

Mid Cap Blend (S&P 400) IJH

280
260
240
220
Sep 21 Dec 21 Mar 22 Jun 22 Sep 22

Ticker	Fund	
QMOM	Alpha Architect U.S. Quantitative Momentum ETF	1.44%
FFTY	Innovator IBD 50 ETF	1.02%
DWAS	Invesco DWA SmallCap Momentum ETF	0.16%
WBIY	WBI Power Factor High Dividend ETF	0.15%
RPHS	Regents Park Hedged Market Strategy ETF	0.11%
LSAT	Leadershares Alphafactor Tactical Focused ETF	0.11%
SYLD	Cambria Shareholder Yield ETF	0.10%
VFMO	Vanguard U.S. Momentum Factor ETF	0.06%
SPC	CrossingBridge Pre-Merger SPAC ETF	0.05%

Pacer Trendpilot US Large Cap ETF

0.03%

Size & Style 1-Day Performance Leaders

Ticker Fund 61.02 **PTLC** Pacer Trendpilot US Large Cap ETF 60.70 SPC CrossingBridge Pre-Merger SPAC ETF ONOF Global X Adaptive U.S. Risk Management ETF 55.43 Leadershares Alphafactor Tactical Focused ETF 51.85 LSAT MOMO Alpha Architect U.S. Quantitative Momentum ETF 51.23 44.11 **EORR** ProShares Equities for Rising Rates ETF VFMO Vanguard U.S. Momentum Factor ETF 42.39 41.69 **DWAS** Invesco DWA SmallCap Momentum ETF 41.40 AVLV Avantis U.S. Large Cap Value ETF PWV 41.27 Invesco Dynamic Large Cap Value ETF

Size & Style Most Overbought

		Small Cap B	Blend (S&P 600)	IJR	
120		M			
110	Mary		MMMM		A
100			•	My Co	July 1
90-				ν.	1
	Sep 21	Dec 21	Mar 22	Jun 22	Sep 22
Cl	osina Price		50 Day Moving Av	verage	200 Day Movii

Ticker	Fund	
QVMS	Invesco S&P SmallCap 600 QVM Multi-factor ETF	-8.06%
EQRR	ProShares Equities for Rising Rates ETF	-1.82%
NZUS	SPDR MSCI USA Climate Paris Aligned ETF	-1.62%
KRMA	Global X Conscious Companies ETF	-1.42%
QQQ	Invesco QQQ Trust	-1.41%
OUSA	ALPS O'Shares U.S. Quality Dividend ETF	-1.39%
UTRN	Vesper U.S. Large Cap Short-Term Reversal Strategy ETF	-1.39%
EQWL	Invesco S&P 100 Equal Weight ETF	-1.39%
USMC	Principal U.S. Mega-Cap ETF	-1.39%
IUSG	iShares Core S&P U.S. Growth ETF	-1.37%

Size & Style 1-Day Performance Laggards

Ticker	Fund	
PTMC	Pacer Trendpilot US Mid Cap ETF	17.65
JEPQ	J.P. Morgan Nasdaq Equity Premium Income ETF	27.27
QVML	Invesco S&P 500 QVM Multi-factor ETF	28.17
USNZ	Xtrackers Net Zero Pathway Paris Aligned US Equity	28.27
LGH	HCM Defender 500 Index ETF	28.93
QQH	HCM Defender 100 Index ETF	29.31
QVMS	Invesco S&P SmallCap 600 QVM Multi-factor ETF	30.09
DEIF	Sterling Capital Diverse Multi-Manager Active ETF	31.00
SIXS	ETC 6 Meridian Small Cap Equity ETF	31.01
DJD	Invesco Dow Jones Industrial Average Dividend ETF	31.25

Size & Style Most Oversold

PTLC

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



Large-Cap 30-Day Rolling Flows



U.S. Size & Style Landscape Flows

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Large Cap, Beta Growth, Beta	25	\$1,210B	(\$2.13B)	\$27.77B	\$33.00B	\$107.80B
Large Cap, Beta Growth, Beta: Growth	10	\$226B	(\$1.17B)	\$6.86B	\$14.25B	\$16.96B
Large Cap, Beta Growth, Beta: Value	11	\$213B	\$0.28B	\$1.27B	\$5.92B	\$25.20B
Mid Cap, Beta, Beta	10	\$173B	(\$0.13B)	\$1.55B	\$5.14B	\$13.40B
Mid Cap, Beta, Beta: Growth	6	\$32B	(\$0.02B)	\$0.75B	\$1.08B	\$1.28B
Mid Cap, Beta, Beta: Value	6	\$39B	\$0.01B	\$0.64B	\$0.17B	\$1.66B
Small Cap, Beta, Beta	13	\$186B	(\$0.53B)	\$0.85B	(\$2.18B)	\$6.88B
Small Cap, Beta, Beta: Growth	7	\$31B	(\$0.06B)	\$0.31B	\$0.92B	\$1.82B
Small Cap, Beta, Beta: Value	7	\$49B	(\$0.02B)	(\$0.84B)	(\$3.57B)	(\$1.90B)

