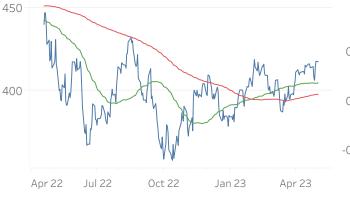


U.S. Size & Style Performance

Large Growth

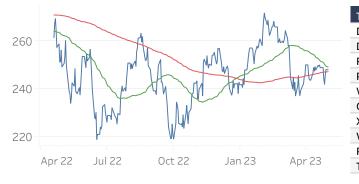
Large Cap Blend (S&P 500) IVV



Large Value (IVE) Large Cap (IVV) Mid Value (IJJ) Mid Growth (IJK) Small Value (IJS) Small Cap (IJR) Small Growth (IJT) Mid Cap (IJH) (IVW) 0.22% 0.2% 0.15% 0.0% -0.03% -0.03% -0.03% -0.07% -0.2% -0.16% -0.22% -0.30%

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	
DWAS	Invesco DWA SmallCap Momentum ETF	0.85%
DVOL	First Trust Dorsey Wright Momentum & Low Volatility E	0.71%
FPX	First Trust US Equity Opportunities ETF	0.64%
RZG	Invesco S&P Smallcap 600 Pure Growth ETF	0.61%
VFMO	Vanguard U.S. Momentum Factor ETF	0.54%
CWS	AdvisorShares Focused Equity ETF	0.53%
XRLV	Invesco S&P 500 ex-Rate Sensitive Low Volatility ETF	0.52%
VTWG	Vanguard Russell 2000 Growth ETF	0.52%
FTCS	First Trust Capital Strength ETF	0.52%
TMFM	Motley Fool Mid-Cap Growth ETF	0.51%

Size & Style 1-Day Performance Laggards

Ticker	Fund	
FCTR	First Trust Lunt U.S. Factor Rotation ETF	-1.59%
RDIV	Invesco S&P Ultra Dividend Revenue ETF	-1.05%
BUZZ	VanEck Social Sentiment ETF	-0.98%
FYT	First Trust Small Cap Value AlphaDEX Fund	-0.83%
WBIY	WBI Power Factor High Dividend ETF	-0.79%
RDVY	First Trust Rising Dividend Achievers ETF	-0.70%
FDL	First Trust Morningstar Dividend Leaders Index Fund	-0.70%
DIV	Global X SuperDividend US ETF	-0.69%
PEY	Invesco High Yield Equity Dividend Achievers ETF	-0.65%
DUSA	Davis Select U.S. Equity ETF	-0.65%

200 Day Moving Average

Size & Style Most Overbought

Ticker	Fund	_
SPC	CrossingBridge Pre-Merger SPAC ETF	70.58
ABEQ	Absolute Select Value ETF	67.29
XLG	Invesco S&P 500 Top 50 ETF	65.70
FDLO	Fidelity Low Volatility Factor ETF	65.52
SPUS	SP Funds S&P 500 Sharia Industry Exclusions ETF	65.46
HUSV	First Trust Horizon Managed Volatility Domestic ETF	64.73
TMFC	Motley Fool 100 Index ETF	64.61
VSMV	VictoryShares US Multi-Factor Minimum Volatility ETF	64.26
OEF	iShares S&P 100 ETF	63.78
QDEF	FlexShares Quality Dividend Defensive Index Fund	63.64

Size & Style Most Oversold

	Ticker	Fund	
%	FCTR	First Trust Lunt U.S. Factor Rotation ETF	33.41
%	XSLV	Invesco S&P SmallCap Low Volatility ETF	38.26
%	AIEQ	AI Powered Equity ETF	38.91
%	SIXS	ETC 6 Meridian Small Cap Equity ETF	39.87
%	SVAL	iShares US Small Cap Value Factor ETF	40.13
%	QMOM	Momentumshares US Quantitative Momementum E	40.86
%	SMLV	SPDR SSGA US Small Cap Low Volatility Index ETF	41.22
%	SMDV	ProShares Russell 2000 Dividend Growers ETF	41.38
%	FDM	First Trust Dow Jones Select MicroCap Index Fund	42.50
%	XSVM	Invesco S&P SmallCap Value with Momentum ETF	43.05

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



U.S. Size & Style Flows

Large-Cap 30-Day Rolling Flows



Mid-Cap 30-Day Rolling Flows



Small-Cap 30-Day Rolling Flows



	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Large Cap, Beta, Beta	25	\$1,296B	(\$3.92B)	(\$3.82B)	(\$17.25B)	\$60.73B
Large Cap, Beta, Beta: Growth	10	\$248B	(\$0.21B)	\$3.43B	\$8.71B	\$21.66B
Large Cap, Beta, Beta: Value	11	\$221B	(\$0.13B)	(\$3.84B)	(\$5.85B)	\$3.27B
Mid Cap, Beta, Beta	10	\$184B	(\$0.01B)	\$0.41B	\$4.61B	\$10.35B
Mid Cap, Beta, Beta: Growth	6	\$33B	(\$0.02B)	\$0.21B	(\$0.08B)	\$1.18B
Mid Cap, Beta, Beta: Value	6	\$39B	(\$0.05B)	(\$0.75B)	(\$0.95B)	\$0.83B
Small Cap, Beta, Beta	13	\$186B	(\$1.47B)	(\$1.63B)	\$1.42B	\$3.20B
Small Cap, Beta, Beta: Growth	7	\$31B	(\$0.01B)	(\$0.06B)	\$0.37B	\$1.46B
Small Cap, Beta, Beta: Value	7	\$47B	(\$0.03B)	(\$0.79B)	\$0.24B	(\$0.16B)

