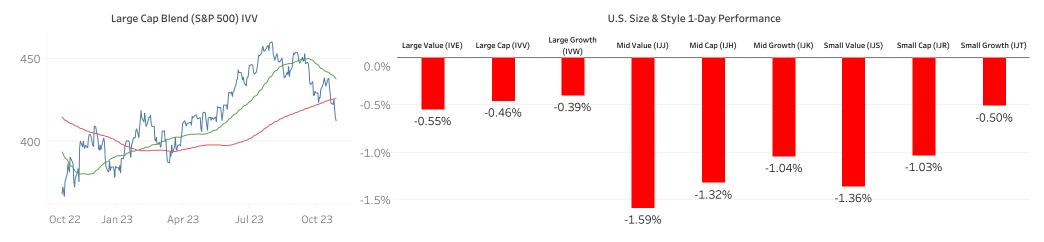


U.S. Size & Style Performance



Mid Cap Blend (S&P 400) IJH

260

240

Oct 22 Jan 23 Apr 23 Jul 23 Oct 23

Size & Style 1-Day Performance Leaders Ticker Fund 0.73% DUSA Davis Select U.S. Equity ETF 0.64% WINN Harbor Long-Term Growers ETF 0.59% QQQM Invesco NASDAQ 100 ETF 0.58% **JEPQ** J.P. Morgan Nasdaq Equity Premium Income ETF 0.53% QQH HCM Defender 100 Index ETF 0.48% MGK Vanguard Mega Cap Growth ETF 0.48% QQQ Invesco QQQ Trust Series I ONEQ 0.46% Fidelity Nasdaq Composite Index ETF 0.42% **TMFC** Motley Fool 100 Index ETF **IWY** 0.41% iShares Russell Top 200 Growth ETF

Ticker	Fund	
SPC	CrossingBridge Pre-Merger SPAC ETF	58.33
SIXS	ETC 6 Meridian Small Cap Equity ETF	37.48
QQH	HCM Defender 100 Index ETF	37.11
SMMV	iShares MSCI USA Small-Cap Min Vol Factor ETF	37.02
XMLV	Invesco S&P MidCap Low Volatility ETF	36.97
QMOM	Momentumshares US Quantitative Momementum ETF	36.65
SIXL	ETC 6 Meridian Low Beta Equity ETF	36.61
QVAL	Alpha Architect US Quantitative Value ETF	36.51
LSAT	Leadershares Alphafactor Tactical Focused ETF	36.22
VFMV	Vanguard U.S. Minimum Volatility ETF	35.98

Size & Style Most Overbought

		Small Cap	Blend (S&P 60	10) IJR		
		٨.				Ticker
		/\/\		.۸.		FDL
		a Joh	1_	My	n	SPVU
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	l l	M	1	M	4	DHS
	NY I	Mul	W/My		La	PEY
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					Υ,	SCHD
						DIVZ
	Oct 22	Jan 23	Apr 23	Jul 23	Oct 23	DVY
CI	osing Price		50 Day Moving	Average	200 Day Movir	ng Average

	3120 d 3cyle i Day i cirormanee Laggards	
Ticker	Fund	
FDL	First Trust Morningstar Dividend Leaders Index Fund	-2.80%
SPVU	Invesco S&P 500 Enhanced Value ETF	-2.19%
SPYD	SPDR Portfolio S&P 500 High Dividend ETF	-2.05%
DHS	WisdomTree U.S. High Dividend Fund	-2.05%
PEY	Invesco High Yield Equity Dividend Achievers ETF	-2.01%
HDV	iShares Core High Dividend ETF	-1.99%
DURA	VanEck Durable High Dividend ETF	-1.89%
SCHD	Schwab US Dividend Equity ETF	-1.88%
DIVZ	TrueShares Low Volatility Equity Income ETF	-1.84%
DVY	iShares Select Dividend ETF	-1.83%

Size & Style 1-Day Performance Laggards

Ticker	Fund	
QARP	Xtrackers Russell 1000 US Quality at a Reasonable P	24.39
DURA	VanEck Durable High Dividend ETF	24.61
MOAT	VanEck Morningstar Wide Moat ETF	24.86
SPHB	Invesco S&P 500 High Beta ETF	25.58
USMC	Principal U.S. Mega-Cap ETF	25.68
RPV	Invesco S&P 500 Pure Value ETF	25.88
ALTL	Pacer Lunt Large Cap Alternator ETF	25.94
CWS	AdvisorShares Focused Equity ETF	25.98
LDDD	Invesco NASDAQ Next Gen 100 ETF	26.05
AIVL	WisdomTree U.S. AI Enhanced Value Fund	26.18