Mid-Cap 30-Day Rolling Flows



U.S. Size & Style Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
QQQ	Invesco QQQ Trust	\$0.60B	\$4.00B	\$7.32B	\$12.22B	\$164.66B
IVV	iShares Core S&P 500 ETF	\$0.50B	\$6.31B	\$8.36B	\$30.66B	\$296.81B
voo	Vanguard S&P 500 ETF	\$0.45B	\$14.02B	\$12.82B	\$43.33B	\$265.01B
VTV	Vanguard Value ETF	\$0.28B	\$1.99B	\$5.35B	\$17.68B	\$98.33B
SCHD	Schwab US Dividend Equity ETF	\$0.22B	\$3.20B	\$5.15B	\$11.73B	\$37.30B
VYM	Vanguard High Dividend Yield Index ETF	\$0.11B	\$2.76B	\$5.45B	\$8.82B	\$46.32B
VTI	Vanguard Total Stock Market ETF	\$0.11B	\$5.64B	\$10.82B	\$32.85B	\$261.77B
VIG	Vanguard Dividend Appreciation ETF	\$0.10B	\$0.27B	\$1.94B	\$4.05B	\$62.22B
COWZ	Pacer US Cash Cows 100 ETF	\$0.10B	\$1.61B	\$5.12B	\$6.95B	\$7.28B
SCHX	Schwab U.S. Large-Cap ETF	\$0.09B	\$0.74B	(\$0.58B)	\$0.77B	\$29.00B

Small-Cap 30-Day Rolling Flows



U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
SPY	SPDR S&P 500 ETF Trust	(\$3.64B)	(\$0.21B)	(\$1.56B)	\$7.52B	\$359.40B
QUAL	iShares MSCI USA Quality Factor ETF	(\$0.68B)	(\$1.25B)	(\$0.81B)	(\$2.46B)	\$18.75B
SPYG	SPDR Portfolio S&P 500 Growth ETF	(\$0.61B)	\$2.18B	\$2.94B	\$3.06B	\$14.50B
IWM	iShares Russell 2000 ETF	(\$0.40B)	(\$1.35B)	(\$1.74B)	(\$3.00B)	\$52.11B
IWF	iShares Russell 1000 Growth ETF	(\$0.28B)	\$0.07B	\$1.32B	(\$0.10B)	\$61.16B
SPLV	Invesco S&P 500 Low Volatility ETF	(\$0.25B)	\$0.87B	\$2.49B	\$2.97B	\$11.05B
SPLG	SPDR Portfolio S&P 500 ETF	(\$0.18B)	\$0.83B	\$1.78B	\$3.55B	\$14.21B
VUG	Vanguard Growth ETF	(\$0.17B)	\$2.65B	\$6.04B	\$7.18B	\$74.10B
IJR	iShares Core S&P Small Cap ETF	(\$0.16B)	\$2.87B	\$1.51B	\$5.97B	\$64.93B
VLUE	iShares MSCI USA Value Factor ETF	(\$0.14B)	(\$0.87B)	(\$2.83B)	(\$6.50B)	\$8.49B

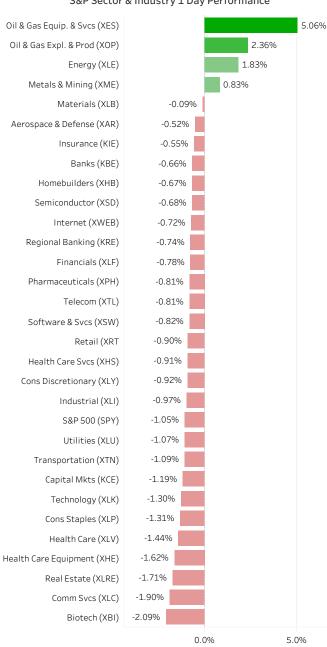
^{*}ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day





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)
XLU	Utilities Select Sector SPDR Fund	-4.04%	17.37%	2.28%	4.78%	47.87
XLP	Consumer Staples Select Sector SPDR Fund	-9.94%	5.47%	-2.05%	-3.08%	35.48
XLV	Health Care Select Sector SPDR Fund	-12.49%	4.25%	-3.92%	-5.24%	36.13
XLE	Energy Select Sector SPDR Fund	-13.35%	69.26%	6.47%	10.36%	53.68
XLI	Industrial Select Sector SPDR Fund	-13.97%	7.79%	-0.64%	-5.50%	37.66
SPY	SPDR S&P 500 ETF Trust	-17.89%	7.21%	-2.16%	-8.02%	35.61
XLB	Materials Select Sector SPDR Fund	-17.95%	4.82%	-2.39%	-10.43%	36.54
XLRE	Real Estate Select Sector SPDR Fund	-20.32%	6.25%	-3.40%	-9.36%	34.09
XLF	Financial Select Sector SPDR Fund	-20.59%	6.99%	-0.84%	-9.26%	39.75
XLK	Technology Select Sector SPDR Fund	-24.79%	7.58%	-4.23%	-10.84%	32.67
XLY	Consumer Discretionary Select Sector SPDR Fund	-26.45%	15.49%	-0.02%	-9.17%	41.10
XLC	Communication Services Select Sector SPDR Fund	-35.96%	1.43%	-4.42%	-16.81%	37.26

