

Large Cap Blend (S&P 500) IVV



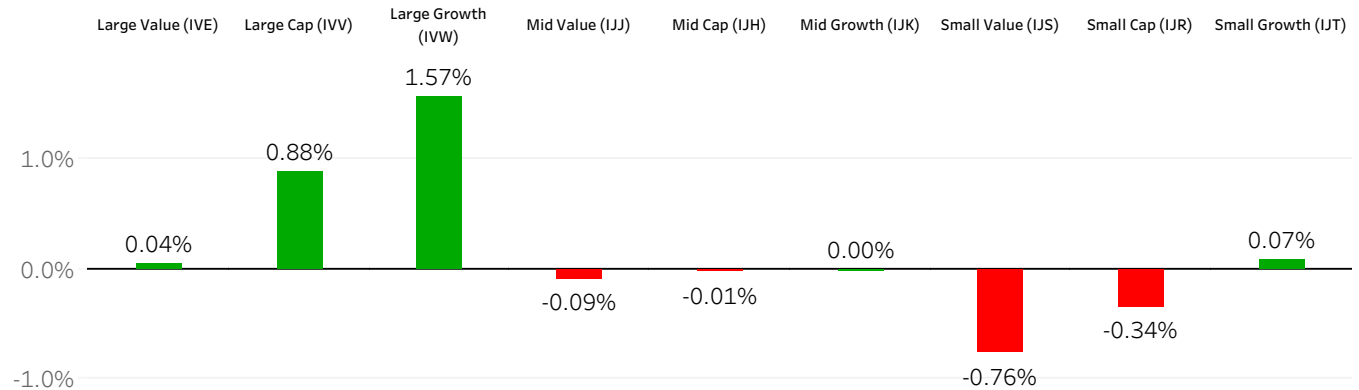
Mid Cap Blend (S&P 400) IJH



Small Cap Blend (S&P 600) IJR



U.S. Size & Style 1-Day Performance



Size & Style 1-Day Performance Leaders

Ticker	Fund	1-Day Performance
QQH	HCM Defender 100 Index ETF	3.18%
VEGN	US Vegan Climate ETF	2.59%
PTNQ	Pacer Trendpilot 100 ETF	2.46%
QQQ	Invesco QQQ Trust	2.43%
QQQM	Invesco NASDAQ 100 ETF	2.41%
NULG	Nuveen ESG Large-Cap Growth ETF	2.37%
WINN	Harbor Long-Term Growers ETF	2.21%
MGK	Vanguard Mega Cap Growth ETF	2.16%
IWY	iShares Russell Top 200 Growth ETF	2.14%
SCHG	Schwab U.S. Large-Cap Growth ETF	2.09%

Size & Style Most Overbought

Ticker	Fund	Price
SPC	CrossingBridge Pre-Merger SPAC ETF	75.53
PTNQ	Pacer Trendpilot 100 ETF	69.52
JEPQ	J.P. Morgan Nasdaq Equity Premium Income ETF	68.97
QQQ	Invesco QQQ Trust	68.41
QQQM	Invesco NASDAQ 100 ETF	68.24
QQH	HCM Defender 100 Index ETF	67.99
TMFC	Motley Fool 100 Index ETF	66.37
SCHG	Schwab U.S. Large-Cap Growth ETF	66.33
MGK	Vanguard Mega Cap Growth ETF	65.74
IWY	iShares Russell Top 200 Growth ETF	65.71

Size & Style 1-Day Performance Laggards

Ticker	Fund	1-Day Performance
IPO	Renaissance IPO ETF	-2.88%
IWC	iShares Micro-Cap ETF	-1.63%
QQXT	First Trust Nasdaq-100 Ex-Technology Sector Index Fund	-1.52%
DIVZ	TrueShares Low Volatility Equity Income ETF	-1.40%
DIV	Global X SuperDividend US ETF	-1.35%
TMFS	Motley Fool Small-Cap Growth ETF	-1.25%
SDOG	ALPS Sector Dividend Dogs ETF	-1.23%
DHS	WisdomTree U.S. High Dividend Fund	-1.20%
UTRN	Vesper U.S. Large Cap Short-Term Reversal Strategy ETF	-1.15%
RZV	Invesco S&P Smallcap 600 Pure Value ETF	-1.07%

Size & Style Most Oversold

Ticker	Fund	Price
SPLV	Invesco S&P 500 Low Volatility ETF	26.45
DIVZ	TrueShares Low Volatility Equity Income ETF	27.03
HUSV	First Trust Horizon Managed Volatility Domestic ETF	27.56
ALTL	Pacer Lunt Large Cap Alternator ETF	27.94
SPHD	Invesco S&P 500 High Dividend Low Volatility ETF	28.69
DVOL	First Trust Dorsey Wright Momentum & Low Volatility ETF	29.06
FVD	First Trust Value Line Dividend Index Fund	29.49
SIXL	ETC 6 Meridian Low Beta Equity ETF	30.21
LVHD	Franklin U.S. Low Volatility High Dividend Index ETF	30.74
CDC	VictoryShares US EQ Income Enhanced Volatility Wt..	30.89

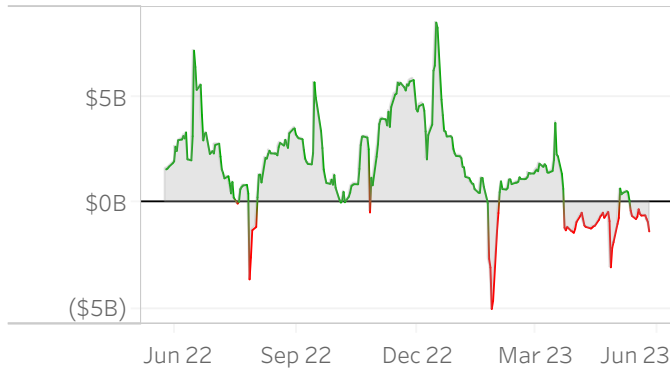
■ Closing Price ■ 50 Day Moving Average ■ 200 Day Moving Average

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

Large-Cap 30-Day Rolling Flows



Mid-Cap 30-Day Rolling Flows



Small-Cap 30-Day Rolling Flows



U.S. Size & Style Landscape Flows

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Large Cap, Beta, Beta	26	\$1,300B	(\$0.10B)	\$14.91B	(\$9.36B)	\$51.13B
Large Cap, Beta, Beta: Growth	10	\$251B	\$0.12B	\$3.98B	\$4.86B	\$18.37B
Large Cap, Beta, Beta: Value	11	\$210B	\$0.09B	(\$8.68B)	(\$9.05B)	(\$3.92B)
Mid Cap, Beta, Beta	10	\$177B	(\$0.19B)	(\$0.97B)	\$1.83B	\$8.55B
Mid Cap, Beta, Beta: Growth	6	\$33B	\$0.06B	\$0.36B	(\$0.34B)	\$1.00B
Mid Cap, Beta, Beta: Value	6	\$37B	(\$0.17B)	(\$1.38B)	(\$1.49B)	\$0.32B
Small Cap, Beta, Beta	13	\$185B	\$0.48B	(\$1.81B)	(\$0.10B)	\$5.36B
Small Cap, Beta, Beta: Growth	7	\$31B	(\$0.02B)	(\$0.09B)	\$0.10B	\$0.78B
Small Cap, Beta, Beta: Value	7	\$46B	(\$0.13B)	(\$1.70B)	(\$0.62B)	(\$0.87B)

