

# U.S. Size & Style Performance





|        | Size & Style 1-Day Performance Leaders           |       |
|--------|--|-------|
| Ticker | Fund   |       |
| BUZZ   | VanEck Social Sentiment ETF                      | 1.20% |
| IPO    | Renaissance IPO ETF                              | 1.11% |
| WBIY   | WBI Power Factor High Dividend ETF               | 0.94% |
| ABEQ   | Absolute Select Value ETF                        | 0.47% |
| TPLE   | Timothy Plan Us Large/Mid Cap Core Enhanced ETF  | 0.46% |
| QQH    | HCM Defender 100 Index ETF                       | 0.46% |
| SPYD   | SPDR Portfolio S&P 500 High Dividend ETF         | 0.42% |
| RDIV   | Invesco S&P Ultra Dividend Revenue ETF           | 0.41% |
| SPDV   | AAM S&P 500 High Dividend Value ETF              | 0.38% |
| SPHD   | Invesco S&P 500 High Dividend Low Volatility ETF | 0.33% |

| Ticker | Fund  |       |
|--------|---|-------|
| LCG    | Sterling Capital Focus Equity ETF           | 75.56 |
| MBCC   | Monarch Blue Chips Core ETF                 | 74.46 |
| PWB    | Invesco Large Cap Growth ETF                | 73.65 |
| BKLC   | BNY Mellon US Large Cap Core Equity ETF     | 72.23 |
| GVIP   | Goldman Sachs Hedge Industry VIP ETF        | 72.21 |
| NULG   | Nuveen ESG Large-Cap Growth ETF             | 72.05 |
| VUG    | Vanguard Growth ETF                         | 72.05 |
| WINN   | Harbor Long-Term Growers ETF                | 71.85 |
| CATH   | Global X S&P 500 Catholic Values Custom ETF | 71.84 |
| CGGR   | Capital Group Growth ETF                    | 71.79 |
|        |   |       |

Size & Style Most Oversold

|     |             | Small  | Cap Blend (S&P                         | 600) IJR   |              |            |
|-----|-------------|--------|--|------------|--------------|------------|
|     |             | ٨.     |  |            |              | Ticker     |
|     |             | l\h.   |  |            |              | XMMO       |
|     | A           | - 1 M  | _                                      |            |              | DWAS       |
| 100 | M           | -N'    | 1.                                     | NAT        |              | QMOM       |
|     | M           |        |  | 1// W      |              | FDM        |
|     | /h          | J      | \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | V          | h m          | CSD        |
|     | ~ V         |        | M. M.                                  |            |              | XMHQ       |
| 90  |             |        | 117                                    |            | - A 1 P      | PDP        |
|     |             |        |  |            | V            | XSMO       |
|     |             |        |  |            |              | RFG        |
|     | Nov 22      | Feb 23 | May 23                                 | Aug 23     | Nov 23       | RZG        |
| CI  | osing Price |        | 50 Day Movi                            | ng Average | 200 Day Movi | ng Average |

| Ticker | Fund   |        |
|--------|--|--------|
| XMMO   | Invesco S&P MidCap Momentum ETF                  | -1.68% |
| DWAS   | Invesco Dorsey Wright SmallCap Momentum ETF      | -1.56% |
| QMOM   | Alpha Architect U.S. Quantitative Momentum ETF   | -1.53% |
| FDM    | First Trust Dow Jones Select MicroCap Index Fund | -1.48% |
| CSD    | Invesco S&P Spin-Off ETF                         | -1.29% |
| XMHQ   | Invesco S&P MidCap Quality ETF                   | -1.15% |
| PDP    | Invesco Dorsey Wright Momentum ETF               | -1.10% |
| XSMO   | Invesco S&P SmallCap Momentum ETF                | -1.09% |
| RFG    | Invesco S&P Midcap 400 Pure Growth ETF           | -1.06% |
| RZG    | Invesco S&P Smallcap 600 Pure Growth ETF         | -1.05% |
|        |  |        |

Size & Style 1-Day Performance Laggards

| Ticker | Fund  |       |
|--------|---|-------|
| PTMC   | Pacer Trendpilot US Mid Cap ETF                   | 31.46 |
| LSAT   | Leadershares Alphafactor Tactical Focused ETF     | 51.96 |
| RFG    | Invesco S&P Midcap 400 Pure Growth ETF            | 52.04 |
| TMFS   | Motley Fool Small-Cap Growth ETF                  | 52.70 |
| ALTL   | Pacer Lunt Large Cap Alternator ETF               | 52.84 |
| FDM    | First Trust Dow Jones Select MicroCap Index Fund  | 52.90 |
| CSF    | VictoryShares US Discovery Enhanced Volatility Wt | 53.47 |
| MGMT   | Ballast Small/Mid Cap ETF                         | 53.60 |
| TPLE   | Timothy Plan Us Large/Mid Cap Core Enhanced ETF   | 53.93 |
| SMDV   | ProShares Russell 2000 Dividend Growers ETF       | 54.38 |
|        |   |       |

Visit www.etfaction.com

© ETF Action, Inc. 2023

<sup>\*</sup> 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    | \$1,551B | \$2.42B   | \$63.05B  | \$95.32B  | \$90.81B  |
| Large Cap, Beta, Beta: Growth | 10    | \$305B   | \$0.22B   | \$11.57B  | \$13.34B  | \$18.39B  |
| Large Cap, Beta, Beta: Value  | 11    | \$225B   | \$0.37B   | \$2.47B   | \$3.62B   | (\$2.54B) |
| Mid Cap, Beta, Beta           | 10    | \$195B   | \$0.16B   | \$1.15B   | \$7.34B   | \$9.12B   |
| Mid Cap, Beta, Beta: Growth   | 6     | \$36B    | \$0.10B   | \$0.30B   | \$0.93B   | \$0.61B   |
| Mid Cap, Beta, Beta: Value    | 6     | \$38B    | \$0.02B   | (\$0.76B) | (\$1.41B) | (\$2.99B) |
| Small Cap, Beta, Beta         | 11    | \$200B   | (\$1.15B) | \$3.64B   | \$11.70B  | \$11.54B  |
| Small Cap, Beta, Beta: Growth | 7     | \$33B    | (\$0.01B) | \$0.73B   | \$0.98B   | \$1.16B   |
| Small Cap, Beta, Beta: Value  | 7     | \$47B    | (\$0.11B) | (\$0.46B) | (\$0.87B) | (\$1.52B) |