Sector & Industry 1 Day Performance Leaders

Sector & Industry Most Overbought

Ticker	Fund		Ticker	Fund	
XES	SPDR S&P Oil & Gas Equipment & Services ETF	5.06%	IEO	iShares U.S. Oil & Gas Exploration & Production ETF	57.30
IEZ	iShares U.S. Oil Equipment & Services ETF	4.29%	FCG	First Trust Natural Gas ETF	55.37
PSCE	Invesco S&P SmallCap Energy ETF	3.80%	FXN	First Trust Energy AlphaDEX Fund	55.24
PXI	Invesco DWA Energy Momentum ETF	2.81%	MLPA	Global X MLP ETF	55.08
PXE	Invesco Dynamic Energy Exploration & Production	2.61%	PXE	Invesco Dynamic Energy Exploration & Production ETF	54.92
IEO	iShares U.S. Oil & Gas Exploration & Production ETF	2.39%	IYE	iShares U.S. Energy ETF	54.72
XOP	SPDR S&P Oil & Gas Exploration & Production ETF	2.36%	FENY	Fidelity MSCI Energy Index ETF	54.48
FTXN	First Trust Nasdaq Oil & Gas ETF	2.33%	VDE	Vanguard Energy ETF	54.46
FCG	First Trust Natural Gas ETF	2.18%	PXI	Invesco DWA Energy Momentum ETF	54.26
RYE	Invesco S&P 500 Equal Weight Energy ETF	2.10%	RYE	Invesco S&P 500 Equal Weight Energy ETF	54.14

Sector & Industry 1 Day Performance Laggards

Sector & Industry Most Oversold

Ticker	Fund		Ticker	Fund	
PBE	Invesco Dynamic Biotechnology & Genome ETF	-2.24%	NETL	NETLease Corporate Real Estate ETF	27.75
XBI	SPDR S&P BIOTECH ETF	-2.09%	KBWY	Invesco KBW Premium Yield Equity REIT ETF	28.38
IYZ	iShares U.S. Telecommunications ETF	-1.94%	IYZ	iShares U.S. Telecommunications ETF	30.46
XLC	Communication Services Select Sector SPDR Fund	-1.90%	PPTY	US Diversified Real Estate ETF	30.52
PJP	Invesco Dynamic Pharmaceuticals ETF	-1.79%	IHE	iShares U.S. Pharmaceuticals ETF	31.97
FCOM	Fidelity MSCI Communication Services Index ETF	-1.75%	SZNE	Pacer CFRA-Stovall Equal Weight Seasonal Rotation ETF	32.26
VOX	Vanguard Communication Services ETF	-1.72%	QTEC	First Trust NASDAQ-100 Technology Sector Index Fund	32.30
XLRE	Real Estate Select Sector SPDR Fund	-1.71%	FRI	First Trust S&P REIT Index Fund	32.38
PTH	Invesco DWA Healthcare Momentum ETF	-1.66%	PSR	Invesco Active U.S. Real Estate Fund	32.39
IBB	iShares Biotechnology ETF	-1.65%	RWR	SPDR Dow Jones REIT ETF	32.64

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U.S. Sector & Industry 1-Week Flows



U.S. Sector Landscape

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services		\$13B	(\$2M)	\$138M	(\$75M)	(\$1,282M)
Consumer Discretionary	13	\$23B	(\$252M)	(\$1,075M)	(\$3,463M)	(\$4,769M)
Consumer Staples	11	\$28B	(\$238M)	\$968M	\$2,966M	\$6,172M
Energy	34	\$75B	\$156M	(\$3,824M)	(\$4,857M)	\$2,889M
Financials	27	\$61B	(\$246M)	\$108M	(\$12,687M)	(\$7,315M)
Health Care	24	\$90B	(\$447M)	\$1,549M	\$7,384M	\$10,852M
Industrial	14	\$28B	\$135M	(\$980M)	(\$2,691M)	(\$4,435M)
Materials	10	\$13B	(\$116M)	(\$2,664M)	(\$1,021M)	(\$1,519M)
Multi-Sector	19	\$14B	(\$101M)	(\$1,764M)	(\$3,885M)	(\$4,559M)
Real Estate	25	\$66B	\$149M	(\$2,318M)	(\$3,854M)	\$305M
Technology	24	\$111B	(\$32M)	(\$115M)	\$1,381M	\$1,660M
Utilities	10	\$28B	\$103M	\$1,634M	\$4,940M	\$4,931M