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	\$1.61B	\$2.65B	(\$1.31B)	(\$0.68B)	\$173.94B
VOO	Vanguard S&P 500 ETF	\$0.73B	\$7.25B	\$5.82B	\$33.19B	\$293.28B
IVV	iShares Core S&P 500 ETF	\$0.43B	(\$2.10B)	(\$5.34B)	\$16.24B	\$311.84B
OMFL	Invesco Russell 1000 Dynamic Multifactor ETF	\$0.36B	\$0.98B	\$1.12B	\$1.37B	\$3.50B
VTI	Vanguard Total Stock Market ETF	\$0.16B	\$2.01B	\$8.87B	\$19.58B	\$285.50B
XMHQ	Invesco S&P MidCap Quality ETF	\$0.14B	\$0.29B	\$0.37B	\$0.36B	\$0.71B
QUAL	iShares MSCI USA Quality Factor ETF	\$0.14B	\$8.68B	\$8.35B	\$6.30B	\$28.55B
JEPQ	J.P. Morgan Nasdaq Equity Premium Income	\$0.13B	\$0.86B	\$1.67B	\$2.30B	\$2.43B
SCHD	Schwab US Dividend Equity ETF	\$0.13B	\$2.23B	\$7.04B	\$14.14B	\$46.66B
SPLV	Invesco S&P 500 Low Volatility ETF	\$0.08B	(\$0.22B)	(\$0.18B)	\$0.66B	\$10.29B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IWM	iShares Russell 2000 ETF	(\$1.36B)	(\$2.77B)	(\$2.63B)	(\$2.51B)	\$48.68B
RSP	Invesco S&P 500 Equal Weight ETF	(\$0.35B)	(\$1.03B)	\$1.45B	\$2.02B	\$33.75B
DIA	SPDR Dow Jones Industrial Average ETF Trust	(\$0.29B)	(\$2.02B)	(\$2.18B)	(\$1.08B)	\$28.40B
IWF	iShares Russell 1000 Growth ETF	(\$0.24B)	(\$0.69B)	(\$2.17B)	\$0.47B	\$63.31B
MTUM	iShares MSCI USA Momentum Factor ETF	(\$0.21B)	(\$2.26B)	(\$2.28B)	(\$0.79B)	\$9.63B
IJR	iShares Core S&P Small Cap ETF	(\$0.13B)	\$0.35B	\$1.21B	\$2.76B	\$64.94B
RPG	Invesco S&P 500 Pure Growth ETF	(\$0.08B)	(\$0.25B)	(\$0.30B)	(\$0.23B)	\$1.95B
RPV	Invesco S&P 500 Pure Value ETF	(\$0.07B)	(\$0.64B)	(\$0.55B)	(\$0.73B)	\$2.72B
SPYD	SPDR Portfolio S&P 500 High Dividend ETF	(\$0.06B)	(\$0.64B)	(\$0.92B)	\$1.09B	\$6.74B
IWP	iShares Russell Mid-Cap Growth ETF	(\$0.06B)	(\$0.02B)	(\$0.48B)	(\$0.09B)	\$12.01B

* 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

2.33%

Biotech (XBI)							
Semiconductor (XSD)							1.07%
Pharmaceuticals (XPH)							0.83%
Insurance (KIE)						0.	59%
Industrial (XLI)						0.	54%
Health Care (XLV)						0.	52%
Health Care Equipment (XHE)						0.	50%
Health Care Svcs (XHS)						0.4	49%
Transportation (XTN)						0.3	8%
Aerospace & Defense (XAR)						0.26	5%
Utilities (XLU)						0.17	%
Cons Staples (XLP)						0.089	%
Technology (XLK)						0.06	%
Telecom (XTL)				-0.01	%		
Comm Svcs (XLC)				-0.02	%		
Materials (XLB)				-0.05	%		
S&P 500 (SPY)				-0.10	%		
Internet (XWEB)				-0.179	6		
Software & Svcs (XSW)				-0.23%	б		
Oil & Gas Equip. & Svcs (XES)				-0.26%	б		
Financials (XLF)				-0.27%	6		
Homebuilders (XHB)				-0.45%			
Retail (XRT				-0.57%			
Oil & Gas Expl. & Prod (XOP)				-0.70%			
Capital Mkts (KCE)				-0.75%			
Real Estate (XLRE)			-(0.93%			
Cons Discretionary (XLY)			-C	.99%			
Energy (XLE)			-1.	13%			
Metals & Mining (XME)			-1.3	19%			
Banks (KBE)		-2.21	.%				
Regional Banking (KRE)	-2	2.81%					
	-4.(0%	-2.	0%	0.0	1%	2.0%

