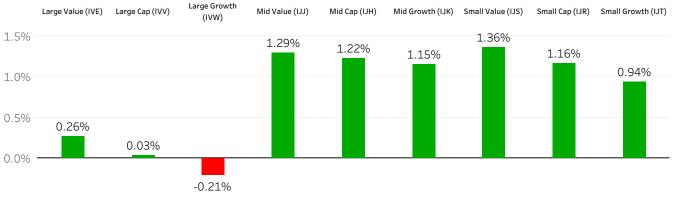


U.S. Size & Style Performance

Large Cap Blend (S&P 500) IVV





U.S. Size & Style 1-Day Performance

Mid Cap Blend (S&P 400) IJH



Small Cap Blend (S&P 600) IJR



Size & Style 1-Day Performance Leaders

Ticker	Fund	
FDM	First Trust Dow Jones Select MicroCap Index Fund	1.97%
SVAL	iShares US Small Cap Value Factor ETF	1.68%
XMMO	Invesco S&P MidCap Momentum ETF	1.61%
JSML	Janus Henderson Small Cap Growth Alpha ETF	1.60%
RWJ	Invesco S&P SmallCap 600 Revenue ETF	1.60%
AVUV	Avantis U.S. Small Cap Value ETF	1.51%
PEY	Invesco High Yield Equity Dividend Achievers ETF	1.47%
DFSV	Dimensional US Small Cap Value ETF	1.44%
SLYV	SPDR S&P 600 Small Cap Value ETF	1.44%
OMFS	Invesco Russell 2000 Dynamic Multifactor ETF	1.44%

Size & Style 1-Day Performance Laggards

Ticker	Fund	
TMFC	Motley Fool 100 Index ETF	-0.54%
QQH	HCM Defender 100 Index ETF	-0.45%
WINN	Harbor Long-Term Growers ETF	-0.43%
IWY	iShares Russell Top 200 Growth ETF	-0.39%
SPMO	Invesco S&P 500 Momentum ETF	-0.35%
LGH	HCM Defender 500 Index ETF	-0.35%
QQQM	Invesco NASDAQ 100 ETF	-0.34%
QQQ	Invesco QQQ Trust Series I	-0.33%
XLG	Invesco S&P 500 Top 50 ETF	-0.31%
JUST	Goldman Sachs JUST U.S. Large Cap Equity ETF	-0.31%

200 Day Moving Average

Size & Style Most Overbought

	Ticker	Fund	
	SPC	CrossingBridge Pre-Merger SPAC ETF	65.49
)	RPG	Invesco S&P 500 Pure Growth ETF	61.92
) 	VSMV	VictoryShares US Multi-Factor Minimum Volatility ETF	57.60
)	SPGP	Invesco S&P 500 GARP ETF	57.54
)	TTAC	FCF US Quality ETF	57.07
>	USMF	WisdomTree U.S. Multifactor Fund	56.89
)	FDLO	Fidelity Low Volatility Factor ETF	56.80
)	QUAL	iShares MSCI USA Quality Factor ETF	56.57
)	MBOX	Freedom Day Dividend ETF	56.40
)	QLV	FlexShares US Quality Low Volatility Index Fund	56.38

Size & Style Most Oversold

	Ticker	Fund	
%	CSF	VictoryShares US Discovery Enhanced Volatility Wt	39.35
%	IWC	iShares Micro-Cap ETF	41.84
%	DWAS	Invesco Dorsey Wright SmallCap Momentum ETF	43.16
%	NOBL	ProShares S&P 500 Dividend Aristocrats ETF	43.45
%	IWO	iShares Russell 2000 Growth ETF	44.40
%	VTWG	Vanguard Russell 2000 Growth ETF	44.41
%	ISCG	iShares Morningstar Small-Cap Growth ETF	44.48
%	BBSC	JPMorgan BetaBuilders U.S. Small Cap Equity ETF	44.58
%	FYC	First Trust Small Cap Growth AlphaDEX Fund	44.76
%	RPV	Invesco S&P 500 Pure Value ETF	45.01

U.S. Size & Style Flows

Large-Cap 30-Day Rolling Flows



Mid-Cap 30-Day Rolling Flows







	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Large Cap, Beta, Beta	26	\$1,451B	\$2.23B	\$27.12B	\$70.73B	\$72.52B
Large Cap, Beta, Beta: Growth	10	\$284B	\$0.76B	\$5.58B	\$8.15B	\$17.73B
Large Cap, Beta, Beta: Value	11	\$216B	(\$0.27B)	\$0.96B	(\$2.73B)	(\$5.73B)
Mid Cap, Beta, Beta	10	\$189B	\$0.03B	\$5.92B	\$6.10B	\$11.52B
Mid Cap, Beta, Beta: Growth	6	\$34B	\$0.01B	(\$0.14B)	\$0.57B	\$0.40B
Mid Cap, Beta, Beta: Value	6	\$37B	(\$0.10B)	(\$0.53B)	(\$1.63B)	(\$1.23B)
Small Cap, Beta, Beta	11	\$190B	\$0.88B	\$2.77B	\$7.85B	\$10.65B
Small Cap, Beta, Beta: Growth	7	\$31B	\$0.03B	(\$0.06B)	\$0.26B	\$0.69B
Small Cap, Beta, Beta: Value	7	\$46B	(\$0.01B)	(\$0.81B)	(\$1.35B)	(\$0.70B)