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLE	Energy Select Sector SPDR Fund	\$376M	(\$1,664M)	(\$3,032M)	\$259M	\$36,857M
XLRE	Real Estate Select Sector SPDR Fund	\$101M	(\$19M)	\$368M	\$1,478M	\$5,230M
KRE	SPDR S&P Regional Banking ETF	\$94M	(\$233M)	(\$1,322M)	(\$737M)	\$3,375M
XRT	SPDR S&P Retail ETF	\$92M	(\$109M)	(\$62M)	(\$631M)	\$320M
XLI	Industrial Select Sector SPDR Fund	\$87M	(\$491M)	(\$2,261M)	(\$3,965M)	\$13,079M
IGV	iShares Expanded Tech-Software Sector ETF	\$86M	(\$501M)	(\$189M)	\$561M	\$3,952M
IHF	iShares U.S. Healthcare Providers ETF	\$67M	\$2M	\$353M	\$395M	\$1,577M
XLU	Utilities Select Sector SPDR Fund	\$60M	\$1,147M	\$3,435M	\$2,825M	\$17,897M
KBWP	Invesco KBW Property & Casualty Insurance ETF	\$48M	\$131M	\$187M	\$180M	\$256M
IYT	iShares US Transportation ETF	\$46M	(\$273M)	(\$631M)	(\$689M)	\$827M

U.S. Sector & Industry Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLF	Financial Select Sector SPDR Fund	(\$328M)	\$1,167M	(\$6,443M)	(\$3,746M)	\$33,104M
XLY	Consumer Discretionary Select Sector SPDR Fu	(\$325M)	(\$796M)	(\$1,478M)	(\$1,129M)	\$15,462M
XLP	Consumer Staples Select Sector SPDR Fund	(\$273M)	\$296M	\$435M	\$2,585M	\$15,776M
IBB	iShares Biotechnology ETF	(\$189M)	\$19M	(\$90M)	(\$191M)	\$7,837M
XOP	SPDR S&P Oil & Gas Exploration & Production E	(\$153M)	(\$328M)	(\$1,069M)	(\$566M)	\$4,575M
XLK	Technology Select Sector SPDR Fund	(\$106M)	\$399M	\$777M	\$1,558M	\$40,541M
XME	SPDR S&P Metals & Mining ETF	(\$95M)	(\$751M)	(\$783M)	(\$31M)	\$1,808M
IYH	iShares U.S. Healthcare ETF	(\$78M)	\$294M	\$336M	\$279M	\$3,048M
XLV	Health Care Select Sector SPDR Fund	(\$71M)	\$331M	\$5,687M	\$7,306M	\$38,309M
PBE	Invesco Dynamic Biotechnology & Genome ETF	(\$63M)	\$3M	\$0M	(\$3M)	\$237M

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U.S. Sector Rolling 30-Day Flows





