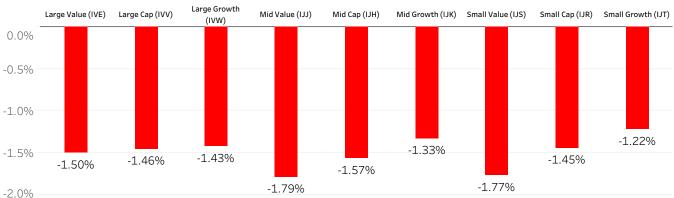




U.S. Size & Style 1-Day Performance



Mid Cap Blend (S&P 400) IJH



Size & Style 1-Day Performance Leaders

| Ticker | Fund | |
|--------|--|--------|
| SPC | CrossingBridge Pre-Merger SPAC ETF | 0.14% |
| CDC | VictoryShares US EQ Income Enhanced Volatility Wtd ETF | -0.29% |
| QMOM | Momentumshares US Quantitative Momementum ETF | -0.64% |
| FDM | First Trust Dow Jones Select MicroCap Index Fund | -0.74% |
| DJD | Invesco Dow Jones Industrial Average Dividend ETF | -0.74% |
| DWAS | Invesco Dorsey Wright SmallCap Momentum ETF | -0.76% |
| PTNQ | Pacer Trendpilot 100 ETF | -0.76% |
| IWC | iShares Micro-Cap ETF | -0.80% |
| RPHS | Regents Park Hedged Market Strategy ETF | -0.81% |
| TMFS | Motley Fool Small-Cap Growth ETF | -0.83% |

Size & Style Most Overbought

| Ticker | Fund | |
|--------|--|-------|
| SPC | CrossingBridge Pre-Merger SPAC ETF | 68.80 |
| QVAL | Alpha Architect US Quantitative Value ETF | 44.28 |
| SIXS | ETC 6 Meridian Small Cap Equity ETF | 38.27 |
| SPVU | Invesco S&P 500 Enhanced Value ETF | 37.66 |
| SYLD | Cambria Shareholder Yield ETF | 37.55 |
| SPMO | Invesco S&P 500 Momentum ETF | 37.38 |
| CDC | VictoryShares US EQ Income Enhanced Volatility Wtd ETF | 37.18 |
| MGMT | Ballast Small/Mid Cap ETF | 37.13 |
| XSVM | Invesco S&P SmallCap Value with Momentum ETF | 37.10 |
| COWZ | Pacer US Cash Cows 100 ETF | 35.97 |

Small Cap Blend (S&P 600) IJR



Size & Style 1-Day Performance Laggards

| Ticker | Fund | |
|--------|--|--------|
| RWJ | Invesco S&P SmallCap 600 Revenue ETF | -2.68% |
| QQH | HCM Defender 100 Index ETF | -1.99% |
| LGH | HCM Defender 500 Index ETF | -1.98% |
| DVY | iShares Select Dividend ETF | -1.96% |
| RFV | Invesco S&P Midcap 400 Pure Value ETF | -1.95% |
| CWS | AdvisorShares Focused Equity ETF | -1.90% |
| CSD | Invesco S&P Spin-Off ETF | -1.87% |
| PEY | Invesco High Yield Equity Dividend Achievers ETF | -1.85% |
| RZV | Invesco S&P Smallcap 600 Pure Value ETF | -1.84% |
| FNK | First Trust Mid Cap Value AlphaDEX Fund | -1.82% |
| | | |

Size & Style Most Oversold

| Ticker | Fund | |
|--------|--|-------|
| LVHD | Franklin U.S. Low Volatility High Dividend Index ETF | 22.21 |
| NOBL | ProShares S&P 500 Dividend Aristocrats ETF | 22.58 |
| AIVL | WisdomTree U.S. AI Enhanced Value Fund | 23.00 |
| SDY | SPDR S&P Dividend ETF | 23.32 |
| GSEW | Goldman Sachs Equal Weight U.S. Large Cap Equity | 23.32 |
| QQQN | VictoryShares Nasdaq Next 50 ETF | 23.70 |
| KRMA | Global X Conscious Companies ETF | 23.86 |
| LCG | Sterling Capital Focus Equity ETF | 24.12 |
| LDDD | Invesco NASDAQ Next Gen 100 ETF | 24.18 |
| VSDA | VictoryShares Dividend Accelerator ETF | 24.26 |

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^{*}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, Beta | 26 | \$1,427B | \$3.17B | \$39.02B | \$69.26B | \$78.18B |
| Large Cap, Beta, Beta: Growth | 10 | \$274B | \$1.07B | \$3.52B | \$6.00B | \$17.48B |
| Large Cap, Beta, Beta: Value | 11 | \$218B | (\$0.51B) | \$1.64B | (\$4.15B) | (\$4.85B) |
| Mid Cap, Beta, Beta | 10 | \$190B | \$0.07B | \$6.31B | \$6.90B | \$12.88B |
| Mid Cap, Beta, Beta: Growth | 6 | \$34B | (\$0.02B) | \$0.23B | \$0.82B | \$0.56B |
| Mid Cap, Beta, Beta: Value | 6 | \$38B | \$0.03B | (\$0.56B) | (\$1.30B) | (\$1.15B) |
| Small Cap, Beta, Beta | 11 | \$192B | \$0.22B | \$1.78B | \$5.09B | \$9.29B |
| Small Cap, Beta, Beta: Growth | 7 | \$32B | \$0.01B | \$0.20B | \$0.47B | \$1.10B |
| Small Cap, Beta, Beta: Value | 7 | \$47B | (\$0.21B) | (\$0.47B) | (\$1.55B) | (\$0.42B) |