U.S. Size & Style Landscape Flows

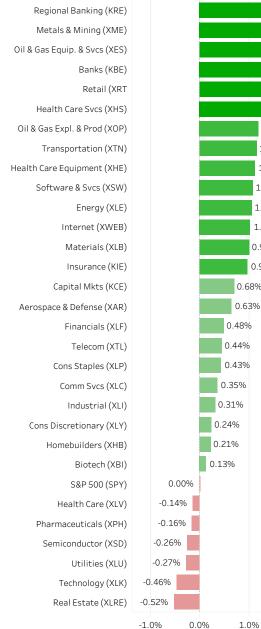
U.S. Size & Style Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
QQQ	Invesco QQQ Trust Series I	\$1.58B	\$2.18B	\$8.72B	\$6.58B	\$207.44B
VXF	Vanguard Extended Market ETF	\$0.91B	\$0.99B	\$1.54B	\$1.96B	\$15.80B
IWM	iShares Russell 2000 ETF	\$0.76B	\$0.41B	\$1.73B	\$0.09B	\$50.13B
IWY	iShares Russell Top 200 Growth ETF	\$0.43B	\$0.05B	\$0.29B	\$1.39B	\$7.22B
- VTI	Vanguard Total Stock Market ETF	\$0.31B	\$3.43B	\$11.51B	\$19.73B	\$310.29B
QQQM	Invesco NASDAQ 100 ETF	\$0.26B	\$1.58B	\$4.65B	\$7.84B	\$15.30B
DGRO	iShares Core Dividend Growth ETF	\$0.25B	\$0.20B	\$0.18B	(\$0.75B)	\$23.27B
DFAC	Dimensional U.S. Core Equity 2 ETF	\$0.24B	\$1.10B	\$2.39B	\$4.78B	\$21.45B
IVV	iShares Core S&P 500 ETF	\$0.19B	\$18.92B	\$26.11B	\$23.00B	\$352.11B
COWZ	Pacer US Cash Cows 100 ETF	\$0.19B	\$1.84B	\$1.57B	\$6.66B	\$15.60B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
DVY	iShares Select Dividend ETF	(\$0.17B)	(\$0.86B)	(\$2.09B)	(\$1.91B)	\$17.77B
IWF	iShares Russell 1000 Growth ETF	(\$0.15B)	\$0.69B	\$0.61B	(\$0.58B)	\$71.73B
SPYV	SPDR Portfolio S&P 500 Value ETF	(\$0.14B)	\$0.40B	\$1.21B	\$2.05B	\$15.99B
IWD	iShares Russell 1000 Value ETF	(\$0.11B)	(\$0.58B)	(\$1.67B)	(\$4.96B)	\$48.08B
MDY	SPDR S&P Midcap 400 ETF Trust	(\$0.09B)	(\$0.22B)	(\$0.62B)	(\$0.15B)	\$18.03B
IWS	iShares Russell Mid-Cap Value ETF	(\$0.08B)	(\$0.21B)	(\$0.59B)	(\$0.98B)	\$11.81B
SDY	SPDR S&P Dividend ETF	(\$0.07B)	(\$0.76B)	(\$1.35B)	(\$1.15B)	\$19.82B
DFAT	Dimensional U.S. Targeted Value ETF	(\$0.07B)	\$0.11B	\$0.30B	\$0.82B	\$8.06B
VTV	Vanguard Value ETF	(\$0.07B)	\$0.99B	(\$2.54B)	(\$3.26B)	\$98.48B
HDV	iShares Core High Dividend ETF	(\$0.06B)	(\$0.13B)	(\$0.68B)	(\$2.49B)	\$10.04B

S&P Sector & Industry 1 Day Performance



2.1070		
2.01%	XLC	Communication Services Select Sector SPDR Fun
2.01%	XLE	Energy Select Sector SPDR Fund
1.96%	SPY	SPDR S&P 500 ETF Trust
1.73%	XLK	Technology Select Sector SPDR Fund
1.46%	XLV	Health Care Select Sector SPDR Fund
	XLI	Industrial Select Sector SPDR Fund
1.18%	XLB	Materials Select Sector SPDR Fund
1.14%	XLY	Consumer Discretionary Select Sector SPDR Fun
1.11%	XLF	Financial Select Sector SPDR Fund
1.11%	XLP	Consumer Staples Select Sector SPDR Fund
1.07%	XLRE	Real Estate Select Sector SPDR Fund
1.04%	XLU	Utilities Select Sector SPDR Fund
1.02%		Sector & Industry 1 Day Performance Leaders
0.98%	Ticker	Fund
0.96%	IAT	iShares U.S. Regional Banks ETF
58%	QABA	First Trust NASDAQ ABA Community Bank Index F
3%	KBWR	Invesco KBW Regional Banking ETF
%	KRE	SPDR S&P Regional Banking ETF
	XME	SPDR S&P Metals & Mining ETF
6	XES	SPDR S&P Oil & Gas Equipment & Services ETF
6	FTXO	First Trust Nasdaq Bank ETF
	KBE	SPDR S&P Bank ETF
	AIRR	First Trust RBA American Industrial Renaissance E
	KBWB	Invesco KBW Bank ETF
		Sector & Industry 1 Day Performance Laggards
	Ticker	Fund
	IGN	iShares North American Tech-Multimedia Networking
	IHE	iShares U.S. Pharmaceuticals ETF

