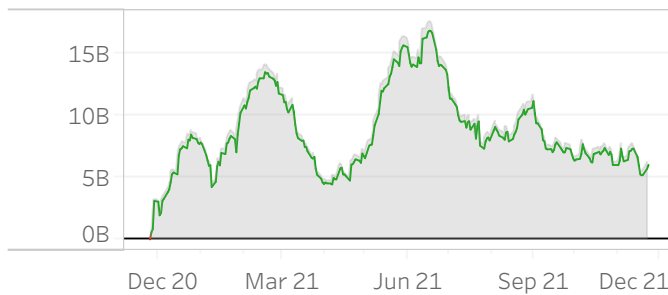
Developed ex-U.S. (EFA)



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



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



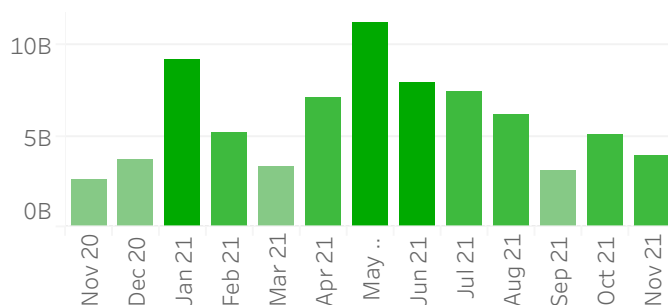
Developed ex-U.S. 1-Day Performance Leaders

Ticker	Fund	1-Day Performance
EWA	iShares MSCI Australia ETF	1.30%
IDV	iShares International Select Dividend ETF	0.98%
DOO	WisdomTree International Dividend ex-Financials Fund	0.91%
ENZL	iShares MSCI New Zealand ETF	0.86%
BBAX	JPMorgan BetaBuilders Developed Asia ex-Japan ETF	0.85%
DTH	WisdomTree International High Dividend Fund	0.83%
FLGB	Franklin FTSE United Kingdom ETF	0.76%
EWU	iShares MSCI United Kingdom ETF	0.76%
EPP	iShares MSCI Pacific ex-Japan ETF	0.70%
IVAL	Alpha Architect International Quantitative Value ETF	0.67%

Developed ex-U.S. Most Overbought

Ticker	Fund	Price
HEWJ	iShares Currency Hedged MSCI Japan ETF	59.00
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	58.85
HEDJ	WisdomTree Europe Hedged Equity Fund	57.35
LVHI	Legg Mason International Low Volatility High Dividend ETF	57.31
DBEF	Xtrackers MSCI EAFE Hedged Equity ETF	57.13
DXJ	WisdomTree Japan Hedged Equity Fund	56.73
HEFA	iShares Currency Hedged MSCI EAFE ETF	56.10
IHDG	WisdomTree International Hedged Quality Dividend Grow..	55.92
TOK	iShares MSCI Kokusai ETF	54.15
DBEU	Xtrackers MSCI Europe Hedged Equity ETF	53.33