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	0.00%	16.54%	4.71%	5.50%	71.26
XLK	Technology Select Sector SPDR Fund	-0.42%	29.48%	4.65%	11.56%	60.64
XLC	Communication Services Select Sector SPDR Fund	-1.72%	31.89%	6.40%	12.85%	63.16
XLI	Industrial Select Sector SPDR Fund	-3.02%	21.37%	0.85%	3.62%	54.09
SPY	SPDR S&P 500 ETF Trust	-3.30%	16.53%	3.21%	4.96%	60.40
XLV	Health Care Select Sector SPDR Fund	-4.20%	11.95%	3.28%	2.36%	57.97
XLB	Materials Select Sector SPDR Fund	-8.64%	19.59%	0.81%	2.79%	51.91
XLE	Energy Select Sector SPDR Fund	-10.53%	24.71%	0.65%	0.10%	48.10
XLF	Financial Select Sector SPDR Fund	-10.59%	9.21%	0.09%	-2.47%	53.91
XLU	Utilities Select Sector SPDR Fund	-11.55%	12.32%	2.57%	-0.86%	53.67
XLY	Consumer Discretionary Select Sector SPDR Fund	-15.36%	15.95%	1.25%	0.05%	51.47
XLRE	Real Estate Select Sector SPDR Fund	-18.23%	10.75%	0.77%	-3.34%	52.86

Sector & Industry 1 Day Performance Leaders

Ticker	Fund	
XBI	SPDR S&P BIOTECH ETF	2.33%
IYT	iShares US Transportation ETF	1.56%
PJP	Invesco Dynamic Pharmaceuticals ETF	1.43%
PSCH	Invesco S&P SmallCap Health Care ETF	1.34%
PBE	Invesco Dynamic Biotechnology & Genome ETF	1.20%
PSI	Invesco Dynamic Semiconductors ETF	1.09%
PTH	Invesco DWA Healthcare Momentum ETF	1.08%
XSD	SPDR S&P Semiconductor ETF	1.07%
PEJ	Invesco Dynamic Leisure & Entertainment ETF	1.04%
SOXQ	Invesco PHLX Semiconductor ETF	0.93%

Sector & Industry 1 Day Performance Laggards

Ticker	Fund	
IAT	iShares U.S. Regional Banks ETF	-3.46%
KRE	SPDR S&P Regional Banking ETF	-2.81%
KBWR	Invesco KBW Regional Banking ETF	-2.62%
REM	iShares Mortgage Real Estate ETF	-2.39%
KBE	SPDR S&P Bank ETF	-2.21%
MORT	VanEck Mortgage REIT Income ETF	-2.18%
KBWB	Invesco KBW Bank ETF	-1.80%
FTXO	First Trust Nasdaq Bank ETF	-1.76%
QABA	First Trust NASDAQ ABA Community Bank Index Fund	-1.74%
FXO	First Trust Financials AlphaDEX Fund	-1.59%

Sector & Industry Most Overbought

Ticker	Fund	
IYK	iShares U.S. Consumer Staples ETF	72.84
VDC	Vanguard Consumer Staples ETF	72.66
FTXG	First Trust Nasdaq Food & Beverage ETF	72.39
RHS	Invesco S&P 500 Equal Weight Consumer Staples ETF	72.25
FSTA	FIDELITY COVINGTON TRUST MSCI CONSUMER STAPLES	71.98
PSL	Invesco DWA Consumer Staples Momentum ETF	71.65
XLP	Consumer Staples Select Sector SPDR Fund	71.26
PBJ	Invesco Dynamic Food & Beverage ETF	68.81
FXG	First Trust Consumer Staples AlphaDEX Fund	67.47
ITB	iShares U.S. Home Construction ETF	65.99

Sector & Industry Most Oversold

Ticker	Fund	
XSD	SPDR S&P Semiconductor ETF	34.02
QABA	First Trust NASDAQ ABA Community Bank Index Fund	34.36
XME	SPDR S&P Metals & Mining ETF	36.68
PSCT	Invesco S&P SmallCap Information Technology ETF	36.79
PTF	Invesco DWA Technology Momentum ETF	37.23
IGN	iShares North American Tech-Multimedia Networking ETF	38.32
KRE	SPDR S&P Regional Banking ETF	39.20
KBWB	Invesco KBW Bank ETF	39.90
KBWR	Invesco KBW Regional Banking ETF	39.91
XTL	SPDR S&P Telecom ETF	40.06
	XSD QABA XME PSCT PTF IGN KRE KBWB KBWR	XSD SPDR S&P Semiconductor ETF QABA First Trust NASDAQ ABA Community Bank Index Fund XME SPDR S&P Metals & Mining ETF PSCT Invesco S&P SmallCap Information Technology ETF PTF Invesco DWA Technology Momentum ETF IGN iShares North American Tech-Multimedia Networking ETF KRE SPDR S&P Regional Banking ETF KBWB Invesco KBW Bank ETF KBWR Invesco KBW Regional Banking ETF

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

2.0%

U.S. Sector Landscape

U.S. Sector & Industry 1-Week Flows



	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services	7	\$15B	\$3M	\$1,083M	\$1,063M	\$820M
Consumer Discretionary	12	\$23B	\$15M	\$937M	\$297M	(\$1,337M)
Consumer Staples	10	\$32B	\$80M	\$1,191M	\$2,310M	\$3,668M
Energy	32	\$72B	(\$283M)	(\$5,035M)	(\$6,401M)	(\$9,409M)
Financials	26	\$57B	\$277M	\$2,325M	\$1,586M	(\$5,901M)
Health Care	23	\$92B	(\$347M)	(\$3,293M)	(\$2,528M)	\$1,104M
Industrial	13	\$31B	(\$56M)	\$213M	\$1,590M	(\$1,313M)
Materials	9	\$14B	(\$170M)	(\$258M)	\$504M	(\$3,025M)
Multi-Sector	19	\$14B	(\$23M)	\$185M	(\$375M)	(\$1,856M)
Real Estate	25	\$56B	(\$87M)	(\$2,779M)	(\$2,733M)	(\$6,582M)
Technology	23	\$131B	(\$578M)	\$6M	(\$1,427M)	(\$312M)
Utilities	9	\$25B	\$66M	\$58M	\$4M	\$1,660M