Mid-Cap 30-Day Rolling Flows



U.S. Size & Style Flow Leaders

| Ticker | Fund | 1 Week | 3 Month | 6 Month | 1 Year | AUM |
|--------|-------------------------------------|---------|-----------|-----------|-----------|-----------|
| SPY | SPDR S&P 500 ETF Trust | \$8.83B | \$1.10B | \$15.97B | \$12.32B | \$409.56B |
| IWF | iShares Russell 1000 Growth ETF | \$0.90B | \$0.11B | \$0.17B | (\$0.26B) | \$69.91B |
| VOO | Vanguard S&P 500 ETF | \$0.48B | \$15.67B | \$25.36B | \$33.24B | \$326.00B |
| VTI | Vanguard Total Stock Market ETF | \$0.33B | \$5.60B | \$10.91B | \$20.97B | \$305.10B |
| IWM | iShares Russell 2000 ETF | \$0.27B | (\$1.48B) | (\$0.47B) | (\$0.98B) | \$50.52B |
| RSP | Invesco S&P 500 Equal Weight ETF | \$0.25B | \$4.40B | \$7.06B | \$10.28B | \$40.86B |
| PBUS | Invesco MSCI USA ETF | \$0.17B | \$0.70B | \$0.70B | \$0.66B | \$3.12B |
| USMV | iShares MSCI USA Min Vol Factor ETF | \$0.16B | (\$0.57B) | (\$0.83B) | (\$0.96B) | \$28.44B |
| DFAC | Dimensional U.S. Core Equity 2 ETF | \$0.16B | \$0.99B | \$2.31B | \$4.62B | \$21.06B |
| SCHD | Schwab US Dividend Equity ETF | \$0.14B | \$1.27B | \$2.73B | \$10.63B | \$47.95B |

Small-Cap 30-Day Rolling Flows



U.S. Size & Style Flow Laggards

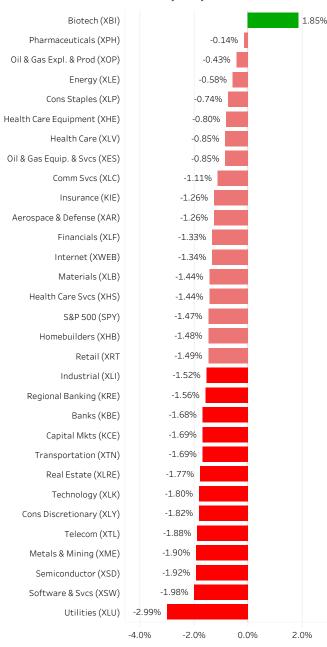
| Ticker | Fund | 1 Week | 3 Month | 6 Month | 1 Year | AUM |
|--------|---|-----------|-----------|-----------|-----------|-----------|
| IVV | iShares Core S&P 500 ETF | (\$5.88B) | \$12.50B | \$13.95B | \$14.22B | \$338.62B |
| IWD | iShares Russell 1000 Value ETF | (\$0.72B) | (\$1.05B) | (\$2.27B) | (\$4.71B) | \$49.02B |
| QQQ | Invesco QQQ Trust Series I | (\$0.63B) | \$6.57B | \$6.01B | \$4.36B | \$198.81B |
| DIA | SPDR Dow Jones Industrial Average ETF Trust | (\$0.31B) | (\$0.44B) | (\$0.31B) | (\$0.95B) | \$28.66B |
| VBR | Vanguard Small Cap Value ETF | (\$0.11B) | \$0.17B | (\$0.04B) | \$0.96B | \$23.91B |
| IWN | iShares Russell 2000 Value ETF | (\$0.08B) | (\$0.57B) | (\$0.92B) | (\$1.13B) | \$10.45B |
| IUSV | iShares Core S&P US Value ETF | (\$0.08B) | (\$0.13B) | (\$0.11B) | \$0.48B | \$13.53B |
| MTUM | iShares MSCI USA Momentum Factor ETF | (\$0.07B) | (\$0.73B) | (\$1.80B) | (\$1.30B) | \$8.28B |
| FVD | First Trust Value Line Dividend Index Fund | (\$0.07B) | (\$0.47B) | (\$0.68B) | (\$0.76B) | \$11.03B |
| IJR | iShares Core S&P Small Cap ETF | (\$0.06B) | \$1.34B | \$1.39B | \$3.09B | \$66.70B |

^{*} 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) |
|--------|--|--------------------|-------------------|-----------------------|------------------------|-----------|
| XLE | Energy Select Sector SPDR Fund | -4.43% | 17.39% | 1.49% | 6.02% | 49.68 |
| XLC | Communication Services Select Sector SPDR Fund | -5.46% | 43.25% | -2.74% | 8.38% | 37.25 |
| SPY | SPDR S&P 500 ETF Trust | -6.97% | 19.44% | -4.48% | 1.52% | 29.44 |
| XLV | Health Care Select Sector SPDR Fund | -7.39% | 6.48% | -2.78% | -1.70% | 34.60 |
| XLI | Industrial Select Sector SPDR Fund | -9.04% | 18.88% | -6.03% | -1.84% | 25.69 |
| XLB | Materials Select Sector SPDR Fund | -9.18% | 14.18% | -5.44% | -3.67% | 29.93 |
| XLF | Financial Select Sector SPDR Fund | -10.03% | 9.90% | -3.80% | -2.00% | 31.04 |
| XLK | Technology Select Sector SPDR Fund | -10.15% | 38.96% | -5.55% | 5.01% | 31.44 |
| XLY | Consumer Discretionary Select Sector SPDR Fund | -10.17% | 25.91% | -5.87% | 3.19% | 31.99 |
| XLP | Consumer Staples Select Sector SPDR Fund | -10.49% | 3.94% | -5.29% | -6.17% | 26.92 |
| XLU | Utilities Select Sector SPDR Fund | -15.63% | 0.00% | -4.76% | -8.27% | 32.17 |
| XLRE | Real Estate Select Sector SPDR Fund | -18.96% | 0.38% | -8.17% | -9.54% | 22.96 |
| | | | | | | |