2.12%

2.10%

Ticker

Ticker	Fund		Ticke
IGN	iShares North American Tech-Multimedia Networking	-1.26%	XPH
IHE	iShares U.S. Pharmaceuticals ETF	-0.79%	XHE
SOXX	iShares Semiconductor ETF	-0.73%	FTXG
FTXL	First Trust Nasdaq Semiconductor ETF	-0.58%	PTH
SOXQ	Invesco PHLX Semiconductor ETF	-0.58%	IHI
PSI	Invesco Semiconductors ETF	-0.56%	RSPS
XLRE	Real Estate Select Sector SPDR Fund	-0.52%	XBI
XLK	Technology Select Sector SPDR Fund	-0.46%	IYK
INDS	Pacer Industrial Real Estate ETF	-0.46%	IGN

Select Sector SPDRs Technicals

Fund Name	% From 52W High	% From 52W Low	% Abv/Below 50 SMA	% Abv/Below 200 SMA	RSI (14D)
Communication Services Select Sector SPDR Fund	-0.61%	50.61%	2.48%	11.41%	59.33
Energy Select Sector SPDR Fund	-3.14%	18.98%	1.87%	7.24%	57.55
SPDR S&P 500 ETF Trust	-4.76%	17.52%	-0.68%	3.07%	52.34
Technology Select Sector SPDR Fund	-5.99%	42.62%	0.33%	7.63%	53.17
Health Care Select Sector SPDR Fund	-6.50%	5.51%	-0.77%	-0.42%	52.13
Industrial Select Sector SPDR Fund	-6.86%	11.39%	-1.56%	0.31%	51.09
Materials Select Sector SPDR Fund	-7.64%	9.44%	-1.61%	-1.99%	50.13
Consumer Discretionary Select Sector SPDR Fund	-8.50%	28.24%	-2.17%	3.56%	47.52
Financial Select Sector SPDR Fund	-8.86%	8.84%	-0.73%	-0.45%	53.20
Consumer Staples Select Sector SPDR Fund	-12.54%	2.36%	-4.39%	-7.64%	41.29
Real Estate Select Sector SPDR Fund	-17.50%	5.09%	-3.23%	-7.30%	47.33
Utilities Select Sector SPDR Fund	-17.78%	6.34%	-3.49%	-9.33%	47.42

ormance Leaders

Ticker	Fund	
IAT	iShares U.S. Regional Banks ETF	2.59%
QABA	First Trust NASDAQ ABA Community Bank Index F	2.36%
KBWR	Invesco KBW Regional Banking ETF	2.20%
KRE	SPDR S&P Regional Banking ETF	2.12%
XME	SPDR S&P Metals & Mining ETF	2.10%
XES	SPDR S&P Oil & Gas Equipment & Services ETF	2.01%
FTXO	First Trust Nasdaq Bank ETF	1.97%
KBE	SPDR S&P Bank ETF	1.96%
AIRR	First Trust RBA American Industrial Renaissance E	1.94%
KBWB	Invesco KBW Bank ETF	1.74%

Sector & Industry Most Overbought

Ticker	Fund	
KBWP	Invesco KBW Property & Casualty Insurance ETF	72.46
IAK	iShares U.S. Insurance ETF	69.84
KIE	SPDR S&P Insurance ETF	66.16
FXN	First Trust Energy AlphaDEX Fund	64.22
FCG	First Trust Natural Gas ETF	63.44
AMLP	Alerian MLP ETF	63.21
MLPX	Global X MLP & Energy Infrastructure ETF	62.78
IEO	iShares U.S. Oil & Gas Exploration & Production ETF	62.54
RSPG	Invesco S&P 500 Equal Weight Energy ETF	62.37
PXE	Invesco Energy Exploration & Production ETF	62.13

Sector & Industry Most Oversold

	Ticker	Fund	
-1.26%	XPH	SPDR S&P Pharmaceuticals ETF	30.68
-0.79%	XHE	SPDR S&P Health Care Equipment ETF	31.92
-0.73%	FTXG	First Trust Nasdaq Food & Beverage ETF	32.20
-0.58%	PTH	Invesco Dorsey Wright Healthcare Momentum ETF	34.01
-0.58%	IHI	iShares U.S. Medical Devices ETF	35.13
-0.56%	RSPS	Invesco S&P 500 Equal Weight Consumer Staples ETF	37.20
-0.52%	XBI	SPDR S&P BIOTECH ETF	37.39
-0.46%	IYK	iShares U.S. Consumer Staples ETF	38.84
-0.46%	IGN	iShares North American Tech-Multimedia Networking ETF	39.20
-0.45%	ITB	iShares U.S. Home Construction ETF	40.29