U.S. Sector Landscape

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLF	Financial Select Sector SPDR Fund	\$318M	\$1,568M	\$1,999M	(\$2,520M)	\$32,388M
XRT	SPDR S&P Retail ETF	\$88M	\$70M	\$41M	(\$62M)	\$405M
XLU	Utilities Select Sector SPDR Fund	\$72M	\$407M	\$311M	\$1,171M	\$16,165M
XLP	Consumer Staples Select Sector SPDR Fund	\$50M	\$966M	\$1,574M	\$1,935M	\$18,737M
IYT	iShares US Transportation ETF	\$44M	\$66M	\$34M	(\$258M)	\$823M
FDN	First Trust Dow Jones Internet Index Fund	\$35M	(\$190M)	(\$564M)	(\$683M)	\$3,928M
KBE	SPDR S&P Bank ETF	\$29M	\$35M	(\$406M)	(\$712M)	\$1,390M
ITA	iShares U.S. Aerospace & Defense ETF	\$28M	\$662M	\$1,580M	\$1,796M	\$5,910M
VCR	Vanguard Consumer Discretionary ETF	\$25M	\$24M	(\$222M)	(\$859M)	\$4,148M
RHS	Invesco S&P 500 Equal Weight Consumer Stapl	\$23M	\$319M	\$397M	\$494M	\$1,100M

U.S. Sector & Industry Flow Laggards

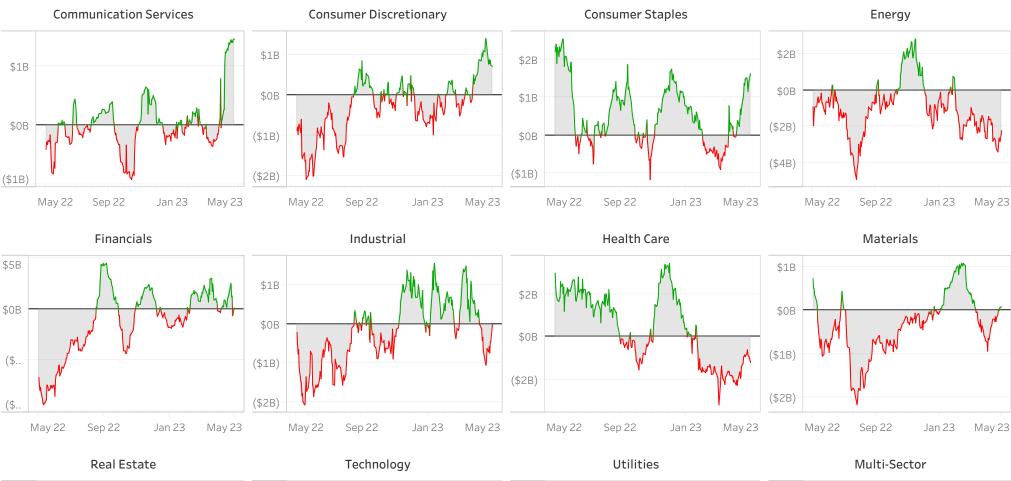
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLE	Energy Select Sector SPDR Fund	(\$216M)	(\$1,326M)	(\$1,964M)	(\$2,083M)	\$38,468M
VGT	Vanguard Information Technology ETF	(\$168M)	(\$612M)	(\$619M)	(\$858M)	\$46,062M
XLK	Technology Select Sector SPDR Fund	(\$148M)	(\$1,718M)	(\$2,189M)	(\$2,133M)	\$43,228M
IGV	iShares Expanded Tech-Software Sector ETF	(\$148M)	\$31M	(\$602M)	\$716M	\$5,145M
XLV	Health Care Select Sector SPDR Fund	(\$144M)	(\$992M)	(\$538M)	\$2,201M	\$39,808M
IBB	iShares Biotechnology ETF	(\$123M)	(\$730M)	(\$362M)	(\$440M)	\$7,885M
XLY	Consumer Discretionary Select Sector SPDR Fu	(\$115M)	\$26M	(\$461M)	(\$962M)	\$14,435M
XLI	Industrial Select Sector SPDR Fund	(\$107M)	(\$640M)	(\$268M)	(\$1,723M)	\$13,276M
SOXX	iShares Semiconductor ETF	(\$81M)	\$113M	\$141M	(\$300M)	\$7,234M
XME	SPDR S&P Metals & Mining ETF	(\$79M)	(\$259M)	\$70M	(\$664M)	\$1,962M

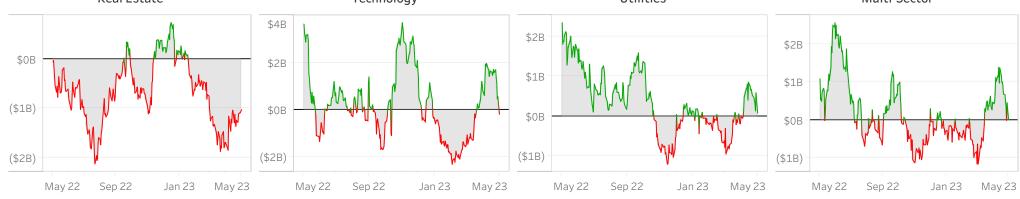
* ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day