Sector & Industry 1 Day Performance Leaders

Sector & Industry Most Overbought

| Ticker | Fund | | Ticker | Fund | |
|--------|---|--------|--------|---|-------|
| XBI | SPDR S&P BIOTECH ETF | 1.85% | KBWP | Invesco KBW Property & Casualty Insurance ETF | 58.35 |
| PTH | Invesco Dorsey Wright Healthcare Momentum ETF | 0.64% | AMLP | Alerian MLP ETF | 53.54 |
| FBT | First Trust NYSE Arca Biotechnology Index Fund | 0.56% | MLPA | Global X MLP ETF | 52.58 |
| IBB | iShares Biotechnology ETF | 0.35% | IAK | iShares U.S. Insurance ETF | 52.21 |
| PJP | Invesco Pharmaceuticals ETF | 0.29% | VDE | Vanguard Energy ETF | 51.92 |
| PBE | Invesco Biotechnology & Genome ETF | 0.11% | XES | SPDR S&P Oil & Gas Equipment & Services ETF | 51.30 |
| XPH | SPDR S&P Pharmaceuticals ETF | -0.14% | PXI | Invesco Dorsey Wright Energy Momentum ETF | 51.23 |
| FCG | First Trust Natural Gas ETF | -0.27% | BIZD | VanEck BDC Income ETF | 51.20 |
| IHE | iShares U.S. Pharmaceuticals ETF | -0.38% | KIE | SPDR S&P Insurance ETF | 50.86 |
| XOP | SPDR S&P Oil & Gas Exploration & Production ETF | -0.43% | FENY | Fidelity MSCI Energy Index ETF | 49.91 |

Sector & Industry 1 Day Performance Laggards

Sector & Industry Most Oversold

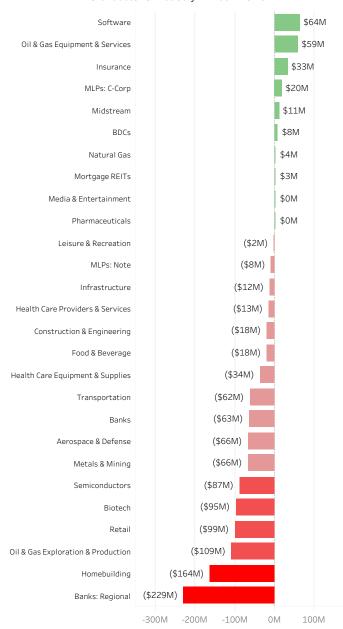
| Ticker | Fund | | Ticker | Fund | |
|--------|--|--------|--------|---|-------|
| XLU | Utilities Select Sector SPDR Fund | -2.99% | SZNE | Pacer CFRA-Stovall Equal Weight Seasonal Rotation ETF | 20.53 |
| RSPU | Invesco S&P 500 Equal Weight Utilities ETF | -2.97% | XHE | SPDR S&P Health Care Equipment ETF | 20.82 |
| FUTY | Fidelity MSCI Utilities Index ETF | -2.93% | NETL | NETLease Corporate Real Estate ETF | 20.98 |
| VPU | Vanguard Utilities ETF | -2.91% | XAR | SPDR S&P Aerospace & Defense ETF | 21.14 |
| NETL | NETLease Corporate Real Estate ETF | -2.84% | IYR | iShares U.S. Real Estate ETF | 21.52 |
| IDU | iShares U.S. Utilities ETF | -2.74% | PEJ | Invesco Leisure and Entertainment ETF | 21.54 |
| FXU | First Trust Utilities AlphaDEX Fund | -2.72% | RSPS | Invesco S&P 500 Equal Weight Consumer Staples ETF | 21.82 |
| KBWY | Invesco KBW Premium Yield Equity REIT ETF | -2.26% | PSCH | Invesco S&P SmallCap Health Care ETF | 22.07 |
| MORT | VanEck Mortgage REIT Income ETF | -2.26% | SCHH | Schwab U.S. REIT ETF | 22.43 |
| REM | iShares Mortgage Real Estate ETF | -2.19% | ITA | iShares U.S. Aerospace & Defense ETF | 22.66 |

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

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U.S. Sector & Industry 1-Week Flows



1 Week (Custom SQL Query22)

U.S. Sector Landscape

| | Funds | AUM | 1 Week | 3 Month | 6 Month | 1 Year |
|------------------------|-------|--------|----------|------------|------------|------------|
| Communication Services | 7 | \$18B | (\$279M) | \$541M | \$2,527M | \$2,697M |
| Consumer Discretionary | 12 | \$27B | (\$339M) | \$1,601M | \$2,539M | \$2,626M |
| Consumer Staples | 10 | \$28B | (\$230M) | (\$833M) | (\$554M) | \$628M |
| Energy | 31 | \$75B | \$80M | \$2,339M | (\$4,156M) | (\$6,830M) |
| Financials | 26 | \$55B | (\$696M) | (\$2,562M) | (\$2,085M) | (\$557M) |
| Health Care | 23 | \$86B | (\$506M) | (\$2,680M) | (\$3,040M) | (\$3,778M) |
| Industrial | 13 | \$33B | \$237M | \$1,393M | \$1,237M | \$3,058M |
| Materials | 9 | \$12B | (\$368M) | (\$668M) | (\$2,021M) | (\$1,804M) |
| Multi-Sector | 18 | \$18B | (\$245M) | \$1,071M | \$2,487M | \$2,159M |
| Real Estate | 25 | \$52B | (\$114M) | \$369M | (\$1,530M) | (\$3,967M) |
| Technology | 23 | \$146B | \$277M | \$1,036M | \$1,260M | \$3,908M |
| Utilities | 9 | \$23B | (\$226M) | (\$836M) | (\$601M) | (\$1,380M) |