# Mid-Cap 30-Day Rolling Flows



U.S. Size & Style Flow Leaders

| Ticker | Fund                                     | 1 Week  | 3 Month   | 6 Month  | 1 Year    | AUM       |
|--------|--|---------|-----------|----------|-----------|-----------|
| IVV    | iShares Core S&P 500 ETF                 | \$1.67B | \$18.22B  | \$37.14B | \$28.87B  | \$376.24B |
| SPY    | SPDR S&P 500 ETF Trust                   | \$0.56B | \$11.16B  | \$0.81B  | (\$1.66B) | \$429.47B |
| VTI    | Vanguard Total Stock Market ETF          | \$0.29B | \$6.24B   | \$12.31B | \$20.53B  | \$326.29B |
| V00    | Vanguard S&P 500 ETF                     | \$0.27B | \$12.21B  | \$29.32B | \$39.69B  | \$352.50B |
| SPYG   | SPDR Portfolio S&P 500 Growth ETF        | \$0.21B | \$1.23B   | \$1.48B  | \$3.52B   | \$20.26B  |
| PBUS   | Invesco MSCI USA ETF                     | \$0.17B | \$0.83B   | \$1.02B  | \$0.96B   | \$3.60B   |
| IWD    | iShares Russell 1000 Value ETF           | \$0.15B | \$1.03B   | \$0.19B  | (\$3.88B) | \$50.74B  |
| JEPQ   | J.P. Morgan Nasdaq Equity Premium Income | \$0.15B | \$2.20B   | \$4.09B  | \$6.10B   | \$7.40B   |
| PWB    | Invesco Large Cap Growth ETF             | \$0.14B | \$0.15B   | \$0.16B  | \$0.15B   | \$0.85B   |
| IJH    | iShares Core S&P Mid-Cap ETF             | \$0.14B | (\$0.33B) | \$4.47B  | \$5.46B   | \$71.70B  |

# Small-Cap 30-Day Rolling Flows



U.S. Size & Style Flow Laggards

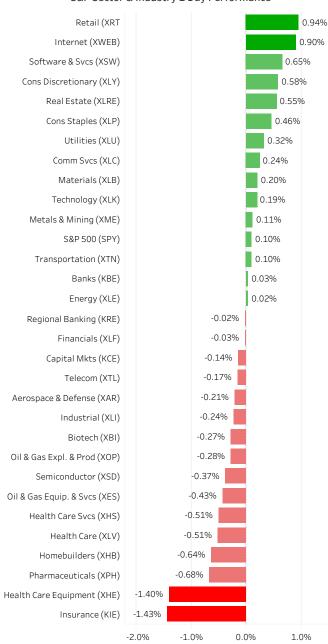
| Ticker | Fund  | 1 Week    | 3 Month   | 6 Month   | 1 Year    | AUM       |
|--------|---|-----------|-----------|-----------|-----------|-----------|
| USMV   | iShares MSCI USA Min Vol Factor ETF         | (\$3.25B) | (\$0.93B) | (\$1.64B) | (\$3.30B) | \$28.14B  |
| IWM    | iShares Russell 2000 ETF                    | (\$1.24B) | \$2.24B   | \$3.98B   | \$1.24B   | \$54.77B  |
| QQQ    | Invesco QQQ Trust Series I                  | (\$0.49B) | \$11.38B  | \$13.43B  | \$5.86B   | \$221.95B |
| IWF    | iShares Russell 1000 Growth ETF             | (\$0.15B) | \$2.99B   | \$2.53B   | (\$0.08B) | \$77.49B  |
| VXF    | Vanguard Extended Market ETF                | (\$0.14B) | \$0.23B   | \$0.68B   | \$1.10B   | \$15.69B  |
| IWB    | iShares Russell 1000 ETF                    | (\$0.14B) | (\$0.20B) | (\$0.14B) | (\$1.04B) | \$31.15B  |
| DIA    | SPDR Dow Jones Industrial Average ETF Trust | (\$0.12B) | (\$0.30B) | (\$0.02B) | (\$2.19B) | \$29.67B  |
| VUG    | Vanguard Growth ETF                         | (\$0.07B) | \$2.18B   | \$1.88B   | \$3.79B   | \$99.35B  |
| VTV    | Vanguard Value ETF                          | (\$0.06B) | (\$0.78B) | \$0.26B   | (\$0.76B) | \$99.67B  |
| IJR    | iShares Core S&P Small Cap ETF              | (\$0.06B) | (\$0.01B) | \$1.85B   | \$2.20B   | \$67.61B  |