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Global Thematic Performance



Global Thematic Segment 1-Day Performance Global Thematic 1-Day Performance Landscape 3D Printing (PRNT) 0.79% SRVR O ARKW OO O SNSR CORSKYYO WCLD O BUG Disruptive Tech Advanced Materials (REMX) 0.13% **Evolving Consumer** KWEB O EMQQ O ONLN o MJ MSOS 0 Cannabis (MJ) -0.35% O IPAY ARKE FinTech -0.57% Cloud Computing (SKYY) ARKG Health Innovation -0.59% Big Data (AIQ) REMX Industrial Revolution O ARKO O KARS O OO OLIT Cyber Security (HACK) -0.65% ARKK Multi O O O TECB OO XT -0.74% Casinos & Gaming (BETZ) O TAN **MACES** OO COCGW O PIO Sustainability Ò Smart Infrastructure (GRID) -0.88% -3.0% -2.5% 1.0% -2.0% -1.5% -1.0% -0.5% 0.0% 0.5% 1.5% Water (PHO) -0.94% -1.05% Connectivity (FIVG) Robotics & AI (ROBO) -1.06% Global Thematic 1-Day Performance Leaders Thematic Most Overbought NextGen Transportation (DRI.. -1.09% Fund Ticker Ticker Fund MSOS AdvisorShares Pure US Cannabis ETF 1.57% MSOS AdvisorShares Pure US Cannabis ETF 57.00 Digital Payments (IPAY) -1.16% PRNT 0.79% MJUS ETFMG U.S. Alternative Harvest ETF 49 34 3D Printing ETF -1.23% Biotech .. 48.10 REMX VanEck Rare Earth/Strategic Metals ETF 0.13% ACES ALPS Clean Energy ETF Clean Energy: Wind (FAN) -1.30% MJUS ETFMG U.S. Alternative Harvest ETF 0.08% **KWEB** KraneShares CSI China Internet ETF 47.86 Global X Cybersecurity ETF SBIO 47.67 BUG 0.08% ALPS Medical Breakthroughs ETF Evolving Consumer (SOCL) -1.34% YOLO 0.00% **CNRG** SPDR S&P Kensho Clean Power ETF 46.91 AdvisorShares Pure Cannabis ETF eSports & Video Games (ESPO -1.36% **EVX** VanEck Environmental Services ETF -0.25% **EMOO** EMQQ The Emerging Markets Internet & Ecommerce ETF 45.69 -1.38% FinTech (FINX) KraneShares SSE STAR Market 50 Index ETF -0.28% CTEC Global X CleanTech ETF 45.30 **KSTR** WCLD WisdomTree Cloud Computing Fund -0.32% OCLN First Trust Nasdaq Clean Edge Green Energy Index Fund 44.75 Blockchain (BLOK) -1.41% ETFMG Alternative Harvest ETF -0.35% TAN 43.90 MJ Invesco Solar ETF Online Retail (IBUY) -1.46% Global Thematic 1-Day Performance Laggards Thematic Most Oversold -1.50% Space (UFO) Disruptive Tech (ARKW) -1.60% Ticker Fund Ticker Fund **HDRO** Defiance Next Gen H2 ETF -3.34% **KGRN** KraneShares MSCI China Clean Technology Index ETF 19.54 Clean Energy (PBW) -1.80% **ARKG** -2.94% PAW7 ProShares Pet Care ETF 25.56 ARK Genomic Revolution ETF -1.86% Industrial Revolution (ARKQ) **KGRN** KraneShares MSCI China Clean Technology Index ETF -2.77% NXTG First Trust Indxx NextG ETF 28.78 -2.71% Digital Infrastructure (SRVR) -2.32% **GNOM** Global X Genomics & Biotechnology ETF GAMR Wedbush ETFMG Video Game Tech ETF 29.07 ARKK ARK Innovation ETF -2.71% **SRVR** 29.46 Pacer Benchmark Data & Infrastructure Real Estate SCTR. -2.36% Clean Energy: Solar (TAN) iShares Genomics Immunology and Healthcare ETF Ge.. -2.56% 29.70 IDNA KLDW Knowledge Leaders Developed World ETF Multi-Theme (ARKK) -2.71% Invesco Solar ETF -2.36% **EBLU** Ecofin Global Water ESG Fund 29.71 TAN SRVR Pacer Benchmark Data & Infrastructure Real Estate S -2.32% **BOTZ** 30.21 Genomics (ARKG) -2.94% Global X Robotics & Artificial Intelligence ETF

KWFB

GAMR

2.00%

-4 00%

0.00%

-2.00%

-2.08%

-1.99%

KARS

KSTR

KraneShares Electric Vehicles & Future Mobility Index ETF

KraneShares SSE STAR Market 50 Index ETF

30.25

30.60

KraneShares CSI China Internet ETF

Wedbush ETFMG Video Game Tech ETF

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Global Thematic Flows



Invesco Solar ETF

TAN

Thematic 1 Week Flow Leaders

Ticker	Fund	
ICLN	iShares Global Clean Energy ETF	\$36M
TARK	AXS 2X Innovation ETF	\$19M
HERO	Global X Video Games & Esports ETF	\$17M
MJUS	ETFMG U.S. Alternative Harvest ETF	\$15M
BKCH	Global X Blockchain ETF	\$12M
KOMP	SPDR S&P Kensho New Economies Composite ETF	\$12M
MJ	ETFMG Alternative Harvest ETF	\$11M
WCLD	WisdomTree Cloud Computing Fund	\$10M
CIBR	First Trust NASDAQ Cybersecurity ETF	\$9M

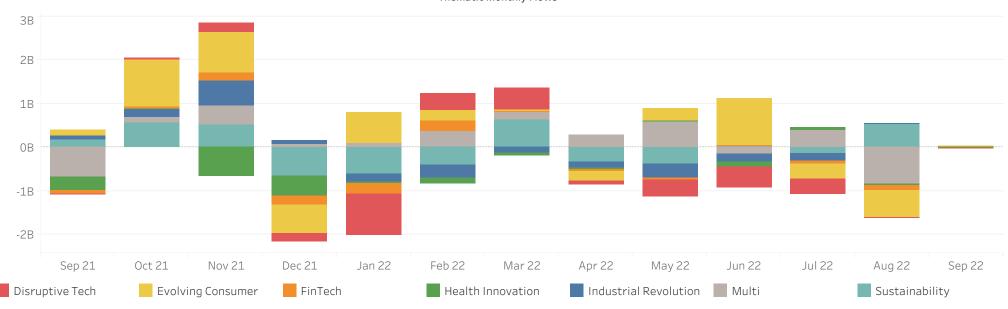
Thematic 1 Week Flow Laggards

Ticker	Fund	
ARKK	ARK Innovation ETF	(\$111M)
XT	iShares Exponential Technologies ETF	(\$35M)
KWEB	KraneShares CSI China Internet ETF	(\$30M)
ARKF	ARK Fintech Innovation ETF	(\$19M)
ARKW	ARK Next Generation Internet ETF	(\$18M)
HACK	ETFMG Prime Cyber Security ETF	(\$17M)
ARKG	ARK Genomic Revolution ETF	(\$12M)
DRIV	Global X Autonomous & Electric Vehicles ETF	(\$11M)
SKYY	First Trust Cloud Computing ETF	(\$10M)
PHO	Invesco Water Resources ETF	(\$10M)