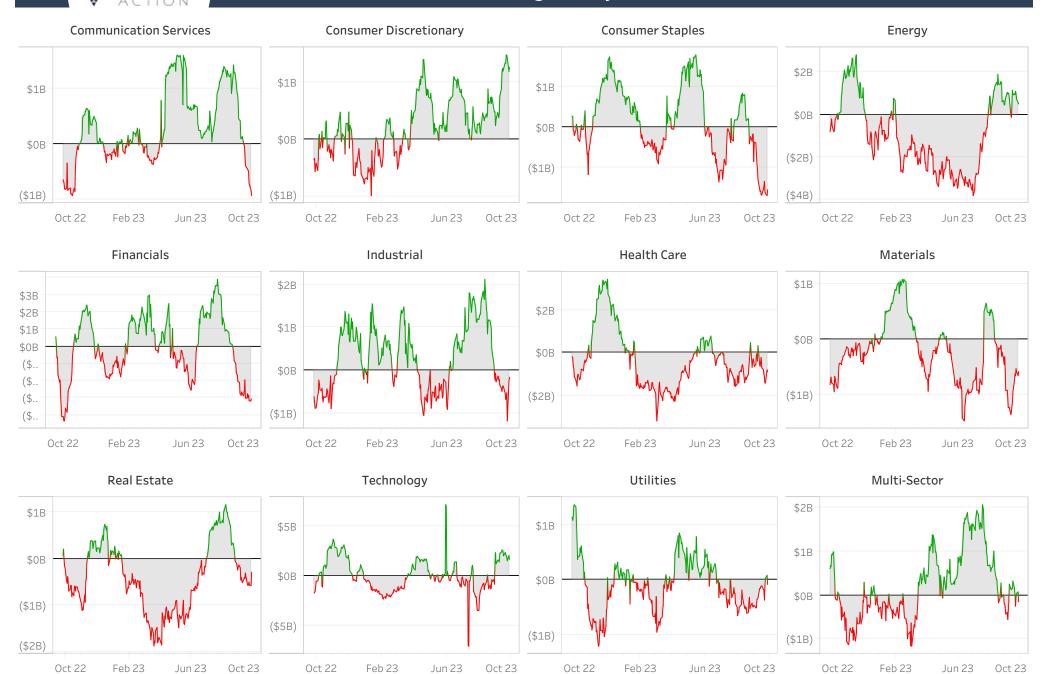
U.S. Sector & Industry Flow Leaders

| Ticker | Fund | 1 Week | 3 Month | 6 Month | 1 Year | AUM |
|--------|---|--------|----------|------------|------------|-----------|
| XLI | Industrial Select Sector SPDR Fund | \$368M | \$1,054M | \$1,116M | \$1,135M | \$15,066M |
| XLK | Technology Select Sector SPDR Fund | \$237M | \$870M | \$191M | (\$982M) | \$48,040M |
| XLE | Energy Select Sector SPDR Fund | \$114M | \$1,242M | (\$2,250M) | (\$2,538M) | \$38,762M |
| KCE | SPDR S&P Capital Markets ETF | \$99M | \$175M | \$198M | \$202M | \$316M |
| IGV | iShares Expanded Tech-Software Sector ETF | \$69M | \$47M | \$349M | \$975M | \$6,385M |
| IEZ | iShares U.S. Oil Equipment & Services ETF | \$58M | \$113M | (\$2M) | \$113M | \$334M |
| VGT | Vanguard Information Technology ETF | \$42M | \$383M | (\$714M) | (\$490M) | \$50,042M |
| KIE | SPDR S&P Insurance ETF | \$33M | \$94M | \$101M | \$80M | \$594M |
| SCHH | Schwab U.S. REIT ETF | \$28M | \$155M | \$249M | \$523M | \$5,477M |
| AMLP | Alerian MLP ETF | \$20M | \$200M | \$84M | \$55M | \$7,082M |

U.S. Sector & Industry Flow Laggards

| Ticker | Fund | 1 Week | 3 Month | 6 Month | 1 Year | AUM |
|--------|---|----------|------------|------------|----------|-----------|
| XLF | Financial Select Sector SPDR Fund | (\$536M) | (\$2,414M) | (\$1,171M) | \$207M | \$30,638M |
| XLV | Health Care Select Sector SPDR Fund | (\$347M) | (\$1,586M) | (\$380M) | (\$683M) | \$38,730M |
| XLC | Communication Services Select Sector SPDR Fu | (\$290M) | \$151M | \$2,144M | \$2,423M | \$13,246M |
| XLB | Materials Select Sector SPDR Fund | (\$268M) | (\$431M) | (\$202M) | (\$406M) | \$5,120M |
| KRE | SPDR S&P Regional Banking ETF | (\$229M) | (\$456M) | (\$211M) | \$477M | \$2,598M |
| XLY | Consumer Discretionary Select Sector SPDR Fu | (\$219M) | \$1,300M | \$2,155M | \$1,482M | \$17,702M |
| XLU | Utilities Select Sector SPDR Fund | (\$205M) | (\$619M) | (\$219M) | (\$682M) | \$14,389M |
| XHB | SPDR S&P Homebuilders ETF | (\$123M) | (\$105M) | (\$52M) | \$13M | \$1,148M |
| XOP | SPDR S&P Oil & Gas Exploration & Production E | (\$123M) | \$152M | (\$511M) | (\$688M) | \$3,688M |
| XLP | Consumer Staples Select Sector SPDR Fund | (\$109M) | \$280M | \$557M | \$1,354M | \$16,526M |