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

IETC

2.0%

iShares U.S. Tech Independence Focused ETF

U.S. Sector Landscape

U.S. Sector & Industry 1-Week Flows

\$89M

					¢00
Aerospace & Defense					\$89
Insurance					4M
Metals & Mining				\$23M	
Infrastructure				\$15M	
Retail				\$10M	
Transportation				\$10M	
BDCs				\$7M	
Oil & Gas Equipment & Services				\$4M	
Health Care Providers & Services				\$2M	
MLPs: Note				\$0M	
Construction & Engineering				\$0M	
Leisure & Recreation				\$0M	
Media & Entertainment				\$0M	
Natural Gas				\$0M	
Food & Beverage		(\$	1M)		
Mortgage REITs		(\$	2M)		
Pharmaceuticals		(\$	2M)		
Midstream		(\$6	5M)		
Health Care Equipment & Supplies		(\$25M)		
MLPs: C-Corp		(\$35M)			
Semiconductors		(\$36M)			
Banks		(\$40M)			
Banks: Regional		(\$71M)			
Software	(\$147M)				
Biotech	(\$155M)				
Oil & Gas Exploration & Production	(\$159M)				
Homebuilding	(\$163M)				
	-200M	-100M	0M		00M
	1	. Week (Custo	om SQL	Query22)	

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services	7	\$19B	\$323M	\$355M	\$1,657M	\$3,144M
Consumer Discretionary	12	\$26B	(\$89M)	\$593M	\$1,244M	\$1,849M
Consumer Staples	10	\$26B	(\$115M)	(\$1,675M)	(\$1,728M)	\$817M
Energy	31	\$76B	\$37M	\$2,276M	(\$2,809M)	(\$7,098M)
Financials	26	\$53B	(\$47M)	(\$3,749M)	(\$2,571M)	(\$573M)
Health Care	23	\$84B	(\$108M)	(\$3,052M)	(\$3,248M)	(\$4,009M)
Industrial	13	\$33B	\$148M	(\$708M)	\$1,058M	\$2,786M
Materials	9	\$12B	\$99M	(\$603M)	(\$1,970M)	(\$1,479M)
Multi-Sector	18	\$17B	(\$213M)	(\$57M)	\$2,310M	\$2,433M
Real Estate	25	\$51B	\$285M	(\$238M)	(\$379M)	(\$2,821M)
Technology	23	\$150B	\$156M	(\$671M)	\$1,251M	\$2,707M
Utilities	9	\$21B	(\$793M)	(\$1,101M)	(\$849M)	(\$1,496M)

U.S. Sector Landscape

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLK	Technology Select Sector SPDR Fund	\$404M	(\$77M)	\$590M	(\$1,379M)	\$49,495M
XLC	Communication Services Select Sector SPDR Fu	\$310M	\$220M	\$1,253M	\$2,733M	\$14,136M
XLE	Energy Select Sector SPDR Fund	\$204M	\$1,804M	(\$1,911M)	(\$2,726M)	\$39,453M
SCHH	Schwab U.S. REIT ETF	\$177M	\$279M	\$357M	\$626M	\$5,674M
IYR	iShares U.S. Real Estate ETF	\$134M	(\$217M)	(\$278M)	(\$641M)	\$2,496M
XLV	Health Care Select Sector SPDR Fund	\$105M	(\$1,617M)	(\$358M)	(\$248M)	\$38,630M
XLB	Materials Select Sector SPDR Fund	\$97M	(\$172M)	(\$281M)	(\$100M)	\$5,460M
XLRE	Real Estate Select Sector SPDR Fund	\$88M	(\$10M)	\$159M	(\$252M)	\$4,316M
XLI	Industrial Select Sector SPDR Fund	\$63M	(\$417M)	\$913M	\$776M	\$14,573M
KIE	SPDR S&P Insurance ETF	\$59M	\$94M	\$124M	\$102M	\$599M

U.S. Sector & Industry Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLU	Utilities Select Sector SPDR Fund	(\$742M)	(\$656M)	(\$512M)	(\$822M)	\$13,473M
IBB	iShares Biotechnology ETF	(\$170M)	(\$240M)	(\$781M)	(\$773M)	\$6,837N
ХОР	SPDR S&P Oil & Gas Exploration & Production E	(\$154M)	(\$440M)	(\$550M)	(\$912M)	\$3,595M
IGV	iShares Expanded Tech-Software Sector ETF	(\$141M)	(\$237M)	\$58M	\$73M	\$6,362N
ITB	iShares U.S. Home Construction ETF	(\$97M)	(\$393M)	(\$36M)	\$203M	\$1,768N
ICF	iShares Cohen & Steers REIT ETF	(\$79M)	(\$123M)	(\$172M)	(\$173M)	\$1,931N
XLP	Consumer Staples Select Sector SPDR Fund	(\$76M)	(\$25M)	(\$208M)	\$1,655M	\$15,904N
ХНВ	SPDR S&P Homebuilders ETF	(\$67M)	(\$166M)	\$106M	\$75M	\$1,102N
KRE	SPDR S&P Regional Banking ETF	(\$65M)	(\$572M)	(\$256M)	\$142M	\$2,484N
XLY	Consumer Discretionary Select Sector SPDR Fu	(\$65M)	\$568M	\$693M	\$406M	\$16,582N