Thematic Landscape Assets & Flows

Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	35	\$18B	(\$23M)	(\$786M)	(\$1,080M)	(\$1,365M)
Evolving Consumer	47	\$11B	\$15M	\$71M	\$399M	\$2,670M
FinTech	24	\$3B	(\$1M)	(\$188M)	(\$241M)	(\$350M)
Health Innovation	19	\$4B	(\$37M)	(\$94M)	(\$230M)	(\$1,772M)
Industrial Revolution	32	\$12B	(\$8M)	(\$334M)	(\$953M)	(\$497M)
Multi	41	\$15B	(\$100M)	(\$443M)	\$424M	\$890M
Sustainability	42	\$20B	\$14M	\$592M	\$254M	(\$76M)
Grand Total	240	\$82B	(\$140M)	(\$1,182M)	(\$1,427M)	(\$500M)

Thematic Monthly Flows

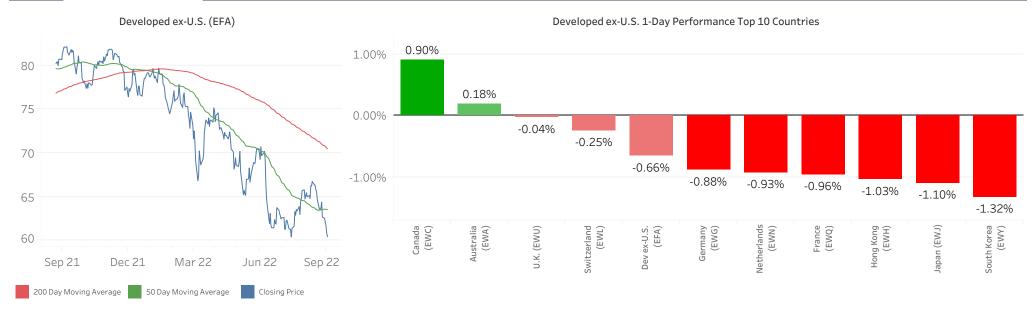


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\$7M

Developed Markets ex-U.S. Performance





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

10B

OB

Sep 21 Dec 21 Mar 22 Jun 22 Sep 22

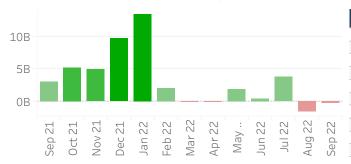
Developed ex-U.S. 1-Day Performance Leaders

Ticker	Fund	
ENZL	iShares MSCI New Zealand ETF	1.12%
EWC	iShares MSCI Canada ETF	0.90%
FLCA	Franklin FTSE Canada ETF	0.86%
CIL	VictoryShares International Volatility Wtd ETF	0.85%
BBCA	JPMorgan BetaBuilders Canada ETF	0.77%
NORW	Global X MSCI Norway ETF	0.52%
ICOW	Pacer Developed Markets International Cash Cows 100 ETF	0.23%
EWA	iShares MSCI Australia ETF	0.18%
FLGB	Franklin FTSE United Kingdom ETF	0.05%
ISDX	Invesco RAFI Strategic Developed ex-US ETF	0.04%

Developed ex-U.S. Most Overbought

Ticker	Fund	
PTIN	Pacer Trendpilot International ETF	55.63
ENZL	iShares MSCI New Zealand ETF	44.49
EIS	iShares MSCI Israel ETF	42.67
DXJ	WisdomTree Japan Hedged Equity Fund	41.34
NORW	Global X MSCI Norway ETF	39.98
CIL	VictoryShares International Volatility Wtd ETF	39.82
EWA	iShares MSCI Australia ETF	39.54
ISRA	VanEck Israel ETF	39.14
HEWJ	iShares Currency Hedged MSCI Japan ETF	38.81
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	38.67