U.S. Size & Style Flow Leaders

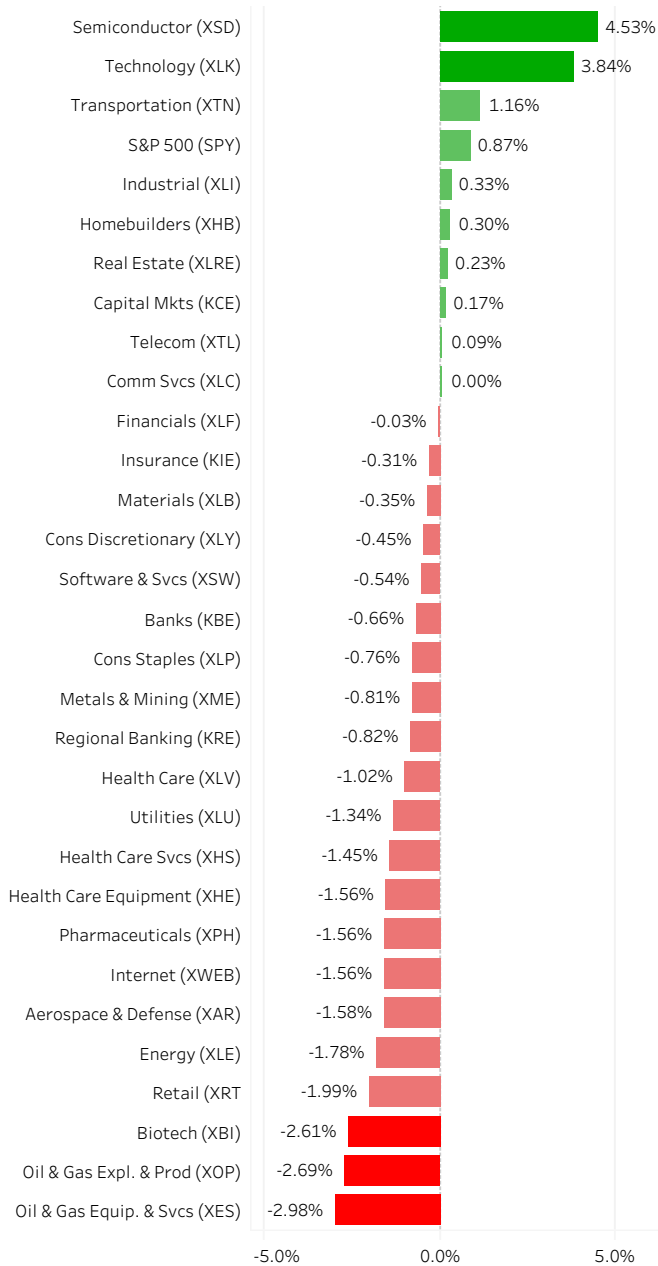
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
RSP	Invesco S&P 500 Equal Weight ETF	\$0.61B	(\$1.80B)	\$0.22B	\$2.32B	\$32.70B
IWM	iShares Russell 2000 ETF	\$0.55B	(\$0.99B)	(\$2.68B)	(\$1.43B)	\$50.14B
DFAC	Dimensional U.S. Core Equity 2 ETF	\$0.36B	\$1.58B	\$2.77B	\$4.58B	\$19.22B
VOO	Vanguard S&P 500 ETF	\$0.35B	\$7.11B	\$10.63B	\$31.48B	\$291.20B
PABU	iShares Paris-Aligned Climate MSCI USA ETF	\$0.16B	\$0.48B	\$0.56B	\$0.83B	\$1.42B
SPY	SPDR S&P 500 ETF Trust	\$0.16B	\$7.17B	(\$8.03B)	\$2.64B	\$384.88B
VTI	Vanguard Total Stock Market ETF	\$0.16B	\$2.77B	\$8.20B	\$21.13B	\$284.58B
QUAL	iShares MSCI USA Quality Factor ETF	\$0.16B	\$9.47B	\$9.24B	\$7.35B	\$28.92B
DIA	SPDR Dow Jones Industrial Average ETF Trust	\$0.15B	(\$0.81B)	(\$2.05B)	(\$1.10B)	\$27.78B
QQQM	Invesco NASDAQ 100 ETF	\$0.12B	\$2.02B	\$3.04B	\$5.08B	\$10.08B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IVV	iShares Core S&P 500 ETF	(\$0.72B)	(\$2.69B)	(\$7.86B)	\$6.94B	\$305.61B
IWB	iShares Russell 1000 ETF	(\$0.12B)	(\$0.13B)	(\$0.83B)	\$0.29B	\$28.33B
MDY	SPDR S&P Midcap 400 ETF Trust	(\$0.11B)	(\$0.44B)	(\$0.09B)	\$0.06B	\$18.01B
IWS	iShares Russell Mid-Cap Value ETF	(\$0.11B)	(\$0.14B)	(\$0.67B)	(\$0.40B)	\$12.04B
VB	Vanguard Small-Cap ETF	(\$0.10B)	(\$0.42B)	\$0.68B	\$0.95B	\$41.27B
SPLV	Invesco S&P 500 Low Volatility ETF	(\$0.08B)	(\$0.35B)	(\$0.60B)	(\$0.20B)	\$9.48B
IWN	iShares Russell 2000 Value ETF	(\$0.07B)	(\$0.19B)	(\$0.70B)	(\$0.41B)	\$10.68B
VTV	Vanguard Value ETF	(\$0.06B)	(\$4.12B)	(\$3.82B)	(\$0.83B)	\$94.99B
VTWO	Vanguard Russell 2000 ETF	(\$0.06B)	(\$0.07B)	\$0.33B	\$0.20B	\$5.65B
DVY	iShares Select Dividend ETF	(\$0.06B)	(\$1.08B)	(\$0.57B)	\$0.16B	\$19.78B

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

## S&P Sector & Industry 1 Day Performance



## Select Sector SPDRs Technicals

Ticker	Fund Name	% From 52W High	% From 52W Low	% Abv/Below 50 SMA	% Abv/Below 200 SMA	RSI (14D)
XLK	Technology Select Sector SPDR Fund	0.00%	37.47%	7.15%	17.90%	68.95
XLC	Communication Services Select Sector SPDR Fund	-1.69%	34.16%	4.17%	14.36%	59.63
SPY	SPDR S&P 500 ETF Trust	-3.50%	16.29%	1.46%	4.80%	53.39
XLP	Consumer Staples Select Sector SPDR Fund	-5.57%	10.05%	-2.89%	-0.48%	26.41
XLI	Industrial Select Sector SPDR Fund	-5.85%	17.83%	-1.42%	0.39%	42.83
XLV	Health Care Select Sector SPDR Fund	-8.79%	6.59%	-2.79%	-2.51%	30.60
XLB	Materials Select Sector SPDR Fund	-12.09%	12.69%	-4.02%	-3.14%	34.00
XLF	Financial Select Sector SPDR Fund	-13.92%	5.15%	-1.15%	-5.60%	42.67
XLY	Consumer Discretionary Select Sector SPDR Fund	-14.16%	17.60%	1.37%	2.49%	51.01
XLE	Energy Select Sector SPDR Fund	-15.94%	17.17%	-3.59%	-6.30%	43.29
XLU	Utilities Select Sector SPDR Fund	-17.32%	4.99%	-4.86%	-6.44%	26.82
XLRE	Real Estate Select Sector SPDR Fund	-22.85%	4.50%	-3.75%	-7.13%	36.03