Size & Style Most Oversold

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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	\$1,376B	\$5.59B	\$24.79B	\$79.52B	\$65.95B
Large Cap, Beta, Beta: Growth	10	\$265B	\$0.52B	\$7.08B	\$8.39B	\$17.25B
Large Cap, Beta, Beta: Value	11	\$208B	\$0.17B	\$1.17B	(\$2.40B)	(\$7.23B)
Mid Cap, Beta, Beta	10	\$178B	(\$0.05B)	\$2.48B	\$5.47B	\$10.25B
Mid Cap, Beta, Beta: Growth	6	\$32B	(\$0.06B)	(\$0.34B)	\$0.48B	\$0.42B
Mid Cap, Beta, Beta: Value	6	\$35B	(\$0.04B)	(\$0.66B)	(\$1.71B)	(\$2.54B)
Small Cap, Beta, Beta	11	\$180B	\$1.16B	\$1.33B	\$7.18B	\$9.64B
Small Cap, Beta, Beta: Growth	7	\$29B	(\$0.08B)	(\$0.02B)	\$0.21B	\$0.52B
Small Cap, Beta, Beta: Value	7	\$44B	(\$0.06B)	(\$0.85B)	(\$1.32B)	(\$0.90B)

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	\$1.96B	(\$6.95B)	\$6.12B	(\$7.91B)	\$384.25B
QQQ	Invesco QQQ Trust Series I	\$1.33B	\$1.17B	\$8.42B	\$2.35B	\$190.41B
IWM	iShares Russell 2000 ETF	\$1.13B	(\$0.49B)	\$1.27B	(\$0.79B)	\$47.34B
IVV	iShares Core S&P 500 ETF	\$1.03B	\$16.65B	\$29.09B	\$23.96B	\$336.48B
V00	Vanguard S&P 500 ETF	\$0.47B	\$7.73B	\$24.85B	\$32.50B	\$314.11B
SPLG	SPDR Portfolio S&P 500 ETF	\$0.44B	\$1.59B	\$2.84B	\$4.40B	\$19.48B
VUG	Vanguard Growth ETF	\$0.27B	\$1.94B	\$0.97B	\$4.21B	\$86.60B
VTI	Vanguard Total Stock Market ETF	\$0.21B	\$5.74B	\$11.91B	\$19.57B	\$293.87B
SPYV	SPDR Portfolio S&P 500 Value ETF	\$0.18B	\$0.53B	\$1.28B	\$2.13B	\$15.53B
IWF	iShares Russell 1000 Growth ETF	\$0.18B	\$1.60B	\$0.98B	(\$1.16B)	\$67.05B

Small-Cap 30-Day Rolling Flows



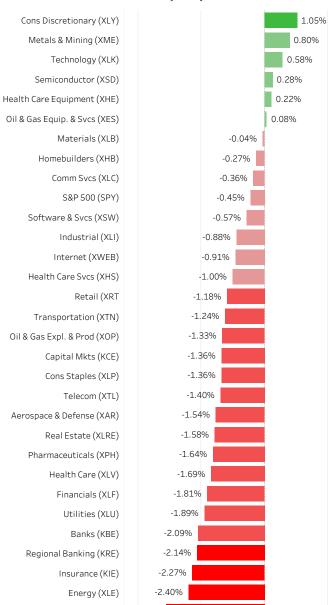
U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
TICKEI	T dild	1 WEEK				AOIVI
USMV	iShares MSCI USA Min Vol Factor ETF	(\$0.27B)	(\$1.22B)	(\$2.33B)	(\$3.17B)	\$26.18B
IJH	iShares Core S&P Mid-Cap ETF	(\$0.27B)	\$1.12B	\$3.62B	\$6.43B	\$65.83B
SUSA	iShares MSCI USA ESG Select ETF	(\$0.27B)	\$0.73B	\$1.13B	\$0.91B	\$4.21B
RSP	Invesco S&P 500 Equal Weight ETF	(\$0.19B)	(\$0.36B)	\$7.21B	\$8.89B	\$37.85B
IVW	iShares S&P 500 Growth ETF	(\$0.15B)	\$0.02B	\$1.54B	\$1.74B	\$32.54B
VTV	Vanguard Value ETF	(\$0.14B)	\$0.48B	(\$2.57B)	(\$4.08B)	\$94.80B
DGRW	WisdomTree US Quality Dividend Growth Fund	(\$0.08B)	\$0.64B	\$1.41B	\$2.16B	\$9.55B
FTCS	First Trust Capital Strength ETF	(\$0.07B)	(\$0.27B)	(\$0.44B)	(\$0.02B)	\$8.19B
VBR	Vanguard Small Cap Value ETF	(\$0.07B)	(\$0.26B)	(\$0.16B)	\$0.47B	\$22.57B
MGK	Vanguard Mega Cap Growth ETF	(\$0.07B)	\$0.27B	\$0.62B	\$1.01B	\$13.29B