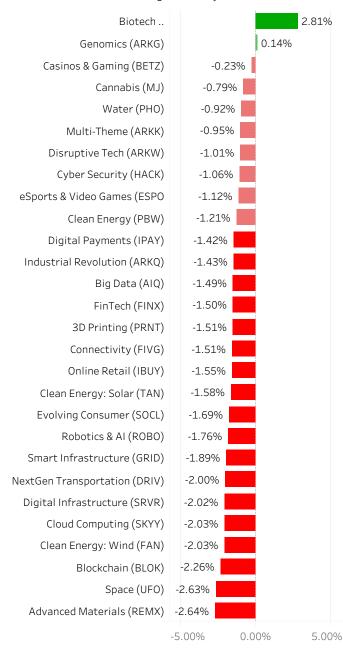
^{*}ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day



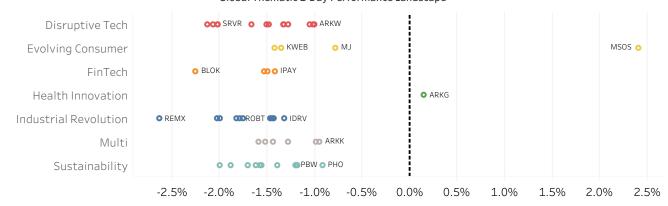
^{*}ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day

Global Thematic Performance

Global Thematic Segment 1-Day Performance



Global Thematic 1-Day Performance Landscape



Global Thematic 1-Day Performance Leaders

| Ticker | Fund | | Ticker | Fund | |
|--------|---|--------|--------|---|-------|
| SBIO | ALPS Medical Breakthroughs ETF | 2.81% | MSOS | AdvisorShares Pure US Cannabis ETF | 58.50 |
| MSOS | AdvisorShares Pure US Cannabis ETF | 2.41% | MJUS | ETFMG U.S. Alternative Harvest ETF | 55.23 |
| MJUS | ETFMG U.S. Alternative Harvest ETF | 1.01% | MJ | ETFMG Alternative Harvest ETFMG Alternative Harvest | 51.72 |
| ARKG | ARK Genomic Revolution ETF | 0.14% | KWEB | KraneShares CSI China Internet ETF | 41.15 |
| GNOM | Global X Genomics & Biotechnology ETF | 0.10% | IHAK | iShares Cybersecurity & Tech ETF | 38.90 |
| BETZ | Roundhill Sports Betting & iGaming ETF | -0.23% | BUG | Global X Cybersecurity ETF | 38.76 |
| IDNA | iShares Genomics Immunology and Healthcare ETF | -0.29% | HACK | ${\tt ETFMG\ Prime\ Cyber\ Security\ ETFMG\ Prime\ Cyber\ Security\}$ | 37.09 |
| GDOC | Goldman Sachs Future Health Care Equity ETF | -0.42% | EMQQ | EMQQ The Emerging Markets Internet & Ecommerce ETF | 36.44 |
| PAWZ | ProShares Pet Care ETF | -0.52% | CIBR | First Trust NASDAQ Cybersecurity ETF | 34.78 |
| EDOC | Global X Telemedicine & Digital Health ETF Registered | -0.77% | SOCL | Global X Social Media ETF | 34.02 |

Global Thematic 1-Day Performance Laggards

Thematic Most Oversold

| Ticker | Fund | | Ticker | Fund | |
|--------|---|--------|--------|---|-------|
| BITQ | Bitwise Crypto Industry Innovators ETF | -2.87% | EDOC | Global X Telemedicine & Digital Health ETF Registered | 16.49 |
| REMX | VanEck Rare Earth/Strategic Metals ETF | -2.64% | PAWZ | ProShares Pet Care ETF | 17.79 |
| ONLN | ProShares Online Retail ETF | -2.39% | HTEC | ROBO Global Healthcare Technology and Innovation ETF | 19.38 |
| CTEC | Global X CleanTech ETF | -2.28% | SRVR | Pacer Data & Infrastructure Real Estate ETF | 21.05 |
| BLOK | Amplify Transformational Data Sharing ETF | -2.26% | ROBO | ROBO Global Robotics & Automation Index ETF | 21.38 |
| WCLD | WisdomTree Cloud Computing Fund | -2.13% | EVX | VanEck Environmental Services ETF | 22.00 |
| CLOU | Global X Cloud Computing ETF | -2.07% | KOMP | SPDR S&P Kensho New Economies Composite ETF | 22.29 |
| BOTZ | Global X Robotics & Artificial Intelligence ETF | -2.03% | FINX | Global X FinTech ETF | 22.33 |
| FAN | First Trust Global Wind Energy ETF | -2.03% | ARKG | ARK Genomic Revolution ETF | 22.56 |
| SKYY | First Trust Cloud Computing ETF | -2.03% | BETZ | Roundhill Sports Betting & iGaming ETF | 22.64 |

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Fidelity New Mill

VanEck Digital India ETF

Bitwise Crypto Industry Innovators ETF

FMIL

DGIN

Thematic 1 Week Flow Leaders

| | mematic 1 Week How Leaders | |
|--------|---|-------|
| Ticker | Fund | |
| GNOM | Global X Genomics & Biotechnology ETF | \$47M |
| AIQ | Global X Artificial Intelligence & Technology ETF | \$13M |
| ROBT | First Trust Nasdaq Artificial Intelligence & Robotics ETF | \$8M |
| ARKG | ARK Genomic Revolution ETF | \$6M |
| KOMP | SPDR S&P Kensho New Economies Composite ETF | \$5M |
| TARK | AXS 2X Innovation ETF | \$3M |
| THNQ | ROBO Global Artificial Intelligence ETF | \$3M |
| FMII | Fidelity New Millennium ETF | \$2M |