## Sector & Industry 1 Day Performance Leaders

Ticker	Fund	1 Day Performance
SOXQ	Invesco PHLX Semiconductor ETF	6.71%
SOXX	iShares Semiconductor ETF	6.66%
PSI	Invesco Dynamic Semiconductors ETF	5.75%
XSD	SPDR S&P Semiconductor ETF	4.53%
PTF	Invesco DWA Technology Momentum ETF	4.02%
FTXL	First Trust Nasdaq Semiconductor ETF	4.01%
XLK	Technology Select Sector SPDR Fund	3.84%
QTEC	First Trust NASDAQ-100 Technology Sector Index ..	3.56%
VGT	Vanguard Information Technology ETF	3.56%
FTEC	Fidelity MSCI Information Technology Index ETF	3.56%

## Sector & Industry Most Overbought

Ticker	Fund	RSI (14D)
IETC	iShares U.S. Tech Independence Focused ETF	71.76
IYW	iShares U.S. Technology ETF	71.50
IGM	iShares Expanded Tech Sector ETF	70.21
PSCT	Invesco S&P SmallCap Information Technology ETF	69.98
XLK	Technology Select Sector SPDR Fund	68.95
SOXX	iShares Semiconductor ETF	68.47
SOXQ	Invesco PHLX Semiconductor ETF	68.26
VGT	Vanguard Information Technology ETF	68.13
FTEC	Fidelity MSCI Information Technology Index ETF	67.74
QTEC	First Trust NASDAQ-100 Technology Sector Index Fund	67.15

## Sector & Industry 1 Day Performance Laggards

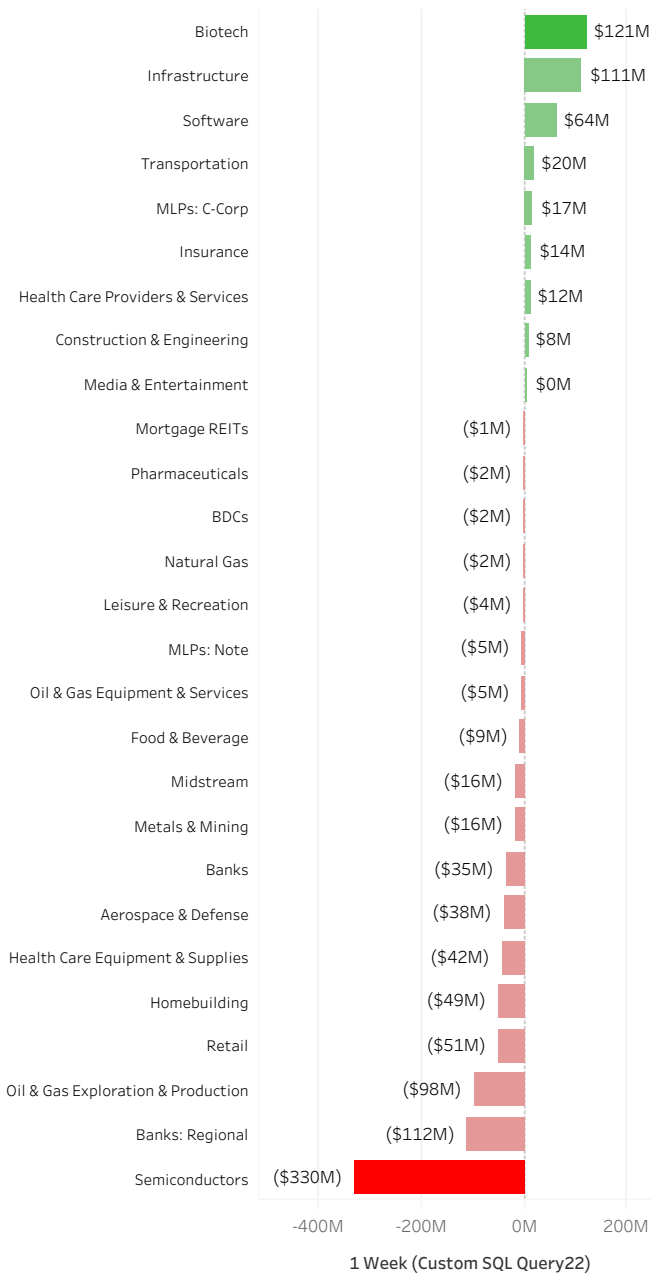
Ticker	Fund	1 Day Performance
PSCE	Invesco S&P SmallCap Energy ETF	-2.99%
XES	SPDR S&P Oil & Gas Equipment & Services ETF	-2.98%
PXI	Invesco DWA Energy Momentum ETF	-2.79%
XOP	SPDR S&P Oil & Gas Exploration & Production ETF	-2.69%
FCG	First Trust Natural Gas ETF	-2.66%
XBI	SPDR S&P BIOTECH ETF	-2.61%
PXE	Invesco Dynamic Energy Exploration & Production ETF	-2.54%
IEZ	iShares U.S. Oil Equipment & Services ETF	-2.46%
IEO	iShares U.S. Oil & Gas Exploration & Production ETF	-2.24%
REM	iShares Mortgage Real Estate ETF	-2.21%

## Sector & Industry Most Oversold

Ticker	Fund	RSI (14D)
XLP	Consumer Staples Select Sector SPDR Fund	26.41
XLU	Utilities Select Sector SPDR Fund	26.82
RYU	Invesco S&P 500 Equal Weight Utilities ETF	26.90
SZNE	Pacer CFRA-Stovall Equal Weight Seasonal Rotation ETF	26.98
IDU	iShares U.S. Utilities ETF	27.12
VPU	Vanguard Utilities ETF	27.17
FUTY	Fidelity MSCI Utilities Index ETF	27.18
VDC	Vanguard Consumer Staples ETF	27.67
RHS	Invesco S&P 500 Equal Weight Consumer Staples ETF	27.72
FSTA	FIDELITY COVINGTON TRUST MSCI CONSUMER STAPLES I..	27.94

\* 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	7	\$16B	(\$15M)	\$1,649M	\$1,680M	\$1,409M
Consumer Discretionary	12	\$23B	\$92M	\$1,238M	\$476M	(\$534M)
Consumer Staples	10	\$31B	\$230M	\$1,930M	\$2,180M	\$4,071M
Energy	32	\$68B	(\$834M)	(\$5,214M)	(\$8,117M)	(\$9,799M)
Financials	26	\$52B	(\$180M)	(\$1,286M)	(\$1,769M)	(\$3,971M)
Health Care	23	\$91B	\$124M	(\$1,793M)	(\$3,614M)	\$1,447M
Industrial	13	\$30B	(\$269M)	(\$745M)	\$82M	(\$425M)
Materials	9	\$13B	(\$41M)	(\$1,039M)	\$23M	(\$2,994M)
Multi-Sector	19	\$14B	\$112M	\$564M	(\$58M)	(\$2,175M)
Real Estate	25	\$52B	(\$237M)	(\$2,911M)	(\$3,846M)	(\$6,519M)
Technology	23	\$136B	\$49M	\$1,698M	(\$614M)	\$1,546M
Utilities	9	\$24B	\$43M	\$799M	\$260M	\$1,542M