<sup>\*</sup> 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<br>High | % From 52W<br>Low | % Abv/Below<br>50 SMA | % Abv/Below<br>200 SMA | RSI (14D) |
|--------|--|--------------------|-------------------|-----------------------|------------------------|-----------|
| XLK    | Technology Select Sector SPDR Fund             | -0.38%             | 52.46%            | 7.98%                 | 13.30%                 | 71.38     |
| SPY    | SPDR S&P 500 ETF Trust                         | -0.62%             | 20.78%            | 4.83%                 | 6.34%                  | 70.44     |
| XLC    | Communication Services Select Sector SPDR Fund | -0.72%             | 51.44%            | 4.93%                 | 11.56%                 | 64.24     |
| XLY    | Consumer Discretionary Select Sector SPDR Fund | -4.23%             | 34.23%            | 5.59%                 | 6.94%                  | 66.76     |
| XLF    | Financial Select Sector SPDR Fund              | -4.73%             | 13.78%            | 5.17%                 | 5.24%                  | 70.33     |
| XLI    | Industrial Select Sector SPDR Fund             | -4.75%             | 9.38%             | 3.59%                 | 2.56%                  | 63.68     |
| XLB    | Materials Select Sector SPDR Fund              | -5.30%             | 9.02%             | 4.01%                 | 1.44%                  | 66.51     |
| XLV    | Health Care Select Sector SPDR Fund            | -7.47%             | 5.28%             | 0.85%                 | -0.84%                 | 54.98     |
| XLP    | Consumer Staples Select Sector SPDR Fund       | -8.99%             | 6.51%             | 2.84%                 | -2.97%                 | 63.23     |
| XLE    | Energy Select Sector SPDR Fund                 | -9.33%             | 10.52%            | -2.74%                | 0.14%                  | 45.83     |
| XLRE   | Real Estate Select Sector SPDR Fund            | -12.38%            | 13.86%            | 6.71%                 | 0.66%                  | 67.16     |
| XLU    | Utilities Select Sector SPDR Fund              | -13.32%            | 12.10%            | 4.53%                 | -2.59%                 | 63.76     |

#### Sector & Industry 1 Day Performance Leaders

#### Sector & Industry Most Overbought

| Ticker | Fund   |       | Ticker | Fund  |       |
|--------|--|-------|--------|---|-------|
| XRT    | SPDR S&P Retail ETF                            | 0.94% | IGV    | iShares Expanded Tech-Software Sector ETF           | 75.38 |
| MORT   | VanEck Mortgage REIT Income ETF                | 0.91% | PNQI   | Invesco NASDAQ Internet ETF                         | 73.45 |
| REM    | iShares Mortgage Real Estate ETF               | 0.86% | XNTK   | SPDR NYSE Technology ETF                            | 73.08 |
| KBWY   | Invesco KBW Premium Yield Equity REIT ETF      | 0.84% | ITA    | iShares U.S. Aerospace & Defense ETF                | 72.96 |
| FDN    | First Trust Dow Jones Internet Index Fund      | 0.76% | FTEC   | Fidelity MSCI Information Technology Index ETF      | 71.93 |
| PSR    | Invesco Active U.S. Real Estate Fund           | 0.76% | XLK    | Technology Select Sector SPDR Fund                  | 71.38 |
| FXU    | First Trust Utilities AlphaDEX Fund            | 0.75% | QTEC   | First Trust NASDAQ-100 Technology Sector Index Fund | 71.14 |
| QTEC   | First Trust NASDAQ-100 Technology Sector Index | 0.73% | VGT    | Vanguard Information Technology ETF                 | 70.93 |
| VNQ    | Vanguard Real Estate ETF                       | 0.66% | IYG    | iShares US Financial Services ETF                   | 70.63 |
| XSW    | SPDR S&P Software & Services ETF               | 0.65% | FNCL   | Fidelity MSCI Financials Index ETF                  | 70.49 |

#### Sector & Industry 1 Day Performance Laggards

#### Sector & Industry Most Oversold

| Ticker | Fund  |        | Ticker | Fund  |       |
|--------|---|--------|--------|---|-------|
| PTH    | Invesco Dorsey Wright Healthcare Momentum ETF       | -2.20% | XES    | SPDR S&P Oil & Gas Equipment & Services ETF         | 39.11 |
| PRN    | Invesco Dorsey Wright Industrials Momentum ETF      | -1.85% | IEZ    | iShares U.S. Oil Equipment & Services ETF           | 39.56 |
| KBWP   | Invesco KBW Property & Casualty Insurance ETF       | -1.60% | PXJ    | Invesco Oil & Gas Services ETF                      | 40.97 |
| AIRR   | First Trust RBA American Industrial Renaissance ETF | -1.59% | XOP    | SPDR S&P Oil & Gas Exploration & Production ETF     | 41.15 |
| PXJ    | Invesco Oil & Gas Services ETF                      | -1.52% | FCG    | First Trust Natural Gas ETF                         | 41.54 |
| PSCI   | Invesco S&P SmallCap Industrials ETF                | -1.51% | PSCE   | Invesco S&P SmallCap Energy ETF                     | 41.63 |
| KIE    | SPDR S&P Insurance ETF                              | -1.43% | FXN    | First Trust Energy AlphaDEX Fund                    | 43.73 |
| XHE    | SPDR S&P Health Care Equipment ETF                  | -1.40% | PXE    | Invesco Energy Exploration & Production ETF         | 43.93 |
| PKB    | Invesco Building & Construction ETF                 | -1.39% | IEO    | iShares U.S. Oil & Gas Exploration & Production ETF | 44.59 |
| PAVE   | Global X U.S. Infrastructure Development ETF        | -1.18% | PJP    | Invesco Pharmaceuticals ETF                         | 44.64 |

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

© ETF Action, Inc. 2023 Visit www.etfaction.com



## U.S. Sector & Industry 1-Week Flows

#### Insurance \$193M Banks: Regional \$47M \$39M Construction & Engineering \$22M Retail \$20M Banks \$5M BDCs \$4M Pharmaceuticals \$2M Infrastructure \$0M MLPs: Note Aerospace & Defense \$0M \$0M Food & Beverage \$0M Health Care Providers & Services \$0M Media & Entertainment \$0M Natural Gas \$0M Transportation \$0M Midstream Mortgage REITs (\$1M) Leisure & Recreation (\$2M) (\$2M) MLPs: C-Corp Oil & Gas Equipment & Services (\$5M) (\$6M) Health Care Equipment & Supplies (\$18M) Biotech (\$28M) Semiconductors (\$37M) Homebuilding Metals & Mining (\$38M) (\$219M) Oil & Gas Exploration & Production (\$818M) Software -1000M -500M 0M 500M