\$1M

\$1M

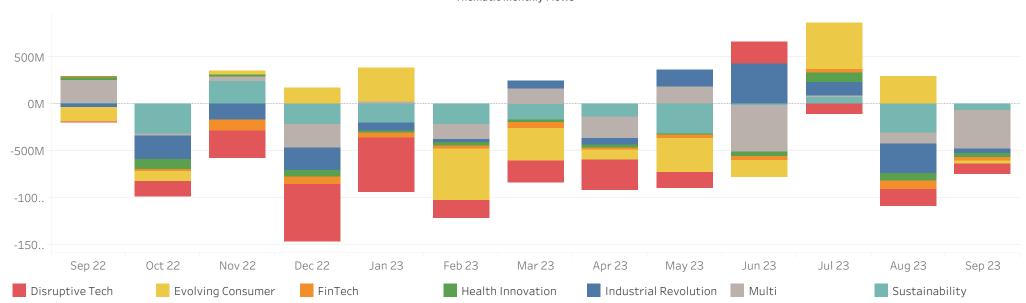
Thematic 1 Week Flow Laggards

| Ticker | Fund | |
|--------|--|----------|
| ARKK | ARK Innovation ETF | (\$171M) |
| SKYY | First Trust Cloud Computing ETF | (\$19M) |
| HERO | Global X Video Games & Esports ETF | (\$16M) |
| BOTZ | Global X Robotics & Artificial Intelligence ETF | (\$12M) |
| ESP0 | VanEck Video Gaming and eSports ETF | (\$10M) |
| HACK | ETFMG Prime Cyber Security ETFMG Prime Cyber Security Fund | (\$10M) |
| WCLD | WisdomTree Cloud Computing Fund | (\$10M) |
| CLOU | Global X Cloud Computing ETF | (\$10M) |
| BUG | Global X Cybersecurity ETF | (\$9M) |
| QCLN | First Trust Nasdaq Clean Edge Green Energy Index Fund | (\$9M) |

Thematic Landscape Assets & Flows

| Segment | Funds | AUM | 1 Week | 3 Month | 6 Month | 1 Year |
|-----------------------|-------|-------|----------|----------|------------|------------|
| Disruptive Tech | 34 | \$16B | (\$55M) | (\$428M) | (\$712M) | (\$2,758M) |
| Evolving Consumer | 40 | \$9B | (\$24M) | \$729M | \$111M | (\$471M) |
| FinTech | 17 | \$2B | (\$1M) | (\$90M) | (\$189M) | (\$543M) |
| Health Innovation | 18 | \$3B | \$40M | (\$16M) | (\$158M) | (\$363M) |
| Industrial Revolution | 30 | \$10B | (\$22M) | (\$207M) | \$381M | (\$399M) |
| Multi | 38 | \$13B | (\$125M) | (\$445M) | (\$988M) | (\$1,018M) |
| Sustainability | 40 | \$14B | (\$22M) | (\$318M) | (\$832M) | (\$1,675M) |
| Grand Total | 217 | \$67B | (\$209M) | (\$774M) | (\$2,386M) | (\$7,227M) |

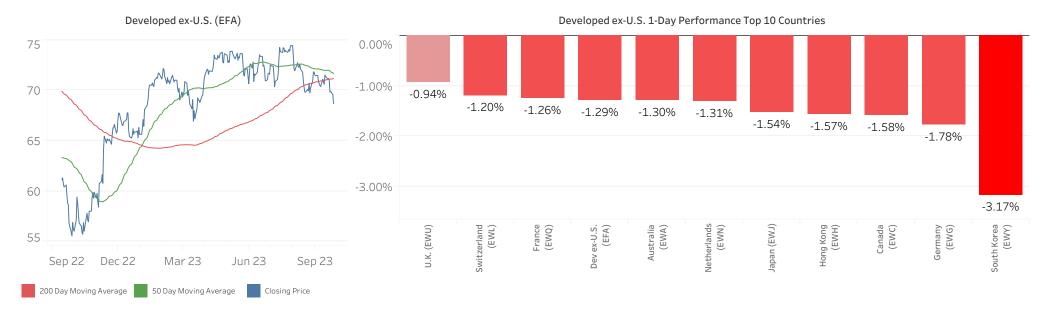
Thematic Monthly Flows



^{*} 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

15B 10B 5B 0B 0ct 22 Jan 23 Apr 23 Jul 23 Oct 23

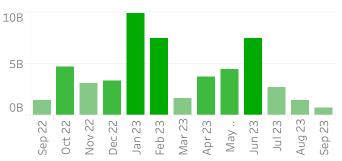
Developed ex-U.S. 1-Day Performance Leaders

| Ticker | Fund | |
|--------|--|--------|
| EIRL | iShares MSCI Ireland ETF | -0.43% |
| GREK | Global X MSCI Greece ETF | -0.50% |
| EWS | iShares MSCI Singapore ETF | -0.55% |
| CIL | VictoryShares International Volatility Wtd ETF | -0.67% |
| FDD | First Trust Stoxx European Select Dividend Index Fund | -0.73% |
| FYLD | Cambria Foreign Shareholder Yield ETF | -0.79% |
| FLGB | Franklin FTSE United Kingdom ETF | -0.79% |
| EFAV | iShares MSCI EAFE Min Vol Factor ETF | -0.82% |
| NORW | Global X MSCI Norway ETF | -0.83% |
| IDLV | Invesco S&P International Developed Low Volatility ETF | -0.85% |