U.S. Sector Rolling 30-Day Flows

May 1, 2023





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



Casinos & Gaming (BETZ)

Genomics (ARKG)

Water (PHO)

Cannabis (MJ)

3D Printing (PRNT)

Industrial Revolution (ARKQ)

Clean Energy: Wind (FAN)

Smart Infrastructure (GRID)

Evolving Consumer (SOCL)

NextGen Transportation (DRIV)

eSports & Video Games (ESPO

Digital Infrastructure (SRVR)

Multi-Theme (ARKK)

Cloud Computing (SKYY)

Cyber Security (HACK)

Online Retail (IBUY)

Digital Payments (IPAY)

Clean Energy: Solar (TAN)

Disruptive Tech (ARKW)

FinTech (FINX) Clean Energy (PBW)

Blockchain (BLOK)

Advanced Materials (REMX)

Robotics & AI (ROBO)

Connectivity (FIVG)

Space (UFO)

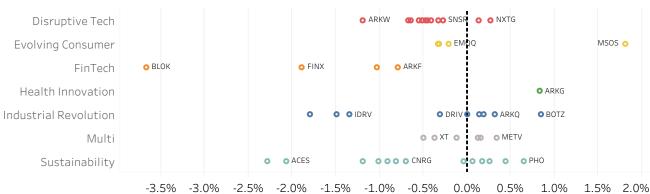
Big Data (AIQ)

Global Thematic Segment 1-Day Performance

Biotech ..

Global Thematic Performance

May 1, 2023



Global Thematic 1-Day Performance Landscape

Global Thematic 1-Day Performance Leaders

Ticker	Fund	
IZRL	ARK Israel Innovative Technology ETF	3.24%
MJUS	ETFMG U.S. Alternative Harvest ETF	2.74%
SBIO	ALPS Medical Breakthroughs ETF	2.13%
MSOS	AdvisorShares Pure US Cannabis ETF	1.81%
BTEC	Principal Healthcare Innovators ETF	1.70%
BETZ	Roundhill Sports Betting & iGaming ETF	1.65%
EDOC	Global X Telemedicine & Digital Health ETF Registered	1.11%
TIME	Clockwise Capital Innovation ETF	1.01%
GNOM	Global X Genomics & Biotechnology ETF	0.98%
BOTZ	Global X Robotics & Artificial Intelligence ETF	0.84%

Global Thematic 1-Day Performance Laggards

Ticker	Fund	
вксн	Global X Blockchain ETF	-5.64%
BITQ	Bitwise Crypto Industry Innovators ETF	-5.41%
BLOK	Amplify Transformational Data Sharing ETF	-3.67%
PBW	Invesco WilderHill Clean Energy ETF	-2.29%
ACES	ALPS Clean Energy ETF	-2.07%
FINX	Global X FinTech ETF	-1.89%
REMX	VanEck Rare Earth/Strategic Metals ETF	-1.80%
BLCN	Siren ETF Trust Siren Nasdaq NexGen Economy ETF	-1.66%
LIT	Global X Lithium & Battery Tech ETF	-1.49%
ONLN	ProShares Online Retail ETF	-1.39%

Thematic Most Overbought

	Ticker	Fund	
_	TICKER	Fulla	
ó	AGNG	Global X Aging Population ETF	67.68
ó	BETZ	Roundhill Sports Betting & iGaming ETF	67.12
ó	BJK	VanEck Gaming ETF	65.40
б	SBIO	ALPS Medical Breakthroughs ETF	64.07
6	PAWZ	ProShares Pet Care ETF	63.36
б	GDOC	Goldman Sachs Future Health Care Equity ETF	59.80
6	MILN	Global X Millennial Consumer ETF	58.84
б	BTEC	Principal Healthcare Innovators ETF	58.78
6	TIME	Clockwise Capital Innovation ETF	57.69
б	PIO	Invesco Global Water ETF	57.39

Thematic Most Oversold

	Ticker	Fund	
6	QCLN	First Trust Nasdaq Clean Edge Green Energy Index Fund	32.50
6	BUG	Global X Cybersecurity ETF	32.86
6	CIBR	First Trust NASDAQ Cybersecurity ETF	33.15
6	IHAK	iShares Cybersecurity & Tech ETF	33.73
6	SNSR	Global X Internet of Things ETF	33.99
6	НАСК	ETFMG Prime Cyber Security ETFMG Prime Cyber Securit	34.40
6	PBW	Invesco WilderHill Clean Energy ETF	36.02
6	ICLN	iShares Global Clean Energy ETF	36.24
6	ARKW	ARK Next Generation Internet ETF	36.95
6	CTEC	Global X CleanTech ETF	37.07