1 Week (Custom SQL Query22)

#### U.S. Sector Landscape

|                        | Funds | AUM    | 1 Week   | 3 Month    | 6 Month    | 1 Year     |
|------------------------|-------|--------|----------|------------|------------|------------|
| Communication Services | 7     | \$19B  | \$60M    | (\$534M)   | \$1,090M   | \$2,777M   |
| Consumer Discretionary | 12    | \$27B  | \$108M   | (\$77M)    | \$1,091M   | \$1,534M   |
| Consumer Staples       | 10    | \$26B  | (\$17M)  | (\$2,977M) | (\$3,815M) | (\$1,985M) |
| Energy                 | 30    | \$72B  | (\$358M) | \$2,117M   | \$731M     | (\$8,067M) |
| Financials             | 26    | \$55B  | \$179M   | (\$3,442M) | (\$1,719M) | (\$3,691M) |
| Health Care            | 23    | \$82B  | (\$405M) | (\$4,256M) | (\$5,804M) | (\$9,137M) |
| Industrial             | 13    | \$34B  | (\$144M) | (\$1,225M) | \$798M     | \$1,352M   |
| Materials              | 9     | \$12B  | (\$94M)  | (\$922M)   | (\$1,964M) | (\$2,003M) |
| Multi-Sector           | 17    | \$18B  | \$28M    | (\$413M)   | \$2,057M   | \$1,990M   |
| Real Estate            | 25    | \$54B  | \$11M    | (\$148M)   | \$606M     | (\$3,116M) |
| Technology             | 23    | \$165B | (\$843M) | \$5,838M   | \$4,815M   | \$4,775M   |
| Utilities              | 9     | \$21B  | \$35M    | (\$1,782M) | (\$2,239M) | (\$2,110M) |

### U.S. Sector & Industry Flow Leaders

| Ticker | Fund   | 1 Week | 3 Month    | 6 Month    | 1 Year     | AUM       |
|--------|--|--------|------------|------------|------------|-----------|
| XLK    | Technology Select Sector SPDR Fund           | \$230M | \$1,647M   | \$2,284M   | (\$764M)   | \$55,034M |
| KIE    | SPDR S&P Insurance ETF                       | \$192M | \$287M     | \$275M     | \$248M     | \$847M    |
| IYR    | iShares U.S. Real Estate ETF                 | \$128M | \$267M     | \$249M     | (\$147M)   | \$2,986M  |
| XLC    | Communication Services Select Sector SPDR Fu | \$60M  | (\$497M)   | \$832M     | \$2,517M   | \$14,768M |
| XLY    | Consumer Discretionary Select Sector SPDR Fu | \$59M  | \$478M     | \$1,018M   | \$1,054M   | \$17,629M |
| VIS    | Vanguard Industrials ETF                     | \$51M  | (\$360M)   | \$17M      | (\$5M)     | \$3,997M  |
| XLU    | Utilities Select Sector SPDR Fund            | \$50M  | (\$1,022M) | (\$1,293M) | (\$1,041M) | \$13,570M |
| KRE    | SPDR S&P Regional Banking ETF                | \$49M  | \$53M      | (\$509M)   | \$568M     | \$2,803M  |
| PKB    | Invesco Building & Construction ETF          | \$39M  | (\$1M)     | \$36M      | \$105M     | \$261M    |
| XBI    | SPDR S&P BIOTECH ETF                         | \$36M  | \$438M     | \$209M     | (\$1,165M) | \$6,086M  |

## U.S. Sector & Industry Flow Laggards

| Ticker | Fund  | 1 Week   | 3 Month    | 6 Month    | 1 Year     | AUM       |
|--------|---|----------|------------|------------|------------|-----------|
| IGV    | iShares Expanded Tech-Software Sector ETF     | (\$818M) | \$1,330M   | \$1,576M   | \$1,644M   | \$7,247M  |
| XLV    | Health Care Select Sector SPDR Fund           | (\$352M) | (\$2,847M) | (\$3,274M) | (\$3,536M) | \$36,768M |
| XOP    | SPDR S&P Oil & Gas Exploration & Production E | (\$214M) | (\$338M)   | (\$348M)   | (\$842M)   | \$3,321M  |
| XLI    | Industrial Select Sector SPDR Fund            | (\$184M) | (\$899M)   | \$509M     | (\$238M)   | \$14,371M |
| XLE    | Energy Select Sector SPDR Fund                | (\$161M) | \$1,829M   | \$688M     | (\$2,673M) | \$37,394M |
| VNQ    | Vanguard Real Estate ETF                      | (\$96M)  | (\$848M)   | (\$289M)   | (\$2,214M) | \$30,504M |
| XLF    | Financial Select Sector SPDR Fund             | (\$72M)  | (\$2,596M) | (\$675M)   | (\$1,595M) | \$31,031M |
| IBB    | iShares Biotechnology ETF                     | (\$54M)  | (\$447M)   | (\$724M)   | (\$1,421M) | \$6,403M  |
| FXL    | First Trust Technology AlphaDEX Fund          | (\$53M)  | \$68M      | \$74M      | \$31M      | \$1,288M  |
| XME    | SPDR S&P Metals & Mining ETF                  | (\$38M)  | (\$92M)    | (\$182M)   | (\$269M)   | \$1,737M  |