U.S. Sector Rolling 30-Day Flows

October 17, 2023







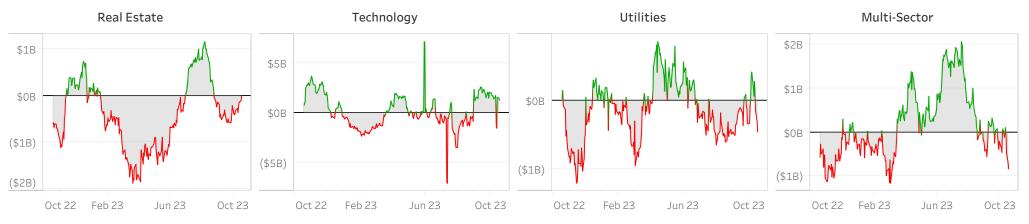


Feb 23

Oct 22









Global Thematic Performance

Global Thematic Segment 1-Day Performance

2.00%

1.81%

1.69%

1.63%

1.45%

1.14%

1.09%

1.05%

1.02% 1.00%

0.99%

0.70%

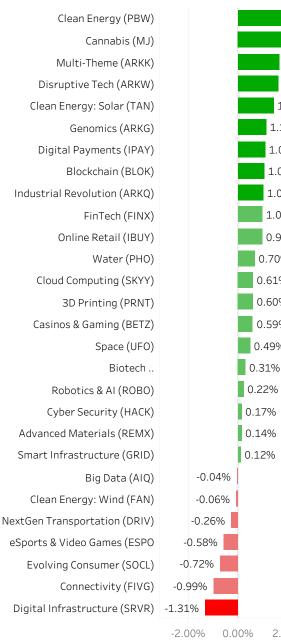
0.61%

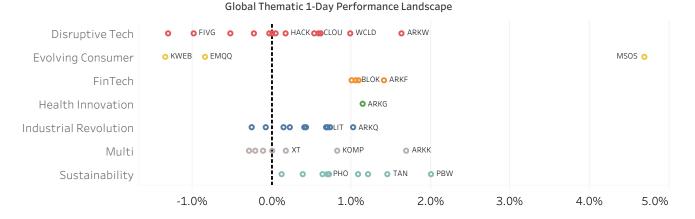
0.60%

0.59%

0.49%

2.00%





Global Thematic 1-Day Performance Leaders

Ticker	Fund	
MSOS	AdvisorShares Pure US Cannabis ETF	4.69%
MJUS	ETFMG U.S. Alternative Harvest ETF	3.27%
вксн	Global X Blockchain ETF	2.09%
PBW	Invesco WilderHill Clean Energy ETF	2.00%
MJ	ETFMG Alternative Harvest ETFMG Alternative Harvest	1.81%
ARKK	ARK Innovation ETF	1.69%
ARKW	ARK Next Generation Internet ETF	1.63%
CTEC	Global X CleanTech ETF	1.45%
TAN	Invesco Solar ETF	1.45%
ARKF	ARK Fintech Innovation ETF	1.41%

Global Thematic 1-Day Performance Laggards

Ticker	Fund	
KWEB	KraneShares CSI China Internet ETF	-1.35%
SRVR	Pacer Data & Infrastructure Real Estate ETF	-1.31%
FIVG	Defiance Next Gen Connectivity ETF	-0.99%
EMQQ	EMQQ The Emerging Markets Internet & Ecommerce E	-0.85%
SOCL	Global X Social Media ETF	-0.72%
GBUY	Goldman Sachs Future Consumer Equity ETF	-0.62%
ESPO	VanEck Video Gaming and eSports ETF	-0.58%
NXTG	First Trust Indxx NextG ETF	-0.53%
LEGR	First Trust Indxx Innovative Transaction & Process ETF	-0.51%
QTUM	Defiance Quantum ETF	-0.46%

Thematic Most Overbought

Ticker	Fund	
HACK	${\sf ETFMG}$ Prime Cyber Security ${\sf ETFMG}$ Prime Cyber Security	62.38
IHAK	iShares Cybersecurity & Tech ETF	59.13
CIBR	First Trust NASDAQ Cybersecurity ETF	58.59
SAMT	Strategas Macro Thematic Opportunities ETF	57.27
BUG	Global X Cybersecurity ETF	55.73
METV	Roundhill Ball Metaverse ETF	53.96
SKYY	First Trust Cloud Computing ETF	52.99
THNQ	ROBO Global Artificial Intelligence ETF	52.58
TECB	iShares U.S. Tech Breakthrough Multisector ETF	51.00
MSOS	AdvisorShares Pure US Cannabis ETF	50.87