Developed ex-U.S. Monthly Flows



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

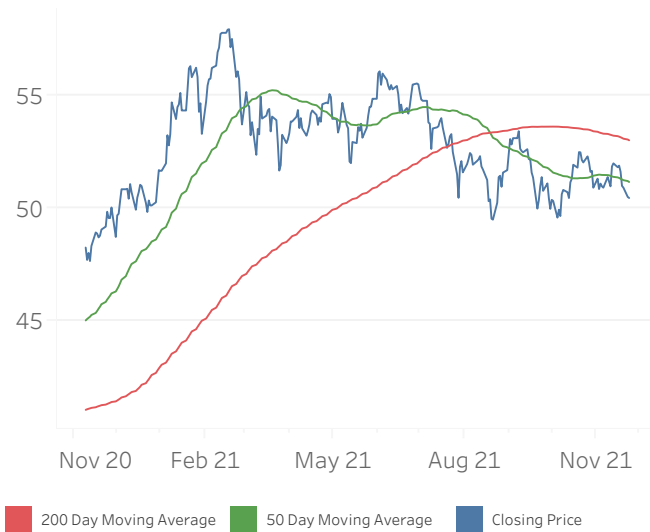
Ticker	Fund	1-Day Performance
FEUZ	First Trust Eurozone AlphaDEX ETF	-5.77%
EDEN	iShares MSCI Denmark ETF	-2.05%
PIZ	Invesco DWA Developed Markets Momentum ETF	-2.03%
ISRA	VanEck Israel ETF	-1.81%
EWD	iShares MSCI Sweden ETF	-1.67%
FSZ	First Trust Switzerland AlphaDEX Fund	-1.60%
EIS	iShares MSCI Israel ETF	-1.59%
IEUS	iShares MSCI Europe Small-Cap ETF	-1.50%
FGM	First Trust Germany AlphaDEX Fund	-1.31%
IMOM	Alpha Architect International Quantitative Momentum ETF	-1.30%

Developed ex-U.S. Most Oversold

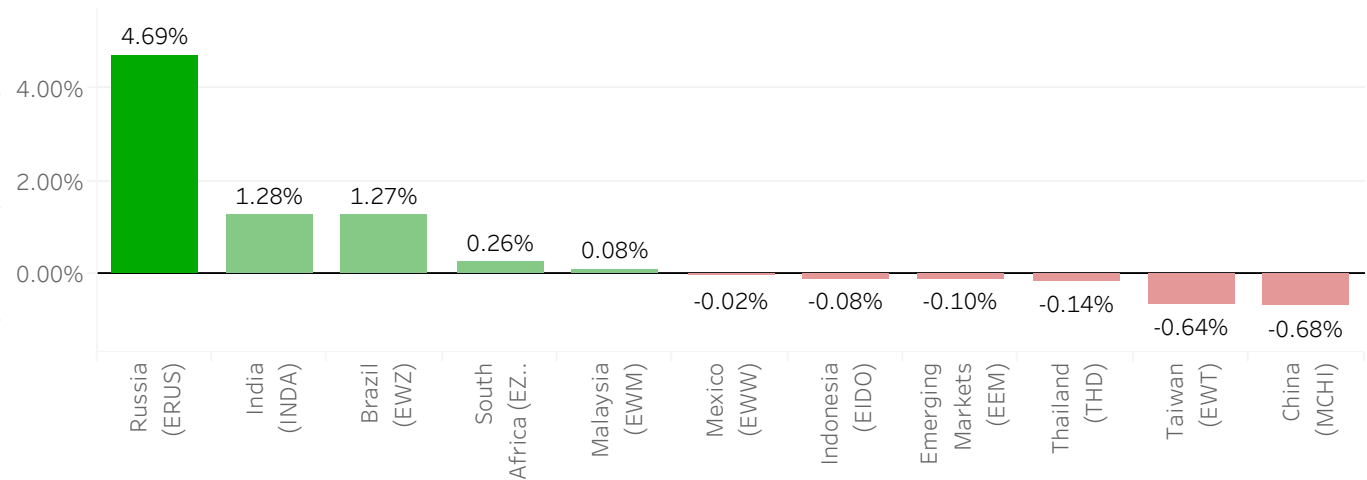
Ticker	Fund	Price
EIRL	iShares MSCI Ireland ETF	26.76
IEUS	iShares MSCI Europe Small-Cap ETF	31.85
DLS	WisdomTree International SmallCap Dividend Fund	32.03
EWP	iShares MSCI Spain ETF	32.30
EDEN	iShares MSCI Denmark ETF	33.22
ENZL	iShares MSCI New Zealand ETF	33.33
DFE	WisdomTree Europe SmallCap Dividend Fund	33.42
GREK	Global X MSCI Greece ETF	34.04
PDN	Invesco FTSE RAFI Developed Markets ex-US Small..	34.28
SCZ	iShares MSCI EAFE Small-Cap ETF	34.53