## U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLP	Consumer Staples Select Sector SPDR Fund	\$231M	\$1,569M	\$1,543M	\$2,491M	\$18,446M
XLK	Technology Select Sector SPDR Fund	\$203M	(\$1,054M)	(\$2,757M)	(\$1,691M)	\$44,545M
XBI	SPDR S&P BIOTECH ETF	\$154M	(\$931M)	(\$1,692M)	(\$467M)	\$6,695M
XLV	Consumer Discretionary Select Sector SPDR Fu..	\$136M	\$554M	(\$33M)	(\$615M)	\$14,840M
PAVE	Global X U.S. Infrastructure Development ETF	\$109M	\$469M	\$394M	(\$457M)	\$4,021M
XLV	Health Care Select Sector SPDR Fund	\$79M	\$195M	(\$180M)	\$2,082M	\$39,972M
IGV	iShares Expanded Tech-Software Sector ETF	\$64M	\$165M	\$63M	\$716M	\$5,425M
FDN	First Trust Dow Jones Internet Index Fund	\$60M	(\$193M)	(\$513M)	(\$660M)	\$4,062M
VGT	Vanguard Information Technology ETF	\$51M	(\$39M)	(\$717M)	(\$98M)	\$47,709M
IYW	iShares U.S. Technology ETF	\$49M	\$897M	\$919M	\$2,812M	\$11,235M

## U.S. Sector & Industry Flow Laggards

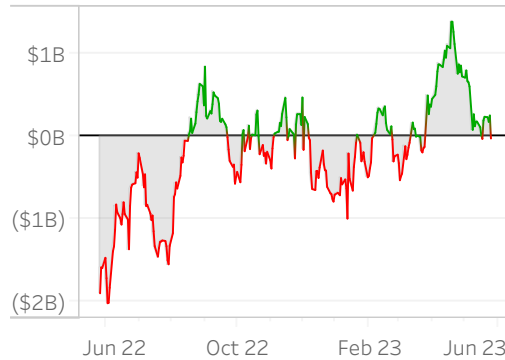
Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLE	Energy Select Sector SPDR Fund	(\$694M)	(\$2,190M)	(\$2,907M)	(\$3,281M)	\$35,188M
SOXX	iShares Semiconductor ETF	(\$349M)	\$151M	\$123M	(\$250M)	\$7,500M
XLI	Industrial Select Sector SPDR Fund	(\$258M)	(\$921M)	(\$1,226M)	(\$1,450M)	\$12,748M
VNQ	Vanguard Real Estate ETF	(\$198M)	(\$1,545M)	(\$1,978M)	(\$3,748M)	\$30,266M
KRE	SPDR S&P Regional Banking ETF	(\$120M)	\$1,763M	\$1,242M	\$577M	\$3,197M
XOP	SPDR S&P Oil & Gas Exploration & Production E..	(\$89M)	(\$231M)	(\$512M)	(\$1,140M)	\$3,326M
ITB	iShares U.S. Home Construction ETF	(\$74M)	\$338M	\$224M	\$62M	\$1,787M
XRT	SPDR S&P Retail ETF	(\$51M)	\$14M	(\$68M)	(\$200M)	\$365M
ITA	iShares U.S. Aerospace & Defense ETF	(\$45M)	\$230M	\$1,304M	\$1,622M	\$5,590M
IYZ	iShares U.S. Telecommunications ETF	(\$43M)	(\$37M)	(\$61M)	(\$48M)	\$270M