Thematic Most Oversold

	Ticker	Fund	
	IZRL	ARK Israel Innovative Technology ETF	27.98
	IDNA	iShares Genomics Immunology and Healthcare ETF	29.30
	EDOC	Global X Telemedicine & Digital Health ETF Registered	31.20
	HTEC	ROBO Global Healthcare Technology and Innovation ETF	31.61
	ARKG	ARK Genomic Revolution ETF	32.23
	SBIO	ALPS Medical Breakthroughs ETF	33.24
	GNOM	Global X Genomics & Biotechnology ETF	35.79
	FAN	First Trust Global Wind Energy ETF	36.17
	KLDW	Knowledge Leaders Developed World ETF	37.79
	BETZ	Roundhill Sports Betting & iGaming ETF	38.12
)			



Global Thematic Flows

Thematic 1 Week Flow Leaders

Ticker	Fund	
TAN	Invesco Solar ETF	\$32M
KWEB	KraneShares CSI China Internet ETF	\$25M
AIQ	Global X Artificial Intelligence & Technology ETF	\$25M
MSOS	AdvisorShares Pure US Cannabis ETF	\$23M
ARKK	ARK Innovation ETF	\$22M
GBUY	Goldman Sachs Future Consumer Equity ETF	\$15M
WCLD	WisdomTree Cloud Computing Fund	\$13M
GTEK	Goldman Sachs Future Tech Leaders Equity ETF	\$11M
TARK	AXS 2X Innovation ETF	\$3M
ACES	ALPS Clean Energy ETF	\$3M

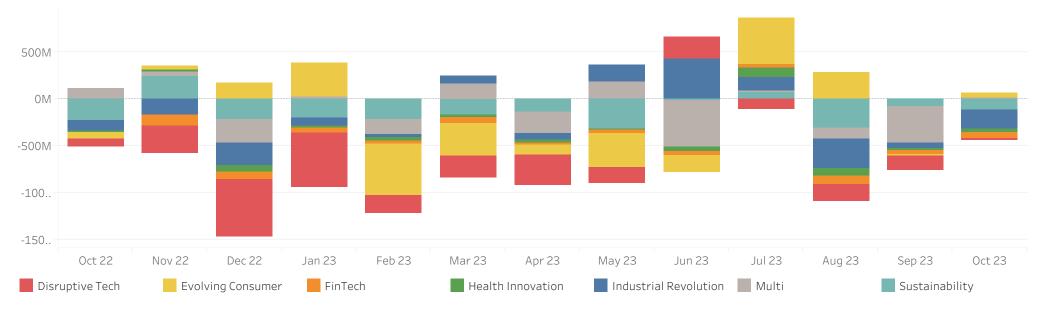
Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	34	\$16B	(\$18M)	(\$544M)	(\$545M)	(\$2,726M)
Evolving Consumer	39	\$9B	\$59M	\$451M	\$193M	(\$229M)
FinTech	17	\$2B	(\$2M)	(\$194M)	(\$244M)	(\$585M)
Health Innovation	18	\$2B	(\$25M)	(\$96M)	(\$137M)	(\$319M)
Industrial Revolution	30	\$10B	(\$90M)	(\$577M)	\$113M	(\$428M)
Multi	38	\$13B	(\$32M)	(\$678M)	(\$1,097M)	(\$1,113M)
Sustainability	40	\$13B	(\$52M)	(\$551M)	(\$852M)	(\$1,724M)
Grand Total	216	\$66B	(\$160M)	(\$2,190M)	(\$2,568M)	(\$7,124M)

Thematic Landscape Assets & Flows

Thematic 1 Week Flow Laggards

Ticker	Fund		I
LIT	Global X Lithium & Battery Tech ETF	(\$70M)	
ICLN	iShares Global Clean Energy ETF	(\$38M)	
SKYY	First Trust Cloud Computing ETF	(\$27M)	Ν
BOTZ	Global X Robotics & Artificial Intelligence ETF	(\$27M)	
ARKG	ARK Genomic Revolution ETF	(\$23M)	
ROBO	ROBO Global Robotics & Automation Index ETF	(\$12M)	S
METV	Roundhill Ball Metaverse ETF	(\$11M)	
XT	iShares Exponential Technologies ETF	(\$11M)	
ARKW	ARK Next Generation Internet ETF	(\$8M)	G
CGW	Invesco S&P Global Water Index ETF	(\$7M)	

Thematic Monthly Flows





Developed Markets ex-U.S. Performance

October 17, 2023

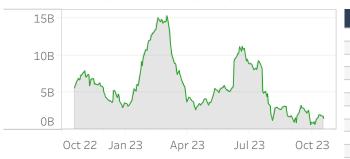
Developed ex-U.S. (EFA)