-0.11% -0.12%

-0.25%

-0.31%

-0.33%

-0.50%

-0.55%

-0.65%

-0.67%

-0.68% -1.03%

-1.19%

-1.20% -1.80%

0.00%

-1.89%

-2.29%

-3.67% -5.00% -0.04%

2.13%

1.65%

0.83%

0.65%

0.60%

0.54%

0.31%

0.26%

0.19% 0.13%

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

5.00%



Global Thematic Flows

Thematic 1 Week Flow Leaders

Ticker	Fund	
AIQ	Global X Artificial Intelligence & Technology ETF	\$9M
GRID	First Trust Nasdaq Clean Edge Smart GRID Infrastructure Index	\$5M
FIW	First Trust Water ETF	\$4M
BJK	VanEck Gaming ETF	\$3M
TARK	AXS 2X Innovation ETF	\$3M
ROBT	First Trust Nasdaq Artificial Intelligence & Robotics ETF	\$2M
KOMP	SPDR S&P Kensho New Economies Composite ETF	\$1M
KSTR	KraneShares SSE STAR Market 50 Index ETF	\$1M
WTAI	WisdomTree Artificial Intelligence and Innovation Fund	\$1M
TMAT	Main Thematic Innovation ETF	\$1M

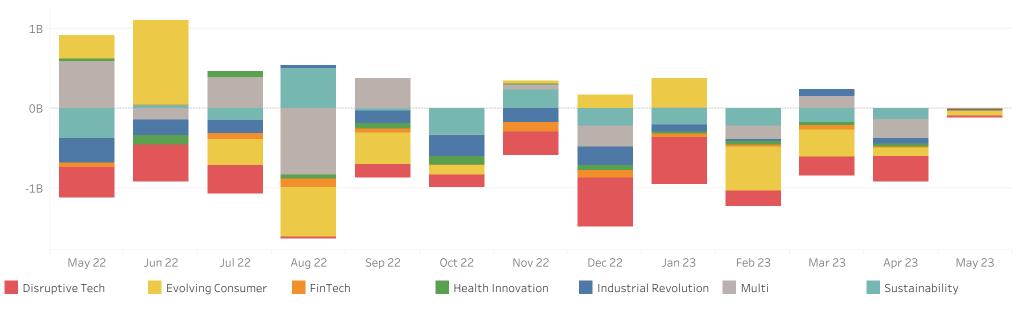
Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	34	\$14B	(\$68M)	(\$729M)	(\$2,236M)	(\$3,786M)
Evolving Consumer	44	\$8B	(\$143M)	(\$1,060M)	(\$493M)	(\$613M)
FinTech	18	\$3B	(\$9M)	(\$99M)	(\$320M)	(\$644M)
Health Innovation	18	\$3B	(\$21M)	(\$107M)	(\$193M)	(\$432M)
Industrial Revolution	31	\$10B	(\$38M)	(\$1M)	(\$506M)	(\$1,574M)
Multi	41	\$14B	(\$41M)	(\$250M)	(\$421M)	(\$48M)
Sustainability	40	\$16B	(\$74M)	(\$504M)	(\$687M)	(\$1,032M)
Grand Total	226	\$68B	(\$395M)	(\$2,750M)	(\$4,856M)	(\$8,128M)

Thematic Landscape Assets & Flows

Thematic 1 Week Flow Laggards

Ticker	Fund		h
KWEB	KraneShares CSI China Internet ETF	(\$133M)	
ARKK	ARK Innovation ETF	(\$63M)	
TAN	Invesco Solar ETF	(\$41M)	Ν
LIT	Global X Lithium & Battery Tech ETF	(\$40M)	
PBW	Invesco WilderHill Clean Energy ETF	(\$22M)	
CIBR	First Trust NASDAQ Cybersecurity ETF	(\$14M)	S
BUG	Global X Cybersecurity ETF	(\$13M)	
SKYY	First Trust Cloud Computing ETF	(\$13M)	
ARKG	ARK Genomic Revolution ETF	(\$13M)	e
BOTZ	Global X Robotics & Artificial Intelligence ETF	(\$12M)	

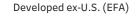
Thematic Monthly Flows



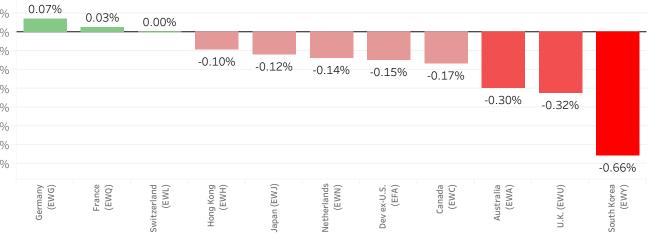
* ETF Landscape represented using the ETF Action classification system ** Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify *** Flows delayed one day



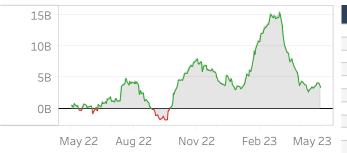
Developed Markets ex-U.S. Performance







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



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

Ticker	Fund	
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	1.08%
HEWJ	iShares Currency Hedged MSCI Japan ETF	0.70%
DXJ	WisdomTree Japan Hedged Equity Fund	0.67%
HEDJ	WisdomTree Europe Hedged Equity Fund	0.61%
DBEU	Xtrackers MSCI Europe Hedged Equity ETF	0.48%
HEZU	iShares Currency Hedged MSCI Eurozone ETF	0.47%
IHDG	WisdomTree International Hedged Quality Dividend Growth	0.45%
DBEF	Xtrackers MSCI EAFE Hedged Equity ETF	0.44%
HEFA	iShares Currency Hedged MSCI EAFE ETF	0.40%
HSCZ	iShares Currency Hedged MSCI EAFE Small-Cap ETF	0.39%