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



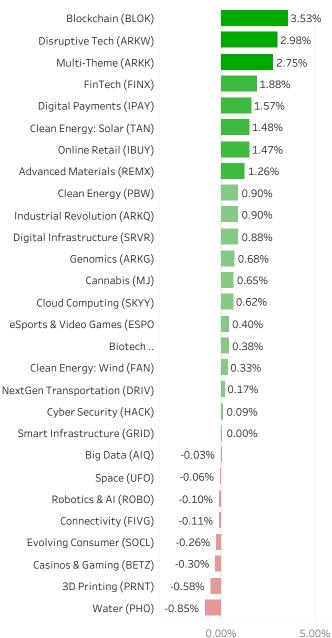


<sup>\*</sup>ETF Landscape represented using the ETF Action classification system\*\*Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify \*\*\*Flows delayed one day

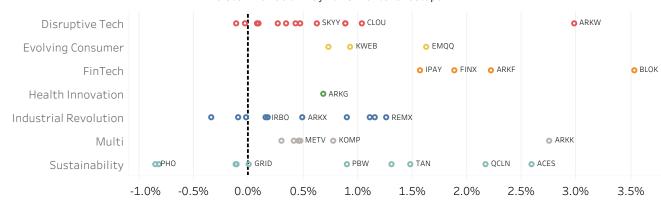


# **Global Thematic Performance**

# Global Thematic Segment 1-Day Performance



#### Global Thematic 1-Day Performance Landscape



#### Global Thematic 1-Day Performance Leaders

# Thematic Most Overbought

| Ticker | Fund  |       | Ticker | Fund   |       |
|--------|---|-------|--------|--|-------|
| DAPP   | VanEck Digital Transformation ETF                     | 8.20% | ARKF   | ARK Fintech Innovation ETF                     | 77.85 |
| вксн   | Global X Blockchain ETF                               | 7.92% | PIO    | Invesco Global Water ETF                       | 76.82 |
| BITQ   | Bitwise Crypto Industry Innovators ETF                | 5.93% | ARKW   | ARK Next Generation Internet ETF               | 75.75 |
| BLOK   | Amplify Transformational Data Sharing ETF             | 3.53% | ВКСН   | Global X Blockchain ETF                        | 73.56 |
| ARKW   | ARK Next Generation Internet ETF                      | 2.98% | FINX   | Global X FinTech ETF                           | 73.15 |
| ARKK   | ARK Innovation ETF                                    | 2.75% | TECB   | iShares U.S. Tech Breakthrough Multisector ETF | 73.08 |
| ONLN   | ProShares Online Retail ETF                           | 2.62% | KLDW   | Knowledge Leaders Developed World ETF          | 72.16 |
| ACES   | ALPS Clean Energy ETF                                 | 2.59% | BLOK   | Amplify Transformational Data Sharing ETF      | 72.10 |
| ARKF   | ARK Fintech Innovation ETF                            | 2.22% | BUG    | Global X Cybersecurity ETF                     | 71.99 |
| QCLN   | First Trust Nasdaq Clean Edge Green Energy Index Fund | 2.17% | IHAK   | iShares Cybersecurity & Tech ETF               | 71.80 |

#### Global Thematic 1-Day Performance Laggards

#### Thematic Most Oversold

| Ticker | Fund   |        | Ticker | Fund  |       |
|--------|--|--------|--------|---|-------|
| EVX    | VanEck Environmental Services ETF                  | -1.15% | KGRN   | KraneShares MSCI China Clean Technology Index ETF         | 42.63 |
| PHO    | Invesco Water Resources ETF                        | -0.85% | LIT    | Global X Lithium & Battery Tech ETF                       | 43.67 |
| FIW    | First Trust Water ETF                              | -0.82% | REMX   | VanEck Rare Earth/Strategic Metals ETF                    | 43.73 |
| PRNT   | 3D Printing ETF                                    | -0.58% | PBW    | Invesco WilderHill Clean Energy ETF                       | 43.78 |
| HTEC   | ROBO Global Healthcare Technology and Innovation E | -0.46% | KARS   | KraneShares Electric Vehicles & Future Mobility Index ETF | 47.00 |
| AGNG   | Global X Aging Population ETF                      | -0.37% | CTEC   | Global X CleanTech ETF                                    | 47.15 |
| BOTZ   | Global X Robotics & Artificial Intelligence ETF    | -0.34% | BATT   | Amplify Lithium & Battery Technology ETF                  | 47.74 |
| BETZ   | Roundhill Sports Betting & iGaming ETF             | -0.30% | ACES   | ALPS Clean Energy ETF                                     | 48.59 |
| SOCL   | Global X Social Media ETF                          | -0.26% | TAN    | Invesco Solar ETF   | 49.50 |
| SAMT   | Strategas Macro Thematic Opportunities ETF         | -0.19% | MJ     | ETFMG Alternative Harvest ETFMG Alternative Harvest       | 50.18 |

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

Visit www.etfaction.com



| Thematic 1 Week Flow Lead |
|---------------------------|
|---------------------------|

| Ticker | Fund   |       |
|--------|--|-------|
| BOTZ   | Global X Robotics & Artificial Intelligence ETF              | \$36M |
| TAN    | Invesco Solar ETF  | \$30M |
| AIQ    | Global X Artificial Intelligence & Technology ETF            | \$23M |
| WCLD   | WisdomTree Cloud Computing Fund                              | \$13M |
| ARKG   | ARK Genomic Revolution ETF                                   | \$7M  |
| IRBO   | iShares Robotics and Artificial Intelligence Multisector ETF | \$6M  |
| ARKW   | ARK Next Generation Internet ETF                             | \$6M  |
| FIVG   | Defiance Next Gen Connectivity ETF                           | \$5M  |
| WTAI   | WisdomTree Artificial Intelligence and Innovation Fund       | \$4M  |
| BLOK   | Amplify Transformational Data Sharing ETE                    | \$3M  |