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

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



Developed ex-U.S. Monthly Flows

Mar 23

Apr 23 May .. Jun 23 Jul 23 Aug 23 Sep 23 Oct 23

10B

5B

0B

Oct 22 Nov 22 Dec 22 Jan 23 Feb 23 Developed ex-U.S. 1-Day Performance Leaders

Ticker	Fund	
EWA	iShares MSCI Australia ETF	0.42%
HEWJ	iShares Currency Hedged MSCI Japan ETF	0.41%
FLJH	Franklin FTSE Japan Hedged ETF	0.35%
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	0.33%
BBAX	JPMorgan BetaBuilders Developed Asia Pacific-ex Japan ETF	0.33%
PXF	Invesco FTSE RAFI Developed Markets ex-U.S. ETF	0.30%
NUDM	Nuveen ESG International Developed Markets Equity ETF	0.29%
FLGB	Franklin FTSE United Kingdom ETF	0.29%
EWU	iShares MSCI United Kingdom ETF	0.28%
EWS	iShares MSCI Singapore ETF	0.27%

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

Ticker	Fund	
EWD	iShares MSCI Sweden ETF	-1.19%
IMFL	Invesco International Developed Dynamic Multifactor ETF	-0.74%
EIRL	iShares MSCI Ireland ETF	-0.72%
EWL	iShares MSCI Switzerland ETF	-0.68%
MINV	Matthews Asia Innovators Active ETF	-0.64%
BKCI	BNY Mellon Concentrated International ETF	-0.51%
NORW	Global X MSCI Norway ETF	-0.49%
FSZ	First Trust Switzerland AlphaDEX Fund	-0.45%
FDT	First Trust Developed Markets ex-US AlphaDEX Fund	-0.42%
EDEN	iShares MSCI Denmark ETF	-0.42%

Developed ex-U.S. Most Overbought

Ticker	Fund	
EWU	iShares MSCI United Kingdom ETF	55.61
FLGB	Franklin FTSE United Kingdom ETF	54.29
LVHI	Franklin International Low Volatility High Dividend Index	53.44
NORW	Global X MSCI Norway ETF	52.78
TTAI	FCF International Quality ETF	52.64
ТОК	iShares MSCI Kokusai ETF	52.64
EWD	iShares MSCI Sweden ETF	52.54
IDHQ	Invesco S&P International Developed High Quality ETF	52.30
DXJ	WisdomTree Japan Hedged Equity Fund	51.68
FLCA	Franklin FTSE Canada ETF	51.41

Developed ex-U.S. Most Oversold

Ticker	Fund	
ISRA	VanEck Israel ETF	22.80
EIS	iShares MSCI Israel ETF	24.72
EFAD	ProShares MSCI EAFE Dividend Growers ETF	35.98
GWX	SPDR S&P International Small Cap ETF	36.89
PDN	Invesco FTSE RAFI Developed Markets ex-US Small	37.15
SCJ	iShares MSCI Japan Small-Cap ETF	37.70
SCZ	iShares MSCI EAFE Small-Cap ETF	38.24
FNDC	Schwab Fundamental International Small Co. Index	39.02
ISCF	iShares International SmallCap Equity Factor ETF	39.14
DFIS	Dimensional International Small Cap ETF	39.88

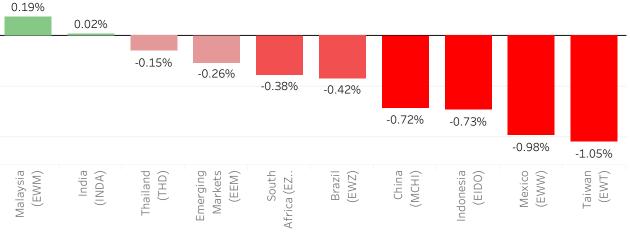


Emerging (EEM)

Emerging Markets Performance

October 17, 2023





Emerging 1-Day Performance Top 10 Countries

Emerging 30-Day Rolling Flows



Emerging Monthly Flows

Apr 23

May 23 Jun 23 Jul 23 Aug 23 Sep 23 Oct 23

5B

0B

0ct 22

Nov 22 Dec 22 Jan 23 Feb 23 Mar 23 Emerging 1-Day Performance Leaders

Ticker	Fund	
EPOL	iShares MSCI Poland ETF	2.65%
ECH	iShares MSCI Chile ETF	1.84%
FLN	First Trust Latin America AlphaDEX Fund	1.83%
KSA	iShares MSCI Saudi Arabia ETF	1.06%
FRDM	Freedom 100 Emerging Markets ETF	0.83%
TUR	iShares MSCI Turkey ETF	0.82%
EPHE	iShares MSCI Philippines ETF	0.41%
FEMS	First Trust Emerging Markets Small Cap AlphaDEX Fund	0.29%
GLIN	VanEck India Growth Leaders ETF	0.26%
NUEM	Nuveen ESG Emerging Markets Equity ETF	0.21%

Emerging 1-Day Performance Laggards

Ticker	Fund	
EWZS	iShares MSCI Brazil Small-Cap ETF	-1.32%
PIE	Invesco Dorsey Wright Emerging Markets Momentum E	-1.30%
EWT	iShares MSCI Taiwan ETF	-1.05%
EWW	iShares MSCI Mexico ETF	-0.98%
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	-0.98%
FLTW	Franklin FTSE Taiwan ETF	-0.94%
PGJ	Invesco Golden Dragon China ETF	-0.91%
EYLD	Cambria Emerging Shareholder Yield ETF	-0.90%
EDIV	SPDR S&P Emerging Markets Dividend ETF	-0.80%
FLCH	Franklin FTSE China ETF	-0.76%