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

Ticker	Fund	
NORW	Global X MSCI Norway ETF	-0.90%
EWY	iShares MSCI South Korea ETF	-0.66%
DFJ	WisdomTree Japan SmallCap Dividend Fund	-0.64%
SCJ	iShares MSCI Japan Small-Cap ETF	-0.56%
IMFL	Invesco International Developed Dynamic Multifactor ETF	-0.55%
ICOW	Pacer Developed Markets International Cash Cows 100 ETF	-0.53%
FLKR	Franklin FTSE South Korea ETF	-0.52%
FYLD	Cambria Foreign Shareholder Yield ETF	-0.51%
AAXJ	iShares MSCI All Country Asia ex Japan ETF	-0.36%
DEEF	Xtrackers FTSE Developed ex US Multifactor ETF	-0.36%

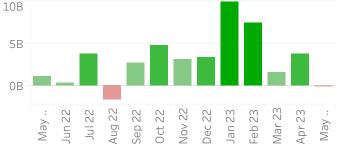
Developed ex-U.S. Most Overbought

Ticker	Fund	
EWL	iShares MSCI Switzerland ETF	70.32
FLSW	Franklin FTSE Switzerland ETF	70.08
HEWJ	iShares Currency Hedged MSCI Japan ETF	69.79
IHDG	WisdomTree International Hedged Quality Dividend Grow	69.41
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	69.33
EUDG	WisdomTree Europe Quality Dividend Growth Fund	69.24
DXJ	WisdomTree Japan Hedged Equity Fund	68.15
EFAV	iShares MSCI EAFE Min Vol Factor ETF	68.10
QLVD	FlexShares Developed Markets ex-US Quality Low Volatilit	67.89
LVHI	Franklin International Low Volatility High Dividend Index	66.38

Developed ex-U.S. Most Oversold

Ticker	Fund	
MINV	Matthews Asia Innovators Active ETF	43.01
AIA	iShares Asia 50 ETF	43.05
FLKR	Franklin FTSE South Korea ETF	45.47
EWY	iShares MSCI South Korea ETF	45.70
ISRA	VanEck Israel ETF	46.13
AAXJ	iShares MSCI All Country Asia ex Japan ETF	46.45
NORW	Global X MSCI Norway ETF	47.10
IVAL	Alpha Architect International Quantitative Value ETF	48.10
IMOM	Alpha Architect International Quantitative Moment	48.45
EWA	iShares MSCI Australia ETF	49.05

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

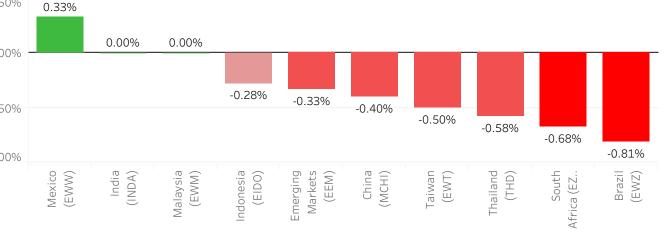


Emerging Markets Performance

May 1, 2023

Emerging (EEM)





Ticker Fund

GLIN

FLIN

INDA

PIN

EPI

NFTY

INDY

KSA EIDO

SMIN

Emerging 1-Day Performance Top 10 Countries

Emerging 30-Day Rolling Flows



Emerging Monthly Flows

Nov 22 Dec 22 Jan 23 Feb 23 Mar 23

Sep 22 Oct 22

5B

0B

May 22

Jul 22 Aug 22

Jun 22

Emerging 1-Day Performance Leaders

Ticker	Fund	
QAT	iShares MSCI Qatar ETF	0.98%
FLN	First Trust Latin America AlphaDEX Fund	0.78%
GLIN	VanEck India Growth Leaders ETF	0.48%
FEMS	First Trust Emerging Markets Small Cap AlphaDEX Fund	0.45%
EWW	iShares MSCI Mexico ETF	0.33%
INDY	iShares India 50 ETF	0.23%
PIE	Invesco DWA Emerging Markets Momentum ETF	0.22%
NFTY	First Trust India NIFTY 50 Equal Weight ETF	0.17%
PIN	Invesco India ETF	0.12%
FLIN	Franklin FTSE India ETF	0.03%

Emerging 1-Day Performance Laggards

Ticker	Fund	
ECH	iShares MSCI Chile ETF	-0.92%
DBEM	Xtrackers MSCI Emerging Markets Hedged Equity ETF	-0.85%
EWZ	iShares MSCI Brazil ETF	-0.81%
CNYA	iShares MSCI China A ETF	-0.81%
FLBR	Franklin FTSE Brazil ETF	-0.80%
ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	-0.79%
EWZS	iShares MSCI Brazil Small-Cap ETF	-0.74%
КВА	KraneShares Bosera MSCI China A 50 Connect Index ETF	-0.69%
EZA	iShares MSCI South Africa ETF	-0.68%
GEM	Goldman Sachs ActiveBeta Emerging Markets Equity ETF	-0.67%