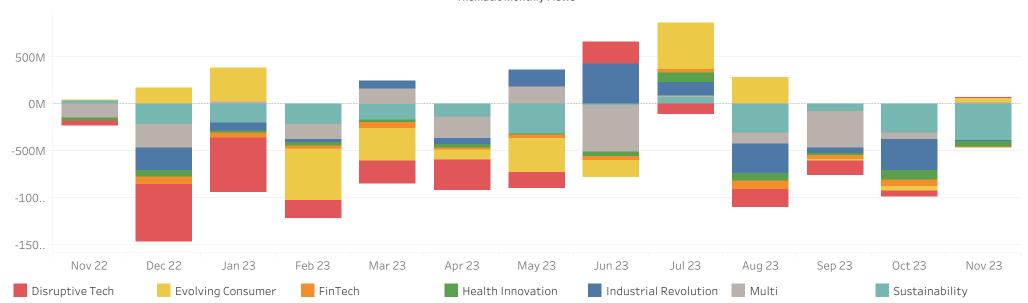
# Thematic 1 Week Flow Laggards

| Ticker | Fund  |          |
|--------|---|----------|
| ARKK   | ARK Innovation ETF                                    | (\$124M) |
| LIT    | Global X Lithium & Battery Tech ETF                   | (\$40M)  |
| ACES   | ALPS Clean Energy ETF                                 | (\$29M)  |
| PBW    | Invesco WilderHill Clean Energy ETF                   | (\$13M)  |
| ICLN   | iShares Global Clean Energy ETF                       | (\$12M)  |
| XT     | iShares Exponential Technologies ETF                  | (\$8M)   |
| EDOC   | Global X Telemedicine & Digital Health ETF Registered | (\$7M)   |
| SKYY   | First Trust Cloud Computing ETF                       | (\$4M)   |
| CGW    | Invesco S&P Global Water Index ETF                    | (\$4M)   |
| IDRV   | iShares Self-driving EV & Tech ETF                    | (\$3M)   |

## Thematic Landscape Assets & Flows

| Segment               | Funds | AUM   | 1 Week  | 3 Month    | 6 Month    | 1 Year     |
|-----------------------|-------|-------|---------|------------|------------|------------|
| Disruptive Tech       | 34    | \$17B | \$25M   | (\$202M)   | (\$260M)   | (\$2,429M) |
| Evolving Consumer     | 37    | \$9B  | \$0M    | (\$19M)    | \$567M     | (\$255M)   |
| FinTech               | 17    | \$3B  | \$4M    | (\$115M)   | (\$203M)   | (\$485M)   |
| Health Innovation     | 18    | \$2B  | (\$13M) | (\$203M)   | (\$239M)   | (\$479M)   |
| Industrial Revolution | 30    | \$10B | \$3M    | (\$400M)   | (\$31M)    | (\$281M)   |
| Multi                 | 35    | \$15B | (\$40M) | (\$382M)   | (\$1,037M) | (\$1,487M) |
| Sustainability        | 40    | \$12B | (\$61M) | (\$776M)   | (\$1,077M) | (\$2,274M) |
| Grand Total           | 211   | \$68B | (\$82M) | (\$2,096M) | (\$2,282M) | (\$7,691M) |

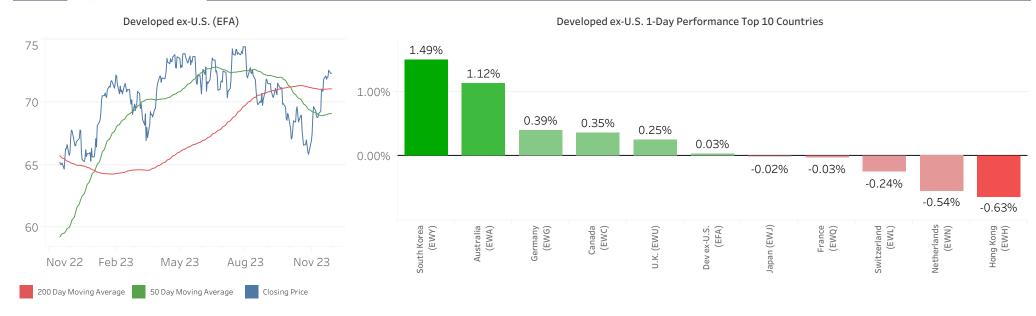
# Thematic Monthly Flows



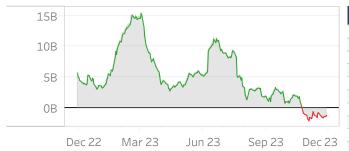
<sup>\*</sup> ETF Landscape represented using the ETF Action classification system\*\*Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify \*\*\*Flows delayed one day







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



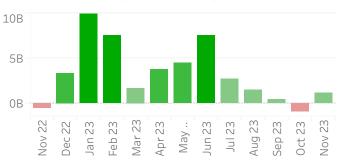
Developed ex-U.S. 1-Day Performance Leaders

| 1      |                                     |       |
|--------|-------------------------------------|-------|
| Ticker | Fund                                |       |
| FLKR   | Franklin FTSE South Korea ETF       | 1.49% |
| EWY    | iShares MSCI South Korea ETF        | 1.49% |
| MINV   | Matthews Asia Innovators Active ETF | 1.46% |
| ENZL   | iShares MSCI New Zealand ETF        | 1.31% |
| EWA    | iShares MSCI Australia ETF          | 1.12% |
| EIS    | iShares MSCI Israel ETF             | 1.12% |
| ISRA   | VanEck Israel ETF                   | 1.01% |
| EWO    | iShares MSCI Austria ETF            | 0.78% |
| EWP    | iShares MSCI Spain ETF              | 0.73% |
| EDD    | iSharos MSCI Pacific ov. Japan ETE  | 0.71% |