Emerging Most Overbought

	Ticker	Fund	
ó	EPOL	iShares MSCI Poland ETF	70.51
б	SMIN	iShares MSCI India Small Cap ETF	58.64
6	GLIN	VanEck India Growth Leaders ETF	58.29
б	EPI	WisdomTree India Earnings Fund	57.76
6	NFTY	First Trust India NIFTY 50 Equal Weight ETF	55.86
б	EZA	iShares MSCI South Africa ETF	55.69
6	FRDM	Freedom 100 Emerging Markets ETF	55.42
ó	INDA	iShares MSCI India ETF	55.40
6	FLIN	Franklin FTSE India ETF	55.18
б	INDY	iShares India 50 ETF	54.16

Emerging Most Oversold

Ticker	Fund	
EIDO	iShares MSCI Indonesia ETF	28.08
RAYC	Rayliant Quantamental China Equity ETF	35.21
CNYA	iShares MSCI China A ETF	35.92
KBA	KraneShares Bosera MSCI China A 50 Connect Index	36.20
VNM	VanEck Vietnam ETF	36.62
THD	iShares MSCI Thailand ETF	37.10
ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	37.83
QAT	iShares MSCI Qatar ETF	38.87
EWW	iShares MSCI Mexico ETF	39.10
DGS	WisdomTree Emerging Markets SmallCap Dividend F	39.21

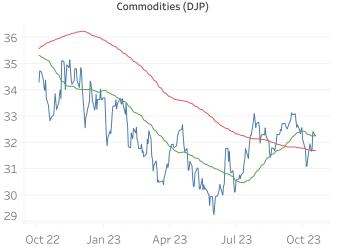


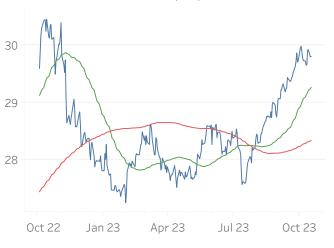
Fixed Income, Commodities & Currencies

October 17, 2023

Fixed Income (AGG)







Currencies Performance

Currencies (UUP)

Fixed Income Performance

Ticker Name 1 Month YTD Ticker Name 1 Day 1 Month YTD Ticker Name 1 Month 1 Day 1 Day 0.06% -2.39% -4.21% DJP Broad Commodities -2.43% -0.72% -2.92% AGG U.S. Aggregate 0.03% 1.33% 7.19% UUP Long Dollar DBE Energy 0.22% -4.27% 1.99% SHY -0.22% 0.01% 1.54% 1-3 Year Treasury Bonds USO WTI Crude Oil 0.52% -3.06% 12.39% IEF 7-10 Year Treasury Bonds -0.98% -3.27% -4.23% 0.16% -0.49% -0.54% UDN Short Dollar BNO Brent Crude Oil 0.35% -2.60% 11.32% -8.00% -12.24% TLT 20+ Year Treasury Bonds -1.10% UNG -1.37% 5.43% -49.08% Natural Gas 0.37% -13.33% UGA Gasoline 7.89% -0.50% 0.23% 0.07% FXE Euro -0.48% -2.00% -1.35% TIP **TIPS Bonds** DBP Precious Metals 0.46% -0.25% 2.54% 0.00% 0.45% 5.08% FLOT Floating Rate Bonds -0.03% GLD Gold 0.19% 5.10% FXB British Pound Sterling -0.27% -1.38% 3.11% -0.79% -3.92% -2.32% LQD Investment Grade Corporate SLV Silver 1.16% -0.90% -5.00% PPLT abrdn Physical Platin. 0.57% -3.26% -16.55% HYG High Yield Corporate -0.47% -2.50% 2.80% FXF -0.04% -0.31% 2.43% Swiss Franc PALL abrdn Physical Palla. -0.78% -8.71% -36.31% -0.19% -0.38% 9.26% BKLN Senior Loan -0.33% -2.69% DBB Base Metals -7.35% -0.66% -5.26% -1.12% PFF Preferred & Income Securities -0.21% -1.34% -12.81% FXY CPER Copper 0.05% -5.29% -3.85% Japanese Yen -0.49% -2.60% -1.63% 0.60% 8.49% MUB Municipal Bonds DBA -2.15% Agriculture CORN Corn -0.18% 2.78% -16.15% FXC Canadian Dollar -0.20% -0.70% 0.88% -0.78% -3.99% -4.06% MBS MBB 0.73% -2.00% -3.62% SOYB Soybeans -0.48% -3.87% -0.86% EMB Dollar Denominated EM Bonds -0.86% WEAT Wheat -3.68% -27.82% FXA Australian Dollar 0.34% -0.94% -5.73% -0.06% -3.31% -0.75% LEMB Local Currency EM Bond CANE Sugar 1.26% 1.60% 59.60%

Commodities Performance

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