Emerging Most Oversold

Emerging Most Overbought

VanEck India Growth Leaders ETF

WisdomTree India Earnings Fund

iShares MSCI India Small Cap ETF

First Trust India NIFTY 50 Equal Weight ETF

Franklin FTSE India ETF

iShares MSCI India ETF

Invesco India ETF

iShares India 50 ETF iShares MSCI Saudi Arabia ETF

iShares MSCI Indonesia ETF

Ticker	Fund	
TUR	iShares MSCI Turkey ETF	29.46
THD	iShares MSCI Thailand ETF	38.65
EWM	iShares MSCI Malaysia ETF	39.33
RAYC	Rayliant Quantamental China Equity ETF	40.64
ECNS	iShares MSCI China Small-Cap ETF	41.11
KBA	KraneShares Bosera MSCI China A 50 Connect Index	41.35
PGJ	Invesco Golden Dragon China ETF	41.40
FLTW	Franklin FTSE Taiwan ETF	41.46
EWT	iShares MSCI Taiwan ETF	41.98
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	42.08

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

Apr 23 May 23 73.52

72.57

71.27

71.07 70.88

70.68

70.37

69.56

69.10

68.32

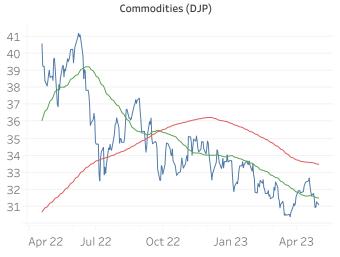


Fixed Income, Commodities & Currencies





Fixed Income Performance







Ticker	Name	1 Day	1 Month	YTD	Ticker	Name	1 Day	1 Month	YTD	Ticker	Name	1 Day	1 Month	YTD
AGG	U.S. Aggregate	-1.02%	-0.45%	2.76%	DJP	Broad Commodities	-0.54%	-1.49%	-7.68%		Long Dollar		0.04%	0.29%
AUU		1.02.70	011070	2.7 0 70	DBE	Energy	-0.84%	-2.21%	-11.38%	UUP		0.50%		
SHY	1-3 Year Treasury Bonds	-0.22%	0.03%	1.64%	USO	WTI Crude Oil	-1.41%	0.17%	-5.08%					
					BNO	Brent Crude Oil	-1.08%	0.26%	-5.76%				0.59%	2.05%
IEF	7-10 Year Treasury Bonds	-1.17%	-0.37%	3.54%	UNG	Natural Gas	-3.57%	-2.59%	-52.06%	UDN	Short Dollar	-0.63%		
		2.000/	0.55%	4.0.404	UGA	Gasoline	1.15%	-2.90%	-1.52%					
TLT	20+ Year Treasury Bonds	-2.88%	-2.55%	4.64%	DBP	Precious Metals	-0.41%	1.12%	7.42%				1.26%	2.83%
TIP	TIPS Bonds	-0.83%	-0.78%	2.78%	GLD	Gold	-0.45%	0.41%	8.45%	FXE	Euro	-0.44%		
	TIPS BUILDS	0.0370	0.7070	2.7070	SLV	Silver	-0.48%	3.48%	3.95%		20.0			
FLOT	Floating Rate Bonds	-0.08%	0.83%	1.80%	PPLT	abrdn Physical Platin	-1.81%	6.17%	-1.68%		British Pound Sterling		1.50%	4.26%
					PALL	abrdn Physical Palla	-3.39%	-0.59%	-18.69%	FXB		-0.56%		
LQD	Investment Grade Corporate	-1.61%	-1.02%	3.59%	DBB	Base Metals	0.94%	-4.21%	-0.51%			0.0070		
					CPER	Copper	1.13%	-3.29%	4.46%		Swiss Franc		2.03%	2.96%
HYG	High Yield Corporate	-0.46%	-0.26%	3.46%	LD	Lead	1.66%	4.09%	-4.83%	FXF		-0.30%		
BKLN	Continue	0.00%	1.08%	4.34%	ЛЛИ	Nickel	1.00%	3.58%	-17.97%	FAF				
BKLIN	Senior Loan	0.00%	1.00%	4.3470	JJU	Aluminum	0.57%	-1.89%	-2.10%					
PFF	Preferred & Income Securities	-0.76%	0.31%	3.75%	JJT	Tin	0.65%	2.13%	6.19%	=>0/	Japanese Yen	-0.95%	-3.47%	-4.78%
•••					DBA	Agriculture	-1.05%	1.47%	2.88%	FXY				
MUB	Municipal Bonds	-0.50%	-0.71%	1.83%	CORN	Corn	-0.64%	-7.93%	-13.74%					
					SOYB	Soybeans	1.03%	-2.01%	-6.70%		Canadian Dollar -0.04%			0.54%
MBB	MBS	-0.97%	-0.55%	2.11%	WEAT	Wheat	-2.66%	-12.04%	-22.18%	FXC		-0.04%	-0.11%	
		-0.99%	-0.72%	2.07%	CANE	Sugar	-2.38%	18.80%	41.87%					
EMB	Dollar Denominated EM Bonds	-0.99%	-0.72%	2.07%	BAL	Cotton	0.78%	-1.27%	-1.76%		A Australian Dollar 0.17%	0.17%	-0.82%	-2.42%
LEMB	Local Currency EM Bond	-0.49%	-0.14%	3.72%	NIB	Сосоа	-0.12%	3.31%	18.31%	FXA				
LLIVID	Eocar currency EN Bolld	0.4070	0.1470	5.7270	JO	Coffee	-0.47%	9.84%	13.17%					

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Currencies Performance

Oct 22

Currencies (UUP)

Mл

Jan 23

Apr 23

30

29

28

27

26

Apr 22

Jul 22

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