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

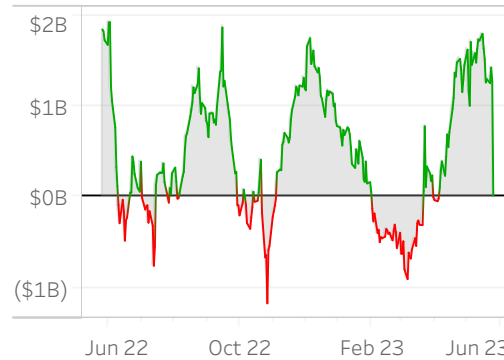
Communication Services



Consumer Discretionary



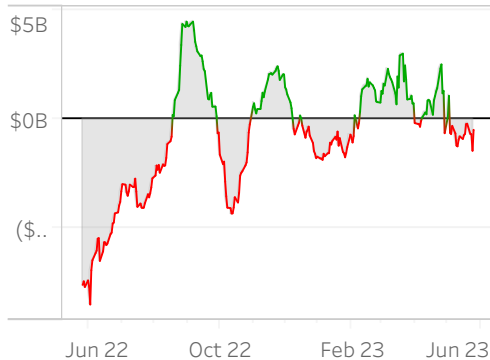
Consumer Staples



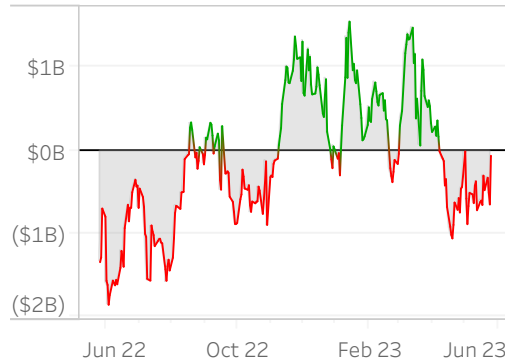
Energy



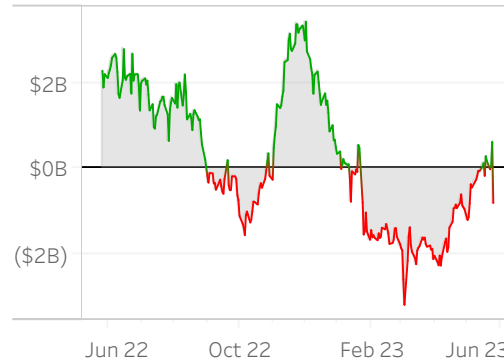
Financials



Industrial



Health Care



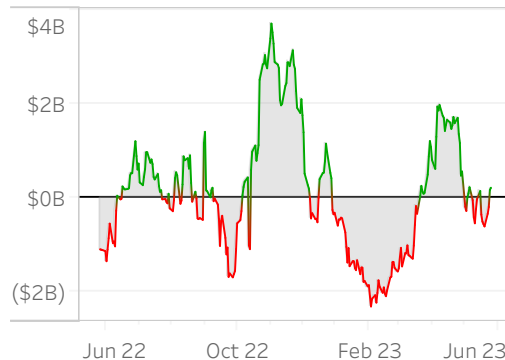
Materials



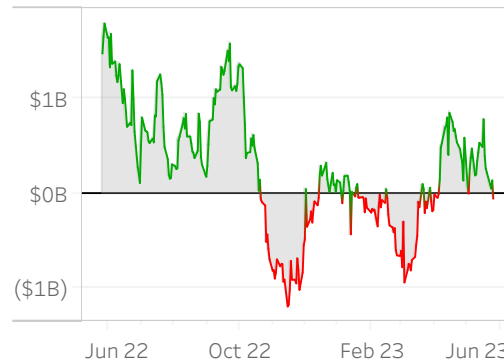
Real Estate



Technology



Utilities

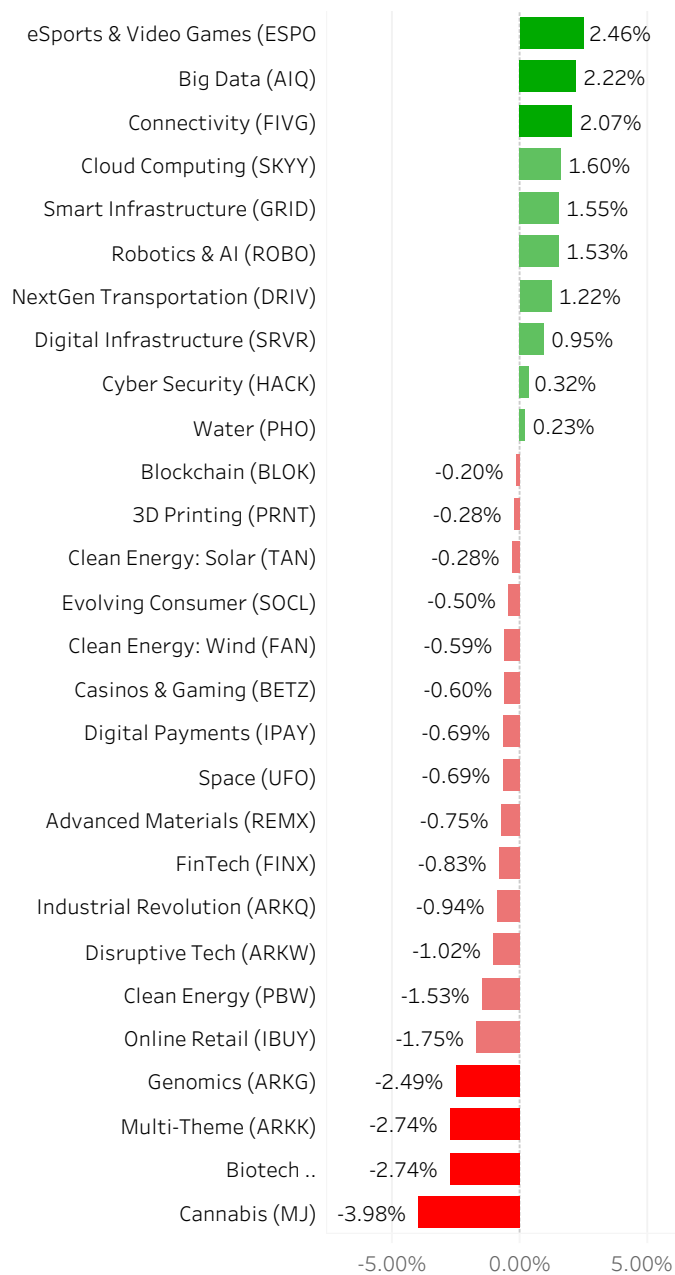


Multi-Sector

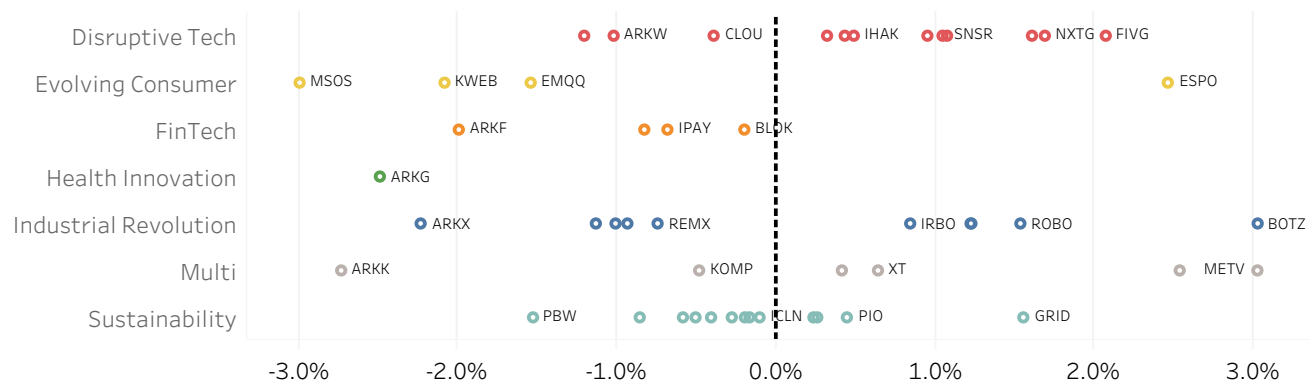


\*ETF Landscape represented using the ETF Action classification system\*\*Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify \*\*\*Flows delayed one day

## Global Thematic Segment 1-Day Performance



## Global Thematic 1-Day Performance Landscape



## Global Thematic 1-Day Performance Leaders

Ticker	Fund	1-Day Performance
<b>BOTZ</b>	Global X Robotics & Artificial Intelligence ETF	3.02%
<b>METV</b>	Roundhill Ball Metaverse ETF	3.02%
<b>TECB</b>	iShares U.S. Tech Breakthrough Multisector ETF	2.53%
<b>ESPO</b>	VanEck Video Gaming and eSports ETF	2.46%
<b>QTUM</b>	Defiance Quantum ETF	2.38%
<b>AIQ</b>	Global X Artificial Intelligence & Technology ETF	2.22%
<b>FIVG</b>	Defiance Next Gen Connectivity ETF	2.07%
<b>NXTG</b>	First Trust Indxx NextG ETF	1.68%
<b>TIME</b>	Clockwise Capital Innovation ETF	1.61%
<b>SKYY</b>	First Trust Cloud Computing ETF	1.60%

## Thematic Most Overbought

Ticker	Fund	Value
<b>TIME</b>	Clockwise Capital Innovation ETF	70.76
<b>BOTZ</b>	Global X Robotics & Artificial Intelligence ETF	68.10
<b>TECB</b>	iShares U.S. Tech Breakthrough Multisector ETF	67.31
<b>SKYY</b>	First Trust Cloud Computing ETF	66.67
<b>AIQ</b>	Global X Artificial Intelligence & Technology ETF	65.78
<b>BUG</b>	Global X Cybersecurity ETF	63.51
<b>CIBR</b>	First Trust NASDAQ Cybersecurity ETF	63.38
<b>QTUM</b>	Defiance Quantum ETF	62.97
<b>METV</b>	Roundhill Ball Metaverse ETF	62.75
<b>XITK</b>	SPDR FactSet Innovative Technology ETF	60.19

## Global Thematic 1-Day Performance Laggards

Ticker	Fund	1-Day Performance
<b>MJ</b>	ETFMG Alternative Harvest ETF	-3.98%
<b>MSOS</b>	AdvisorShares Pure US Cannabis ETF	-3.00%
<b>IDNA</b>	iShares Genomics Immunology and Healthcare ETF	-2.86%
<b>SBIO</b>	ALPS Medical Breakthroughs ETF	-2.74%
<b>ARKK</b>	ARK Innovation ETF	-2.74%
<b>BTEC</b>	Principal Healthcare Innovators ETF	-2.68%
<b>GNOM</b>	Global X Genomics & Biotechnology ETF	-2.53%
<b>ARKG</b>	ARK Genomic Revolution ETF	-2.49%
<b>ARKX</b>	ARK Space Exploration & Innovation ETF	-2.24%
<b>MJUS</b>	ETFMG U.S. Alternative Harvest ETF	-2.24%

## Thematic Most Oversold

Ticker	Fund	Value
<b>PAWZ</b>	ProShares Pet Care ETF	26.54
<b>CGW</b>	Invesco S&P Global Water Index ETF	33.65
<b>BJK</b>	VanEck Gaming ETF	35.17
<b>KWEB</b>	KraneShares CSI China Internet ETF	35.44
<b>GDOC</b>	Goldman Sachs Future Health Care Equity ETF	35.52
<b>AGNG</b>	Global X Aging Population ETF	35.53
<b>SRVR</b>	Pacer Data & Infrastructure Real Estate ETF	35.79
<b>RNRG</b>	Global X Renewable Energy Producers ETF	36.66
<b>EDOC</b>	Global X Telemedicine & Digital Health ETF Registered	36.71
<b>HERO</b>	Global X Video Games & Esports ETF	37.00