Developed ex-U.S. Most Overbought

|   | Ticker | Fund   |       |
|---|--------|--|-------|
| ó | EWP    | iShares MSCI Spain ETF                                   | 79.58 |
| ó | EWG    | iShares MSCI Germany ETF                                 | 75.18 |
| ó | DAX    | Global X DAX Germany ETF                                 | 74.75 |
| ó | IDOG   | ALPS International Sector Dividend Dogs ETF              | 74.30 |
| ó | FICS   | First Trust International Developed Capital Strength ETF | 73.95 |
| ó | EWD    | iShares MSCI Sweden ETF                                  | 73.41 |
| ó | EZU    | iShares MSCI Eurozone ETF                                | 72.88 |
| ó | ТОК    | iShares MSCI Kokusai ETF                                 | 72.68 |
| ó | FEZ    | SPDR EURO STOXX 50 ETF                                   | 72.48 |
| ó | IMOM   | Alpha Architect International Quantitative Momentum ETF  | 72.22 |
|   |        |  |       |

Developed ex-U.S. Monthly Flows



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

| Ticker | Fund  |        |
|--------|---|--------|
| EDEN   | iShares MSCI Denmark ETF                              | -1.27% |
| HEWJ   | iShares Currency Hedged MSCI Japan ETF                | -0.87% |
| DBJP   | Xtrackers MSCI Japan Hedged Equity ETF                | -0.73% |
| DXJ    | WisdomTree Japan Hedged Equity Fund                   | -0.72% |
| NORW   | Global X MSCI Norway ETF                              | -0.64% |
| EWH    | iShares MSCI Hong Kong ETF                            | -0.63% |
| EWN    | iShares MSCI Netherlands ETF                          | -0.54% |
| IHDG   | WisdomTree International Hedged Quality Dividend Grow | -0.50% |
| HEFA   | iShares Currency Hedged MSCI EAFE ETF                 | -0.42% |
| BKCI   | BNY Mellon Concentrated International ETF             | -0.40% |

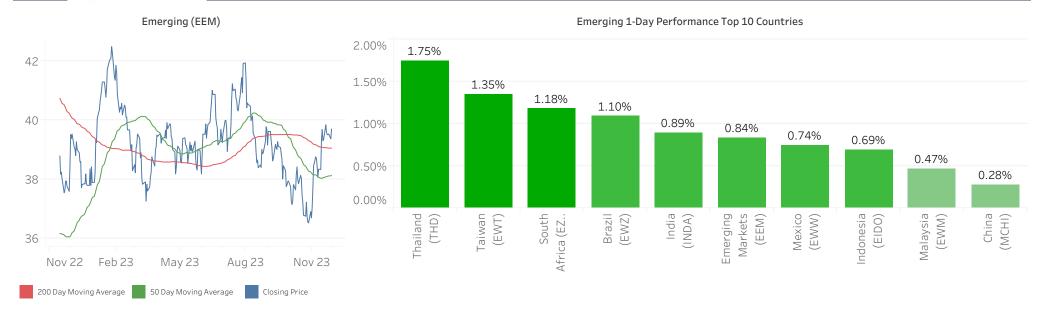
Developed ex-U.S. Most Oversold

| Ticker | Fund   |       |
|--------|--|-------|
| EWH    | iShares MSCI Hong Kong ETF                   | 47.58 |
| EWS    | iShares MSCI Singapore ETF                   | 49.60 |
| DXJ    | WisdomTree Japan Hedged Equity Fund          | 55.05 |
| HEWJ   | iShares Currency Hedged MSCI Japan ETF       | 55.54 |
| AIA    | iShares Asia 50 ETF                          | 56.19 |
| DBJP   | Xtrackers MSCI Japan Hedged Equity ETF       | 56.33 |
| DXJS   | WisdomTree Japan Hedged SmallCap Equity Fund | 58.53 |
| MINV   | Matthews Asia Innovators Active ETF          | 59.03 |
| EWJV   | iShares MSCI Japan Value ETF                 | 59.12 |
| DBEF   | Xtrackers MSCI EAFE Hedged Equity ETF        | 59.50 |

<sup>\*</sup>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   |       |
|--------|--|-------|
| EPOL   | iShares MSCI Poland ETF                            | 2.53% |
| THD    | iShares MSCI Thailand ETF                          | 1.75% |
| EWZS   | iShares MSCI Brazil Small-Cap ETF                  | 1.71% |
| DGRE   | WisdomTree Emerging Markets Quality Dividend Growt | 1.44% |
| FLTW   | Franklin FTSE Taiwan ETF                           | 1.39% |
| FRDM   | Freedom 100 Emerging Markets ETF                   | 1.38% |
| EWT    | iShares MSCI Taiwan ETF                            | 1.35% |
| PIN    | Invesco India ETF                                  | 1.30% |
| AVEM   | Avantis Emerging Markets Equity ETF                | 1.26% |
| FLBR   | Franklin FTSE Brazil ETF                           | 1.24% |

Emerging Most Overbought

| Ticker | Fund  |       |
|--------|---|-------|
| ARGT   | Global X MSCI Argentina ETF                     | 75.74 |
| EPOL   | iShares MSCI Poland ETF                         | 75.00 |
| FLTW   | Franklin FTSE Taiwan ETF                        | 73.45 |
| EWT    | iShares MSCI Taiwan ETF                         | 72.12 |
| FRDM   | Freedom 100 Emerging Markets ETF                | 71.09 |
| DVYE   | iShares Emerging Markets Dividend ETF           | 70.47 |
| FLLA   | Franklin FTSE Latin America ETF                 | 70.19 |
| EWZ    | iShares MSCI Brazil ETF                         | 70.17 |
| FLBR   | Franklin FTSE Brazil ETF                        | 70.08 |
| EELV   | Invesco S&P Emerging Markets Low Volatility ETF | 69.69 |