Developed ex-U.S. Monthly Flows



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

GREK Global X MSCI Greece ETF -2.75% EUSC WisdomTree Europe Hedged SmallCap Equity Fund -1.61% AIA iShares Asia 50 ETF -1.58% DFE WisdomTree Europe SmallCap Dividend Fund -1.55% EWY iShares MSCI South Korea ETF -1.32% HEDJ WisdomTree Europe Hedged Equity Fund -1.28% DLS WisdomTree International SmallCap Dividend Fund -1.25%
AIA iShares Asia 50 ETF -1.58% DFE WisdomTree Europe SmallCap Dividend Fund -1.55% EWY iShares MSCI South Korea ETF -1.32% HEDJ WisdomTree Europe Hedged Equity Fund -1.28%
DFE WisdomTree Europe SmallCap Dividend Fund -1.55% EWY iShares MSCI South Korea ETF -1.32% HEDJ WisdomTree Europe Hedged Equity Fund -1.28%
EWY iShares MSCI South Korea ETF -1.32% HEDJ WisdomTree Europe Hedged Equity Fund -1.28%
HEDJ WisdomTree Europe Hedged Equity Fund -1.28%
DLS WisdomTree International SmallCap Dividend Fund -1.25%
EWP iShares MSCI Spain ETF -1.25%
AAXJ iShares MSCI All Country Asia ex Japan ETF -1.22%
FLKR Franklin FTSE South Korea ETF -1.18%

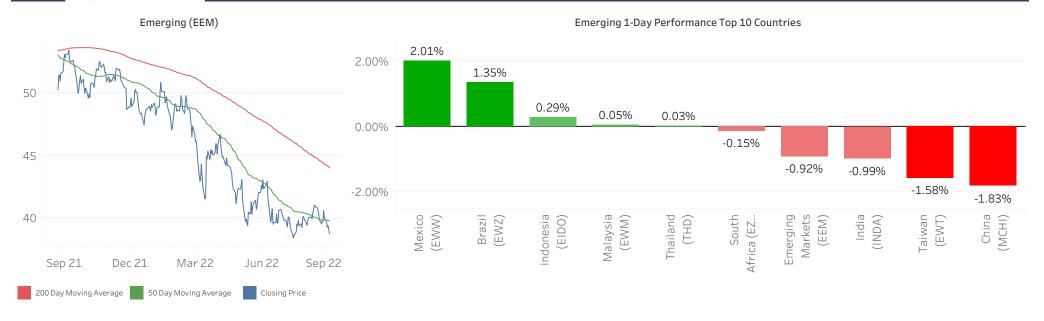
Developed ex-U.S. Most Oversold

Ticker	Fund	
QLVD	FlexShares Developed Markets ex-US Quality Low V	25.13
IMFL	Invesco International Developed Dynamic Multifact	25.25
RFDI	First Trust Riverfront Dynamic Developed Internatio	25.69
EFAV	iShares MSCI EAFE Min Vol Factor ETF	25.73
EUDG	WisdomTree Europe Quality Dividend Growth Fund	25.74
QEFA	SPDR MSCI EAFE StrategicFactors ETF	26.35
EFAD	ProShares MSCI EAFE Dividend Growers ETF	26.36
DFE	WisdomTree Europe SmallCap Dividend Fund	26.37
RODM	Hartford Multifactor Developed Markets (ex-US) ETF	26.46
EWU	iShares MSCI United Kingdom ETF	26.48

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

Emerging Markets Performance





Emerging 30-Day Rolling Flows

10B
5B
0B
Sep 21 Dec 21 Mar 22 Jun 22 Sep 22

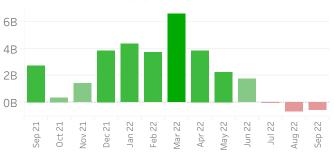
Emerging 1-Day Performance Leaders

Ticker	Fund	
ECH	iShares MSCI Chile ETF	7.91%
TUR	iShares MSCI Turkey ETF	2.37%
ILF	iShares Latin America 40 ETF	2.30%
EWW	iShares MSCI Mexico ETF	2.01%
FLLA	Franklin FTSE Latin America ETF	1.78%
EPU	iShares MSCI Peru ETF	1.75%
FRDM	Freedom 100 Emerging Markets ETF	1.68%
EWZ	iShares MSCI Brazil ETF	1.35%
EWZS	iShares MSCI Brazil Small-Cap ETF	1.25%
FLRR	Franklin FTSE Brazil FTE	1.05%

Emerging Most Overbought

Ticker	Fund	
TUR	iShares MSCI Turkey ETF	70.01
ECH	iShares MSCI Chile ETF	67.42
EIDO	iShares MSCI Indonesia ETF	61.38
SMIN	iShares MSCI India Small Cap ETF	59.38
EWZS	iShares MSCI Brazil Small-Cap ETF	54.38
ILF	iShares Latin America 40 ETF	53.12
FEMS	First Trust Emerging Markets Small Cap AlphaDEX Fu	52.79
NFTY	First Trust India NIFTY 50 Equal Weight ETF	52.76
FLIN	Franklin FTSE India ETF	52.44
FLBR	Franklin FTSE Brazil ETF	52.40