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



## Thematic 1 Week Flow Leaders

Ticker	Fund	Flow
BOTZ	Global X Robotics & Artificial Intelligence ETF	\$120M
ARKK	ARK Innovation ETF	\$84M
AIQ	Global X Artificial Intelligence & Technology ETF	\$19M
KOMP	SPDR S&P Kensho New Economies Composite ETF	\$13M
ARKF	ARK Fintech Innovation ETF	\$12M
WTAI	WisdomTree Artificial Intelligence and Innovation Fund	\$12M
ROBT	First Trust Nasdaq Artificial Intelligence & Robotics ETF	\$8M
IRBO	iShares Robotics and Artificial Intelligence Multisector ETF	\$6M
GRID	First Trust Nasdaq Clean Edge Smart GRID Infrastructure Index	\$5M
ROBO	ROBO Global Robotics & Automation Index ETF	\$4M

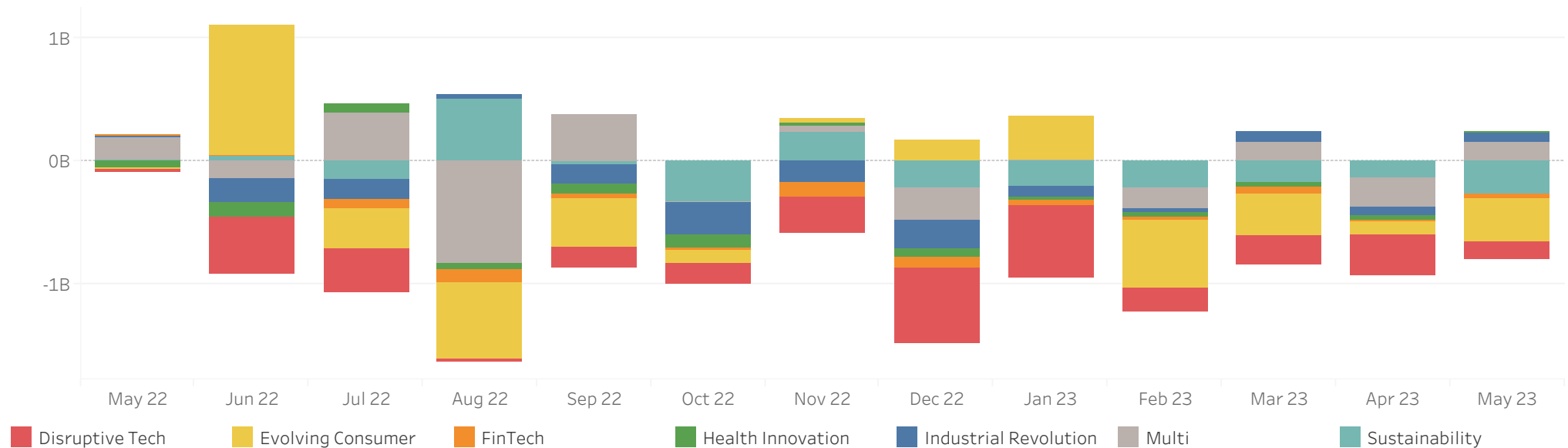
## Thematic 1 Week Flow Laggards

Ticker	Fund	Flow
KWEB	KraneShares CSI China Internet ETF	(\$42M)
ICLN	iShares Global Clean Energy ETF	(\$30M)
ARKG	ARK Genomic Revolution ETF	(\$25M)
CIBR	First Trust NASDAQ Cybersecurity ETF	(\$19M)
MJUS	ETFMG U.S. Alternative Harvest ETF	(\$14M)
TAN	Invesco Solar ETF	(\$11M)
PBW	Invesco WilderHill Clean Energy ETF	(\$10M)
TECB	iShares U.S. Tech Breakthrough Multisector ETF	(\$9M)
IPAY	ETFMG Prime Mobile Payments ETFMG Prime Mobile Payments F..	(\$8M)
FINX	Global X FinTech ETF	(\$6M)

## Thematic Landscape Assets & Flows

Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	34	\$15B	\$5M	(\$711M)	(\$2,138M)	(\$3,548M)
Evolving Consumer	42	\$8B	(\$61M)	(\$881M)	(\$827M)	(\$1,200M)
FinTech	18	\$3B	\$0M	(\$139M)	(\$283M)	(\$616M)
Health Innovation	18	\$3B	(\$10M)	(\$81M)	(\$248M)	(\$524M)
Industrial Revolution	31	\$11B	\$97M	\$76M	(\$274M)	(\$1,162M)
Multi	40	\$15B	\$74M	\$73M	(\$511M)	(\$296M)
Sustainability	40	\$16B	(\$62M)	(\$582M)	(\$1,140M)	(\$895M)
Grand Total	223	\$70B	\$43M	(\$2,245M)	(\$5,421M)	(\$8,242M)

## Thematic Monthly Flows

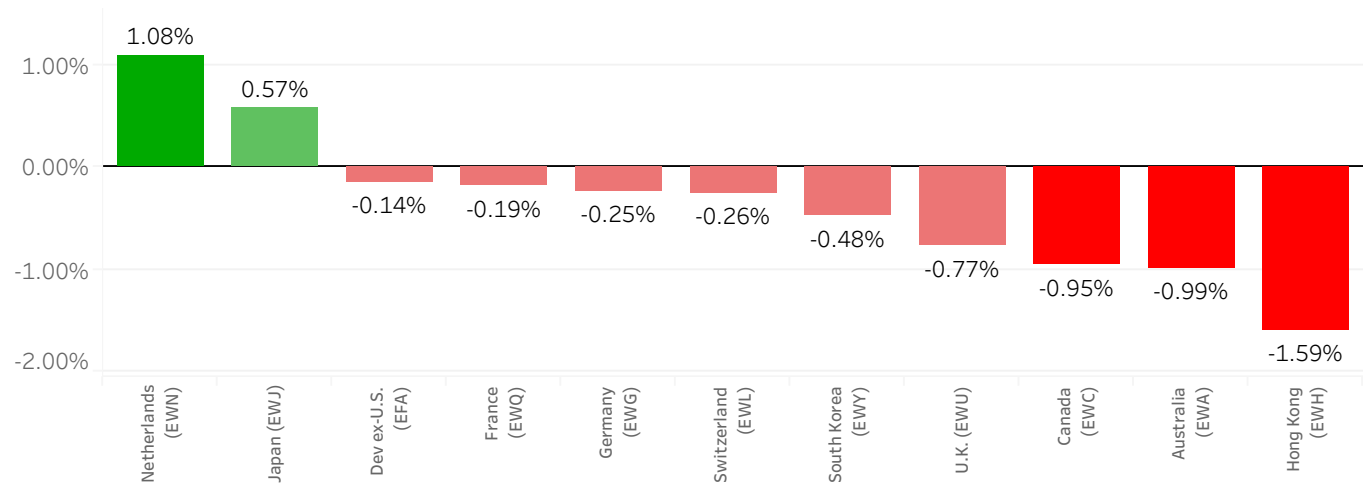


\* ETF Landscape represented using the ETF Action classification system\*\*Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify \*\*\*Flows delayed one day

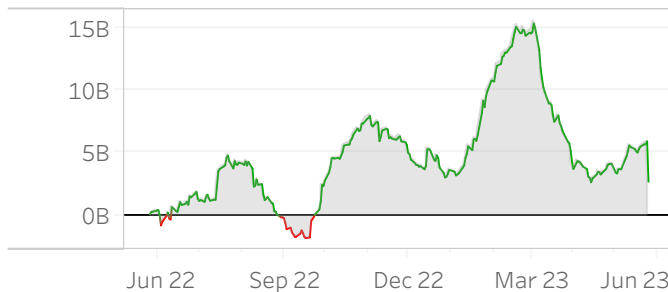
Developed ex-U.S. (EFA)