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

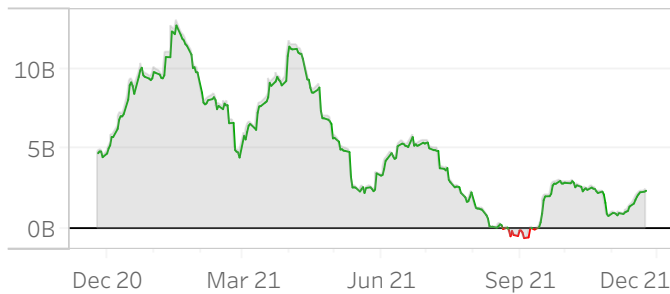
Emerging (EEM)



Emerging 1-Day Performance Top 10 Countries



Emerging 30-Day Rolling Flows



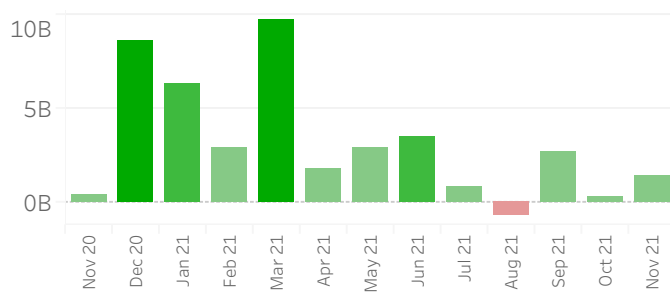
Emerging 1-Day Performance Leaders

Ticker	Fund	Performance
ERUS	iShares MSCI Russia ETF	4.69%
RSX	VanEck Russia ETF	3.98%
SMIN	iShares MSCI India Small Cap ETF	2.27%
EPHE	iShares MSCI Philippines ETF	2.07%
EPI	WisdomTree India Earnings Fund	1.69%
FLBR	Franklin FTSE Brazil ETF	1.39%
PIN	Invesco India ETF	1.33%
EPOL	iShares MSCI Poland ETF	1.31%
INDA	iShares MSCI India ETF	1.28%
EWZ	iShares MSCI Brazil ETF	1.27%

Emerging Most Overbought

Ticker	Fund	Value
ECH	iShares MSCI Chile ETF	60.75
EWT	iShares MSCI Taiwan ETF	60.28
VNM	VanEck Vietnam ETF	56.89
CNYA	iShares MSCI China A ETF	56.04
KBA	KraneShares Bosera MSCI China A Share ETF	54.57
EPHE	iShares MSCI Philippines ETF	53.96
EIDO	iShares MSCI Indonesia ETF	53.48
FRDM	Freedom 100 Emerging Markets ETF	52.08
ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	52.02
IDX	VanEck Indonesia Index ETF	51.89

Emerging Monthly Flows



Emerging 1-Day Performance Laggards

Ticker	Fund	Performance
TUR	iShares MSCI Turkey ETF	-7.71%
ECH	iShares MSCI Chile ETF	-2.18%
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	-1.12%
ADRE	Invesco BLDERS Emerging Markets 50 ADR Index Fund	-0.84%
MCHI	iShares MSCI China ETF	-0.68%
GXC	SPDR S&P China ETF	-0.67%
EWT	iShares MSCI Taiwan ETF	-0.64%
FLCH	Franklin FTSE China ETF	-0.63%
FXI	iShares China Large-Cap ETF	-0.53%
ECNS	iShares MSCI China Small-Cap ETF	-0.50%