Emerging Monthly Flows



Emerging 1-Day Performance Laggards

Ticker	Fund	
PGJ	Invesco Golden Dragon China ETF	-2.64%
FXI	iShares China Large-Cap ETF	-2.04%
FNI	First Trust Chindia ETF	-1.91%
FLCH	Franklin FTSE China ETF	-1.89%
MCHI	iShares MSCI China ETF	-1.83%
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	-1.72%
NFTY	First Trust India NIFTY 50 Equal Weight ETF	-1.59%
EWT	iShares MSCI Taiwan ETF	-1.58%
GXC	SPDR S&P China ETF	-1.54%
KBA	KraneShares Bosera MSCI China A 50 Connect Index ETF	-1.53%

Emerging Most Oversold

Ticker	Fund	
EPOL	iShares MSCI Poland ETF	27.68
CNYA	iShares MSCI China A ETF	29.75
ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	31.00
EDIV	SPDR S&P Emerging Markets Dividend ETF	31.92
EEMV	iShares MSCI Emerging Markets Min Vol Factor ETF	32.07
KBA	KraneShares Bosera MSCI China A 50 Connect Index	33.02
RAYC	Rayliant Quantamental China Equity ETF	33.45
EWT	iShares MSCI Taiwan ETF	33.48
NUEM	Nuveen ESG Emerging Markets Equity ETF	33.50
DGRE	WisdomTree Emerging Markets Quality Dividend Gr	34.24

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







Fixed Income Performance

Ticker	Name	1 Day	1 Month	YTD
AGG	U.S. Aggregate	0.29%	-2.52%	-10.81%
SHY	1-3 Year Treasury Bonds	0.22%	-0.31%	-3.24%
IEF	7-10 Year Treasury Bonds	0.56%	-3.30%	-11.67%
TLT	20+ Year Treasury Bonds	0.57%	-5.99%	-24.60%
TIP	TIPS Bonds	0.59%	-1.75%	-7.84%
FLOT	Floating Rate Bonds	-0.02%	0.47%	-0.24%
LQD	Investment Grade Corporate	0.07%	-3.95%	-16.67%
HYG	High Yield Corporate	-0.07%	-3.71%	-11.79%
BKLN	Senior Loan	0.00%	-0.29%	-3.37%
PFF	Preferred & Income Securities	0.43%	-5.39%	-13.70%
MUB	Municipal Bonds	0.43%	-2.45%	-8.09%
МВВ	MBS	0.36%	-2.64%	-9.12%
EMB	Dollar Denominated EM Bonds	0.35%	-1.61%	-19.56%
LEMB	Local Currency EM Bond	0.07%	-0.30%	-13.85%

Commodities Performance

Ticker	Name	1 Day	1 Month	YTD
DJP	Broad Commodities	0.03%	1.99%	23.45%
DBE	Energy	0.81%	-0.80%	44.91%
USO	WTI Crude Oil	0.68%	-5.93%	31.40%
BNO	Brent Crude Oil	1.03%	-6.45%	40.12%
UNG	Natural Gas	-3.25%	16.28%	145.88%
UGA	Gasoline	3.25%	-12.98%	30.32%
DBP	Precious Metals	0.89%	-4.58%	-11.22%
GLD	Gold	0.88%	-2.92%	-6.84%
SLV	Silver	1.16%	-9.99%	-22.97%
PPLT	abrdn Physical Platin	1.16%	-6.98%	-13.63%
PALL	abrdn Physical Palla	0.72%	-1.77%	6.22%
DBB	Base Metals	-1.70%	-3.96%	-17.12%
CPER	Copper	-0.24%	-2.85%	-24.84%
LD	Lead	-4.31%	-9.86%	-19.53%
JJN	Nickel	0.95%	-7.68%	-0.26%
JJU	Aluminum	-0.19%	-4.61%	-18.21%
JJT	Tin	1.17%	-11.76%	-44.13%
DBA	Agriculture	0.34%	3.56%	3.19%
CORN	Corn	0.68%	10.69%	23.54%
SOYB	Soybeans	1.41%	3.05%	17.36%
WEAT	Wheat	1.84%	2.72%	12.45%
CANE	Sugar	0.68%	1.59%	-2.83%
BAL	Cotton	-4.74%	9.67%	10.97%
NIB	Cocoa	2.78%	2.94%	-12.25%

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD
UUP	Long Dollar	0.03%	3.60%	14.63%
UDN	Short Dollar	0.00%	-3.43%	-13.44%
FXE	Euro	0.07%	-2.19%	-13.11%
FXB	British Pound Sterling	-0.32%	-5.40%	-15.00%
FXF	Swiss Franc	0.03%	-2.54%	-7.76%
FXY	Japanese Yen	0.00%	-5.15%	-18.20%
FXC	Canadian Dollar	0.05%	-2.10%	-4.03%
FXA	Australian Dollar	0.31%	-1.67%	-6.52%

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

Coffee

-2.55%

11.10%

3.41%

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