Developed ex-U.S. Most Overbought

| Ticker | Fund | |
|--------|--|-------|
| DXJ | WisdomTree Japan Hedged Equity Fund | 55.36 |
| DXJS | WisdomTree Japan Hedged SmallCap Equity Fund | 55.21 |
| EWJV | iShares MSCI Japan Value ETF | 52.70 |
| FJP | First Trust Japan AlphaDEX Fund | 50.12 |
| FLJH | Franklin FTSE Japan Hedged ETF | 49.49 |
| HEWJ | iShares Currency Hedged MSCI Japan ETF | 49.08 |
| DBJP | Xtrackers MSCI Japan Hedged Equity ETF | 49.02 |
| DFJ | WisdomTree Japan SmallCap Dividend Fund | 47.59 |
| NORW | Global X MSCI Norway ETF | 45.58 |
| IVAL | Alpha Architect International Quantitative Value ETF | 45.25 |

Developed ex-U.S. Monthly Flows



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

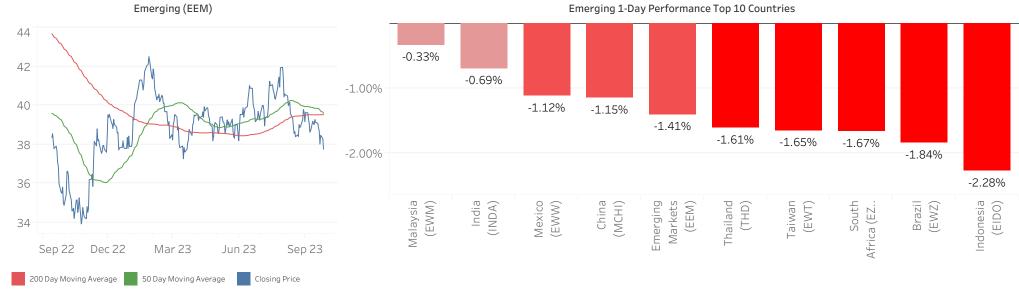
| ker | Fund | |
|----------|---|---|
| /Υ | iShares MSCI South Korea ETF | -3.17% |
| ΚR | Franklin FTSE South Korea ETF | -2.97% |
| 4 | iShares Asia 50 ETF | -1.95% |
| N | Invesco FTSE RAFI Developed Markets ex-US Small-Mid ETF | -1.80% |
| /G | iShares MSCI Germany ETF | -1.78% |
| RA | VanEck Israel ETF | -1.76% |
| <u> </u> | Invesco Dorsey Wright Developed Markets Momentum ETF | -1.76% |
| JS | iShares MSCI Europe Small-Cap ETF | -1.69% |
| ٧X | SPDR S&P International Small Cap ETF | -1.69% |
| HC | Schwab International Small-Cap Equity ETF | -1.69% |
| | IY KR N IG RA Z | IShares MSCI South Korea ETF IShares MSCI South Korea ETF IShares Asia 50 ETF Invesco FTSE RAFI Developed Markets ex-US Small-Mid ETF IShares MSCI Germany ETF INVESCO Dorsey Wright Developed Markets Momentum ETF ISHARES MSCI Europe Small-Cap ETF |

Developed ex-U.S. Most Oversold

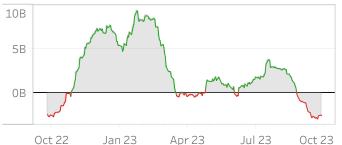
| Ticker | Fund | |
|--------|---|-------|
| EWN | iShares MSCI Netherlands ETF | 21.48 |
| FSZ | First Trust Switzerland AlphaDEX Fund | 22.52 |
| BKCI | BNY Mellon Concentrated International ETF | 22.69 |
| EFG | iShares MSCI EAFE Growth ETF | 24.12 |
| PIZ | Invesco Dorsey Wright Developed Markets Moment | 24.70 |
| FICS | First Trust International Developed Capital Strengt | 24.75 |
| EFAD | ProShares MSCI EAFE Dividend Growers ETF | 25.07 |
| EWG | iShares MSCI Germany ETF | 25.10 |
| DFE | WisdomTree Europe SmallCap Dividend Fund | 25.92 |
| IQDG | WisdomTree International Quality Dividend Growth | 26.07 |

^{*}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 | 30-Day | Rolling | Flows |
|----------|--------|---------|-------|
| | | | |



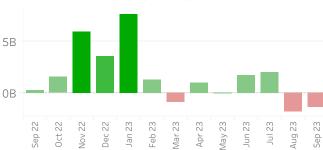
Emerging 1-Day Performance Leaders

| Ticker | Fund | |
|--------|--|--------|
| EPHE | iShares MSCI Philippines ETF | 0.95% |
| QAT | iShares MSCI Qatar ETF | 0.52% |
| RAYC | Rayliant Quantamental China Equity ETF | -0.09% |
| FLN | First Trust Latin America AlphaDEX Fund | -0.24% |
| KSA | iShares MSCI Saudi Arabia ETF | -0.26% |
| ASHR | Xtrackers Harvest CSI 300 China A-Shares ETF | -0.31% |
| EWM | iShares MSCI Malaysia ETF | -0.33% |
| CNYA | iShares MSCI China A ETF | -0.39% |
| SMIN | iShares MSCI India Small Cap ETF | -0.40% |
| ECH | iShares MSCI Chile ETE | -0.58% |