Emerging Most Oversold

Ticker	Fund	Value
EPOL	iShares MSCI Poland ETF	24.53
TUR	iShares MSCI Turkey ETF	27.96
EWW	iShares MSCI Mexico ETF	29.54
EWM	iShares MSCI Malaysia ETF	31.08
FM	iShares MSCI Frontier and Select EM ETF	32.38
FEMS	First Trust Emerging Markets Small Cap AlphaDEX F..	33.02
AFK	VanEck Africa Index ETF	33.23
KSA	iShares MSCI Saudi Arabia ETF	34.13
LDEM	iShares ESG MSCI EM Leaders ETF	35.51
SDEM	Global X MSCI SuperDividend Emerging Markets ETF	36.02

*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	-0.40%	-0.38%	-2.55%
SHY	1-3 Year Treasury Bonds	0.00%	-0.17%	-0.64%
IEF	7-10 Year Treasury Bonds	-0.41%	-0.29%	-4.71%
TLT	20+ Year Treasury Bonds	-1.45%	0.39%	-7.19%
TIP	TIPS Bonds	-0.39%	0.13%	4.55%
FLOT	Floating Rate Bonds	0.00%	-0.05%	0.42%
LQD	Investment Grade Corporate	-0.71%	-0.81%	-3.35%
HYG	High Yield Corporate	-0.14%	-0.52%	1.99%
BKLN	Senior Loan	0.00%	-0.38%	1.55%
PFF	Preferred & Income Securities	-0.13%	-0.99%	4.04%
MUB	Municipal Bonds	-0.04%	0.63%	0.57%
MBB	MBS	-0.23%	-0.56%	-1.78%
EMB	Dollar Denominated EM Bonds	-0.63%	-1.42%	-4.19%
LEMB	Local Currency EM Bond	-0.69%	-3.64%	-10.45%

Commodities Performance

Ticker	Name	1 Day	1 Month	YTD
DJP	Broad Commodities	1.69%	-0.56%	37.63%
DBE	Energy	3.51%	-3.18%	65.96%
USO	WTI Crude Oil	3.21%	-3.15%	70.25%
BNO	Brent Crude Oil	3.70%	-3.06%	69.88%
UNG	Natural Gas	4.96%	-8.98%	81.85%
UGA	Gasoline	4.05%	-3.81%	72.32%
DBP	Precious Metals	-1.06%	-0.81%	-8.23%
GLD	Gold	-0.87%	-0.29%	-6.21%
SLV	Silver	-1.88%	-2.75%	-10.79%
PPLT	Platinum	-4.36%	-6.71%	-10.08%
PALL	Palladium	-4.42%	-7.93%	-24.31%
DBB	Base Metals	-0.65%	-2.78%	23.75%
CPER	Copper	0.97%	-1.96%	24.19%
LD	Lead	-0.02%	-8.08%	14.46%
JJN	Nickel	0.68%	4.36%	22.38%
JJU	Aluminum	-0.25%	-6.82%	33.24%
JJT	Tin	0.49%	6.79%	121.88%
DBA	Agriculture	0.74%	7.01%	25.84%
CORN	Corn	0.83%	6.82%	39.73%
SOYB	Soybeans	-0.09%	3.22%	13.66%
WEAT	Wheat	1.09%	12.45%	34.25%
CANE	Sugar	1.14%	4.09%	42.95%
BAL	Cotton	0.33%	10.15%	45.98%
NIB	Cocoa	-0.94%	-3.00%	-5.55%
JO	Coffee	2.59%	18.28%	74.71%

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD
UUP	Long Dollar	-0.04%	2.99%	6.72%
UDN	Short Dollar	0.09%	-3.09%	-7.68%
FXE	Euro	0.12%	-3.48%	-8.75%
FXB	British Pound Sterling	-0.09%	-2.77%	-2.50%
FXF	Swiss Franc	-0.02%	-1.97%	-6.17%
FXJ	Japanese Yen	-0.27%	-1.52%	-10.80%
FXC	Canadian Dollar	0.23%	-2.45%	0.01%
FXA	Australian Dollar	0.13%	-3.13%	-6.55%

*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

www.etfaction.com