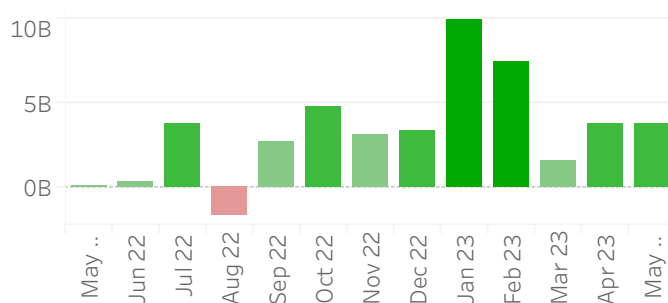
Developed ex-U.S. 1-Day Performance Top 10 Countries



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



Developed ex-U.S. Monthly Flows



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

Ticker	Fund	1-Day Performance
DXJ	WisdomTree Japan Hedged Equity Fund	1.37%
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	1.16%
HEWJ	iShares Currency Hedged MSCI Japan ETF	1.10%
EWN	iShares MSCI Netherlands ETF	1.08%
BKCI	BNY Mellon Concentrated International ETF	0.92%
DFJ	WisdomTree Japan SmallCap Dividend Fund	0.81%
GREK	Global X MSCI Greece ETF	0.71%
FJP	First Trust Japan AlphaDEX Fund	0.66%
EWJ	iShares MSCI Japan ETF	0.57%
FLJP	Franklin FTSE Japan ETF	0.57%

Developed ex-U.S. Most Overbought

Ticker	Fund	Value
DXJ	WisdomTree Japan Hedged Equity Fund	66.80
GREK	Global X MSCI Greece ETF	66.34
HEWJ	iShares Currency Hedged MSCI Japan ETF	66.30
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	66.06
FLKR	Franklin FTSE South Korea ETF	56.19
EWY	iShares MSCI South Korea ETF	55.41
JPXN	iShares JPX-Nikkei 400 ETF	54.26
EWJ	iShares MSCI Japan ETF	53.99
BBJP	JPMorgan BetaBuilders Japan ETF	53.71
FLJP	Franklin FTSE Japan ETF	53.04

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

Ticker	Fund	1-Day Performance
EWH	iShares MSCI Hong Kong ETF	-1.59%
BBCA	JPMorgan BetaBuilders Canada ETF	-1.15%
FLCA	Franklin FTSE Canada ETF	-1.08%
FDD	First Trust Stoxx European Select Dividend Index Fund	-1.03%
BBAX	JPMorgan BetaBuilders Developed Asia Pacific-ex Japan E..	-1.01%
IDV	iShares International Select Dividend ETF	-1.01%
EWA	iShares MSCI Australia ETF	-0.99%
EPP	iShares MSCI Pacific ex-Japan ETF	-0.97%
EWC	iShares MSCI Canada ETF	-0.95%
ICOW	Pacer Developed Markets International Cash Cows 100 ETF	-0.94%

Developed ex-U.S. Most Oversold

Ticker	Fund	Value
IDV	iShares International Select Dividend ETF	29.34
FYLD	Cambria Foreign Shareholder Yield ETF	30.37
DTH	WisdomTree International High Dividend Fund	30.46
EWH	iShares MSCI Hong Kong ETF	30.53
DLS	WisdomTree International SmallCap Dividend Fund	30.94
HDEF	Xtrackers MSCI EAFE High Dividend Yield Equity ETF	31.17
IQDG	WisdomTree International Quality Dividend Growth ..	31.57
QLVD	FlexShares Developed Markets ex-US Quality Low V..	31.78
DFE	WisdomTree Europe SmallCap Dividend Fund	31.82
EPP	iShares MSCI Pacific ex-Japan ETF	31.93

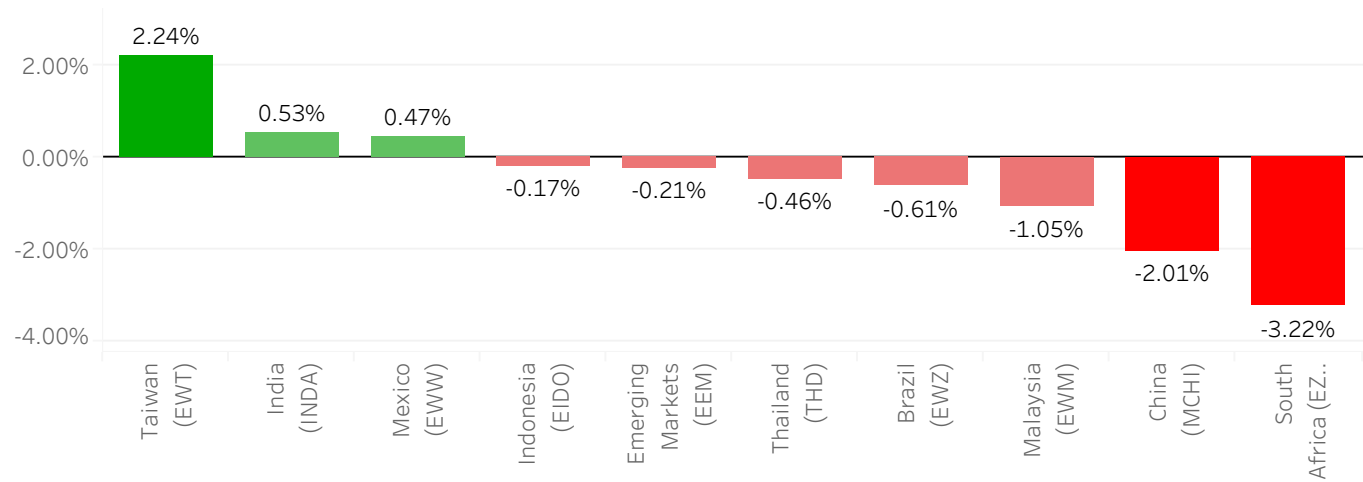
\*ETF Landscape represented using the ETF Action classification system\*\*Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify \*\*\*Flows delayed one day



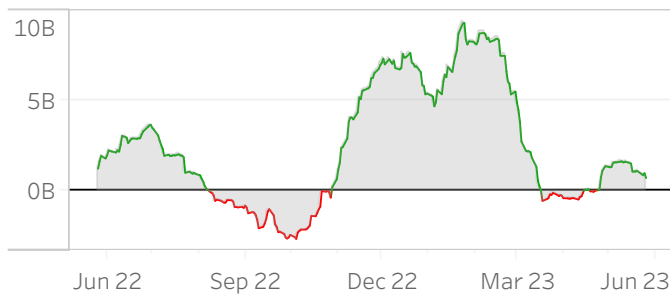
Emerging (EEM)



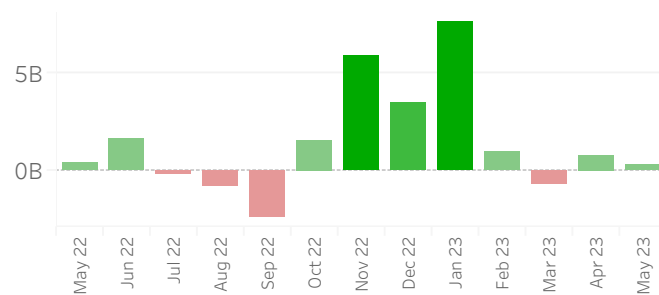
Emerging 1-Day Performance Top 10 Countries