Emerging Most Overbought

| | Ticker | Fund | |
|---|--------|---|-------|
| ó | TUR | iShares MSCI Turkey ETF | 58.60 |
| ó | GLIN | VanEck India Growth Leaders ETF | 50.02 |
| ó | SMIN | iShares MSCI India Small Cap ETF | 49.61 |
| ó | EPI | WisdomTree India Earnings Fund | 48.60 |
| ó | NFTY | First Trust India NIFTY 50 Equal Weight ETF | 48.11 |
| ó | EPHE | iShares MSCI Philippines ETF | 47.25 |
| ó | FLIN | Franklin FTSE India ETF | 46.70 |
| ó | INDA | iShares MSCI India ETF | 46.43 |
| ó | EWM | iShares MSCI Malaysia ETF | 43.90 |
| ó | RAYC | Rayliant Quantamental China Equity ETF | 43.69 |
| | | | |

Emerging Monthly Flows



Emerging 1-Day Performance Laggards

| Ticker | Fund | |
|--------|--|--------|
| EIDO | iShares MSCI Indonesia ETF | -2.28% |
| FLBR | Franklin FTSE Brazil ETF | -2.10% |
| EWZS | iShares MSCI Brazil Small-Cap ETF | -2.01% |
| EYLD | Cambria Emerging Shareholder Yield ETF | -2.01% |
| DGRE | WisdomTree Emerging Markets Quality Dividend Growt | -1.95% |
| EWZ | iShares MSCI Brazil ETF | -1.84% |
| DVYE | iShares Emerging Markets Dividend ETF | -1.80% |
| FRDM | Freedom 100 Emerging Markets ETF | -1.70% |
| FLLA | Franklin FTSE Latin America ETF | -1.69% |
| ILF | iShares Latin America 40 ETF | -1.68% |

Emerging Most Oversold

| Ticker | Fund | |
|--------|---|-------|
| FM | iShares Frontier and Select EM ETF | 24.04 |
| FRDM | Freedom 100 Emerging Markets ETF | 24.91 |
| ECH | iShares MSCI Chile ETF | 25.90 |
| KSA | iShares MSCI Saudi Arabia ETF | 26.12 |
| VNM | VanEck Vietnam ETF | 26.18 |
| EELV | Invesco S&P Emerging Markets Low Volatility ETF | 26.90 |
| MEM | Matthews Emerging Markets Equity Active ETF | 27.31 |
| ARGT | Global X MSCI Argentina ETF | 27.36 |
| EPU | iShares MSCI Peru and Global Exposure ETF | 27.84 |
| THD | iShares MSCI Thailand ETF | 29.64 |
| | | |

^{*}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 | -0.13% | -1.50% | -0.88% |
| SHY | 1-3 Year Treasury Bonds | 0.01% | 0.19% | 1.50% |
| IEF | 7-10 Year Treasury Bonds | -0.03% | -1.84% | -2.44% |
| TLT | 20+ Year Treasury Bonds | -0.35% | -6.38% | -8.81% |
| TIP | TIPS Bonds | -0.25% | -1.46% | -0.82% |
| FLOT | Floating Rate Bonds | 0.00% | 0.54% | 4.80% |
| LQD | Investment Grade Corporate | -0.28% | -1.95% | -0.11% |
| HYG | High Yield Corporate | -0.43% | -0.92% | 3.94% |
| BKLN | Senior Loan | -0.24% | 0.76% | 8.95% |
| PFF | Preferred & Income Securities | -0.64% | -0.10% | 2.76% |
| MUB | Municipal Bonds | -0.11% | -1.61% | -0.57% |
| MBB | MBS | -0.10% | -1.78% | -1.84% |
| EMB | Dollar Denominated EM Bonds | -0.67% | -2.07% | 1.10% |
| LEMB | Local Currency EM Bond | -0.88% | -4.10% | 0.40% |

Commodities Performance

| Ticker | Name | 1 Day | 1 Month | YTD |
|--------|-----------------------|--------|---------|---------|
| DJP | Broad Commodities | -0.40% | 0.09% | -4.03% |
| DBE | Energy | 0.31% | 6.01% | 4.46% |
| USO | WTI Crude Oil | 0.61% | 11.64% | 15.36% |
| BNO | Brent Crude Oil | 0.56% | 11.70% | 13.76% |
| UNG | Natural Gas | -1.93% | -3.64% | -53.12% |
| UGA | Gasoline | 0.94% | -2.24% | 18.45% |
| DBP | Precious Metals | -0.85% | -1.70% | 1.69% |
| GLD | Gold | -0.80% | -0.75% | 3.91% |
| SLV | Silver | -1.13% | -5.67% | -4.81% |
| PPLT | abrdn Physical Platin | -0.84% | -4.30% | -15.93% |
| PALL | abrdn Physical Palla | -0.81% | -0.23% | -31.60% |
| DBB | Base Metals | -0.75% | 1.49% | -5.24% |
| CPER | Copper | -0.84% | -3.01% | -2.38% |
| DBA | Agriculture | -0.37% | 0.23% | 7.54% |
| CORN | Corn | -0.41% | -0.76% | -17.86% |
| SOYB | Soybeans | 0.26% | -3.96% | -3.72% |
| WEAT | Wheat | 0.00% | -4.07% | -26.19% |
| CANE | Sugar | -0.95% | 4 7404 | E2 1004 |

Currencies Performance

| Ticker | Name | 1 Day | 1 Month | YTD |
|--------|------------------------|--------|---------|---------|
| UUP | Long Dollar | 0.30% | 2.48% | 6.90% |
| UDN | Short Dollar | -0.22% | -1.61% | -0.81% |
| FXE | Euro | -0.21% | -2.00% | -0.20% |
| FXB | British Pound Sterling | -0.41% | -3.13% | 2.69% |
| FXF | Swiss Franc | -0.37% | -3.42% | 0.71% |
| FXY | Japanese Yen | -0.13% | -1.90% | -12.33% |
| FXC | Canadian Dollar | -0.40% | 0.90% | 1.76% |
| FXA | Australian Dollar | -0.44% | -0.16% | -5.34% |

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