**Emerging Monthly Flows** 



**Emerging 1-Day Performance Laggards** 

| Ticker | Fund  |        |
|--------|---|--------|
| FXI    | iShares China Large-Cap ETF                       | -1.19% |
| ECNS   | iShares MSCI China Small-Cap ETF                  | -0.47% |
| QAT    | iShares MSCI Qatar ETF                            | -0.17% |
| PGJ    | Invesco Golden Dragon China ETF                   | -0.08% |
| FLCH   | Franklin FTSE China ETF                           | 0.06%  |
| SMIN   | iShares MSCI India Small Cap ETF                  | 0.09%  |
| NUEM   | Nuveen ESG Emerging Markets Equity ETF            | 0.11%  |
| EMXF   | iShares ESG Advanced MSCI EM ETF                  | 0.20%  |
| KSA    | iShares MSCI Saudi Arabia ETF                     | 0.20%  |
| LEEM   | iSharos Curroncy Hodgod MSCI Emorging Markets ETE | 0.21%  |

Emerging Most Oversold

| Ticker | Fund   |       |
|--------|--|-------|
| KBA    | KraneShares Bosera MSCI China A 50 Connect Index | 44.46 |
| FXI    | iShares China Large-Cap ETF                      | 44.48 |
| RAYC   | Rayliant Quantamental China Equity ETF           | 47.31 |
| ASHR   | Xtrackers Harvest CSI 300 China A-Shares ETF     | 47.87 |
| CXSE   | WisdomTree China ex-State-Owned Enterprises Fund | 49.03 |
| CNYA   | iShares MSCI China A ETF                         | 50.03 |
| MCHI   | iShares MSCI China ETF                           | 50.43 |
| FLCH   | Franklin FTSE China ETF                          | 50.45 |
| VNM    | VanEck Vietnam ETF                               | 50.51 |
| GXC    | SPDR S&P China ETF                               | 51.14 |

<sup>\*</sup>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                | 0.44% | 4.11%   | 1.73%  |
| SHY    | 1-3 Year Treasury Bonds       | 0.18% | 0.84%   | 2.89%  |
| IEF    | 7-10 Year Treasury Bonds      | 0.44% | 3.95%   | -0.15% |
| TLT    | 20+ Year Treasury Bonds       | 0.20% | 8.79%   | -5.51% |
| TIP    | TIPS Bonds                    | 0.39% | 2.13%   | 1.12%  |
| FLOT   | Floating Rate Bonds           | 0.02% | 0.42%   | 5.77%  |
| LQD    | Investment Grade Corporate    | 0.40% | 6.79%   | 4.03%  |
| HYG    | High Yield Corporate          | 0.44% | 4.81%   | 7.70%  |
| BKLN   | Senior Loan                   | 0.00% | 1.31%   | 10.16% |
| PFF    | Preferred & Income Securities | 0.33% | 7.16%   | 4.78%  |
| MUB    | Municipal Bonds               | 0.26% | 4.97%   | 2.72%  |
| MBB    | MBS                           | 0.50% | 4.87%   | 0.63%  |
| EMB    | Dollar Denominated EM Bonds   | 0.52% | 6.39%   | 5.72%  |
| LEMB   | Local Currency EM Bond        | 0.33% | 5.32%   | 4.32%  |

#### **Commodities Performance**

| Ticker | Name                  | 1 Day  | 1 Month | YTD     |
|--------|-----------------------|--------|---------|---------|
| DJP    | Broad Commodities     | 1.06%  | -3.62%  | -6.73%  |
| DBE    | Energy                | 1.25%  | -7.16%  | -5.40%  |
| USO    | WTI Crude Oil         | 1.86%  | -9.06%  | 1.64%   |
| BNO    | Brent Crude Oil       | 1.76%  | -8.11%  | 2.16%   |
| UNG    | Natural Gas           | -4.83% | -23.33% | -60.85% |
| UGA    | Gasoline              | 1.90%  | -3.08%  | 5.54%   |
| DBP    | Precious Metals       | 1.22%  | 2.74%   | 9.39%   |
| GLD    | Gold                  | 1.33%  | 1.67%   | 11.57%  |
| SLV    | Silver                | 1.60%  | 8.22%   | 4.09%   |
| PPLT   | abrdn Physical Platin | 2.40%  | 4.37%   | -12.47% |
| PALL   | abrdn Physical Palla  | -1.56% | -5.97%  | -41.16% |
| DBB    | Base Metals           | 0.75%  | 2.67%   | -3.24%  |
| CPER   | Copper                | 1.14%  | 5.03%   | 3.07%   |
| DBA    | Agriculture           | 1.62%  | -0.50%  | 8.88%   |
| CORN   | Corn                  | -0.18% | -2.98%  | -19.75% |
| SOYB   | Soybeans              | 1.14%  | 2.77%   | -0.63%  |
| WEAT   | Wheat                 | 2.03%  | -4.66%  | -30.70% |
| CANE   | Sugar                 | -0.11% | -0.24%  | 58.69%  |

### **Currencies Performance**

| Ticker | Name                   | 1 Day  | 1 Month | YTD     |
|--------|------------------------|--------|---------|---------|
| UUP    | Long Dollar            | -0.34% | -3.07%  | 4.46%   |
| UDN    | Short Dollar           | 0.48%  | 4.00%   | 3.19%   |
| FXE    | Euro                   | 0.27%  | 4.18%   | 4.17%   |
| FXB    | British Pound Sterling | 0.58%  | 5.13%   | 7.85%   |
| FXF    | Swiss Franc            | 0.25%  | 2.69%   | 5.01%   |
| FXY    | Japanese Yen           | 0.80%  | 1.43%   | -11.41% |
| FXC    | Canadian Dollar        | 0.31%  | 2.40%   | 1.71%   |
| FXA    | Australian Dollar      | 0.58%  | 5.02%   | -1.41%  |

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

# **Definitions & Disclosures**

#### 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 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 <a href="https://www.etfaction.com/terms">https://www.etfaction.com/terms</a>.

© 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 www.etfaction.com