Emerging 30-Day Rolling Flows



Emerging Monthly Flows



Emerging 1-Day Performance Leaders

Ticker	Fund	Performance
EWT	iShares MSCI Taiwan ETF	2.24%
FLTW	Franklin FTSE Taiwan ETF	2.15%
NUEM	Nuveen ESG Emerging Markets Equity ETF	1.18%
NFTY	First Trust India NIFTY 50 Equal Weight ETF	1.00%
EWZS	iShares MSCI Brazil Small-Cap ETF	0.90%
XCEM	Columbia EM Core ex-China ETF	0.77%
FRDM	Freedom 100 Emerging Markets ETF	0.73%
INDY	iShares India 50 ETF	0.68%
FLIN	Franklin FTSE India ETF	0.65%
EMXC	iShares MSCI Emerging Markets ex China ETF	0.54%

Emerging Most Overbought

Ticker	Fund	Price
EWZS	iShares MSCI Brazil Small-Cap ETF	64.77
SMIN	iShares MSCI India Small Cap ETF	63.25
FLTW	Franklin FTSE Taiwan ETF	62.85
EWT	iShares MSCI Taiwan ETF	62.05
GLIN	VanEck India Growth Leaders ETF	61.08
INDA	iShares MSCI India ETF	59.36
FLIN	Franklin FTSE India ETF	59.35
PIN	Invesco India ETF	57.72
XCEM	Columbia EM Core ex-China ETF	57.35
FLBR	Franklin FTSE Brazil ETF	56.59

Emerging 1-Day Performance Laggards

Ticker	Fund	Performance
EZA	iShares MSCI South Africa ETF	-3.22%
GXC	SPDR S&P China ETF	-2.06%
FXI	iShares China Large-Cap ETF	-2.04%
PGJ	Invesco Golden Dragon China ETF	-2.03%
MCHI	iShares MSCI China ETF	-2.01%
ECNS	iShares MSCI China Small-Cap ETF	-1.80%
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	-1.70%
FLCH	Franklin FTSE China ETF	-1.47%
BKF	iShares MSCI BIC ETF	-1.35%
EWM	iShares MSCI Malaysia ETF	-1.05%

Emerging Most Oversold

Ticker	Fund	Price
EWM	iShares MSCI Malaysia ETF	19.96
FEM	First Trust Emerging Markets AlphaDEX Fund	25.16
ECNS	iShares MSCI China Small-Cap ETF	25.46
EZA	iShares MSCI South Africa ETF	27.27
ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	28.65
CNYA	iShares MSCI China A ETF	29.13
KBA	KraneShares Boser MSCI China A 50 Connect Index ..	29.66
JPEM	J.P. Morgan Diversified Return Emerging Markets E..	30.51
FEMS	First Trust Emerging Markets Small Cap AlphaDEX F..	31.29
GXC	SPDR S&P China ETF	31.56

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

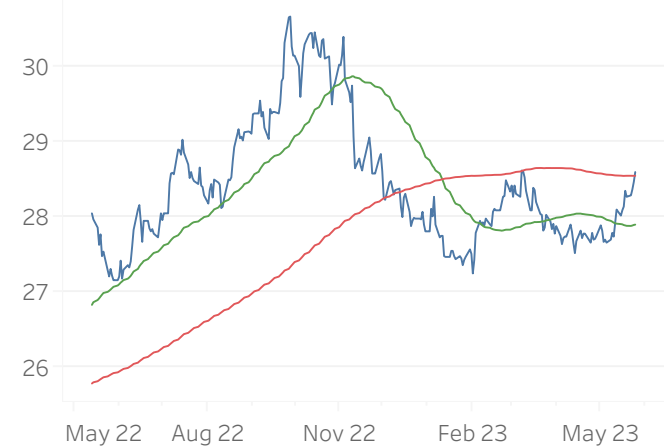
Fixed Income (AGG)



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	-0.37%	-2.44%	1.52%
SHY	1-3 Year Treasury Bonds	-0.22%	-0.85%	1.20%
IEF	7-10 Year Treasury Bonds	-0.63%	-3.04%	1.88%
TLT	20+ Year Treasury Bonds	-0.25%	-6.00%	1.75%
TIP	TIPS Bonds	-0.45%	-2.39%	1.74%
FLOT	Floating Rate Bonds	0.04%	1.04%	2.41%
LQD	Investment Grade Corporate	-0.33%	-3.25%	1.89%
HYG	High Yield Corporate	-0.07%	-1.58%	1.91%
BKLN	Senior Loan	0.05%	-0.33%	3.55%
PFF	Preferred & Income Securities	-0.56%	-3.07%	0.40%
MUB	Municipal Bonds	0.29%	-1.75%	0.81%
MBB	MBS	-0.48%	-2.50%	0.84%
EMB	Dollar Denominated EM Bonds	-0.26%	-1.55%	0.81%
LEMB	Local Currency EM Bond	-0.38%	1.39%	4.98%

Commodities Performance

Ticker	Name	1 Day	1 Month	YTD
DJP	Broad Commodities	-1.43%	-5.64%	-12.13%
DBE	Energy	-2.05%	-4.11%	-13.63%
USO	WTI Crude Oil	-2.39%	-5.22%	-8.59%
BNO	Brent Crude Oil	-2.25%	-4.92%	-9.19%
UNG	Natural Gas	-4.25%	-3.43%	-52.06%
UGA	Gasoline	-2.18%	2.30%	0.88%
DBP	Precious Metals	-1.07%	-4.18%	3.64%
GLD	Gold	-0.96%	-2.99%	6.22%
SLV	Silver	-1.42%	-9.26%	-5.27%
PPLT	abrdn Physical Platin..	-0.44%	-6.19%	-4.62%
PALL	abrdn Physical Palla..	-0.32%	-4.87%	-20.91%
DBB	Base Metals	-0.23%	-7.65%	-10.03%
CPER	Copper	1.00%	-6.34%	-4.03%
LD	Lead	0.90%	-2.32%	-9.98%
JJN	Nickel	1.33%	-8.75%	-29.53%
JJU	Aluminum	0.60%	-4.80%	-8.00%
JJT	Tin	2.47%	-2.54%	-0.11%
DBA	Agriculture	-1.11%	-2.81%	1.24%
CORN	Corn	-0.65%	-5.49%	-15.04%
SOYB	Soybeans	-0.72%	-6.21%	-13.51%
WEAT	Wheat	0.00%	-6.70%	-23.18%
CANE	Sugar	-1.25%	-1.61%	40.71%
BAL	Cotton	-1.91%	2.56%	-2.68%
NIB	Cocoa	0.04%	4.28%	22.49%
JO	Coffee	-3.11%	-3.48%	11.68%

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD
UUP	Long Dollar	0.46%	2.91%	2.84%
UDN	Short Dollar	-0.43%	-2.16%	0.16%
FXE	Euro	-0.29%	-2.18%	0.54%
FXB	British Pound Sterling	-0.37%	-0.46%	2.97%
FXF	Swiss Franc	-0.16%	-1.60%	1.83%
FXJ	Japanese Yen	-0.57%	-4.82%	-6.58%
FXC	Canadian Dollar	-0.32%	0.11%	0.02%
FXA	Australian Dollar	-0.55%	-1.66%	-4.13%

\*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](mailto:team@etfaction.com)

[www.etfaction.com](http://www.etfaction.com)