^{*}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



Biotech (XBI)

-3.11% -4.0%

-2.0%

0.0%

Select Sector SPDRs Technicals

Ticker	Fund Name	% From 52W High	% From 52W Low	% Abv/Below 50 SMA	% Abv/Below 200 SMA	RSI (14D)
XLC	Communication Services Select Sector SPDR Fund	-8.31%	35.15%	-5.28%	1.86%	33.56
XLE	Energy Select Sector SPDR Fund	-10.04%	10.50%	-5.43%	-0.36%	34.48
SPY	SPDR S&P 500 ETF Trust	-10.29%	9.03%	-5.68%	-3.15%	29.01
XLK	Technology Select Sector SPDR Fund	-10.62%	32.96%	-4.33%	1.46%	36.75
XLV	Health Care Select Sector SPDR Fund	-12.11%	0.00%	-5.83%	-6.18%	24.94
XLB	Materials Select Sector SPDR Fund	-12.56%	0.66%	-5.61%	-6.87%	36.48
XLI	Industrial Select Sector SPDR Fund	-12.92%	0.00%	-6.63%	-6.13%	30.14
XLP	Consumer Staples Select Sector SPDR Fund	-14.09%	0.54%	-4.69%	-8.96%	36.30
XLF	Financial Select Sector SPDR Fund	-15.00%	1.52%	-6.43%	-6.78%	28.02
XLY	Consumer Discretionary Select Sector SPDR Fund	-15.47%	18.48%	-8.27%	-4.66%	33.08
XLU	Utilities Select Sector SPDR Fund	-19.18%	4.52%	-3.90%	-10.23%	45.20
XLRE	Real Estate Select Sector SPDR Fund	-22.66%	0.50%	-7.60%	-12.48%	36.35

Sector & Industry 1 Day Performance Leaders

Sector & Industry Most Overbought

Ticker	Fund		Ticker	Fund	
FDIS	Fidelity MSCI Consumer Discretionary Index ETF	1.17%	KBWP	Invesco KBW Property & Casualty Insurance ETF	46.79
SOXQ	Invesco PHLX Semiconductor ETF	1.15%	FCG	First Trust Natural Gas ETF	46.03
VCR	Vanguard Consumer Discretionary ETF	1.13%	ITA	iShares U.S. Aerospace & Defense ETF	45.23
SOXX	iShares Semiconductor ETF	1.08%	XLU	Utilities Select Sector SPDR Fund	45.20
XLY	Consumer Discretionary Select Sector SPDR Fund	1.05%	MLPA	Global X MLP ETF	44.93
FTXL	First Trust Nasdaq Semiconductor ETF	0.98%	IDU	iShares U.S. Utilities ETF	44.91
IGPT	Invesco AI and Next Gen Software ETF	0.94%	AMLP	Alerian MLP ETF	44.76
FDN	First Trust Dow Jones Internet Index Fund	0.82%	FUTY	Fidelity MSCI Utilities Index ETF	44.46
XME	SPDR S&P Metals & Mining ETF	0.80%	RSPU	Invesco S&P 500 Equal Weight Utilities ETF	44.44
XNTK	SPDR NYSE Technology ETF	0.80%	VPU	Vanguard Utilities ETF	44.25

Sector & Industry 1 Day Performance Laggards

Sector & Industry Most Oversold

Ticker	Fund		Ticker	Fund	
XBI	SPDR S&P BIOTECH ETF	-3.11%	RSPH	Invesco S&P 500 Equal Weight Health Care ETF	20.04
PBE	Invesco Biotechnology & Genome ETF	-3.06%	XPH	SPDR S&P Pharmaceuticals ETF	21.13
IAT	iShares U.S. Regional Banks ETF	-2.94%	KBWD	Invesco KBW High Dividend Yield Financial ETF	22.08
FTXO	First Trust Nasdaq Bank ETF	-2.86%	IYT	iShares US Transportation ETF	22.38
FBT	First Trust NYSE Arca Biotechnology Index Fund	-2.62%	FXH	First Trust Health Care AlphaDEX Fund	23.90
PINK	Simplify Health Care ETF	-2.52%	VHT	Vanguard Health Care ETF	23.93
XLE	Energy Select Sector SPDR Fund	-2.40%	XTN	SPDR S&P Transportation ETF	24.14
KBWB	Invesco KBW Bank ETF	-2.34%	XHE	SPDR S&P Health Care Equipment ETF	24.22
KBWY	Invesco KBW Premium Yield Equity REIT ETF	-2.32%	FHLC	Fidelity MSCI Health Care Index ETF	24.36
FXU	First Trust Utilities AlphaDEX Fund	-2.31%	INDS	Pacer Industrial Real Estate ETF	24.39

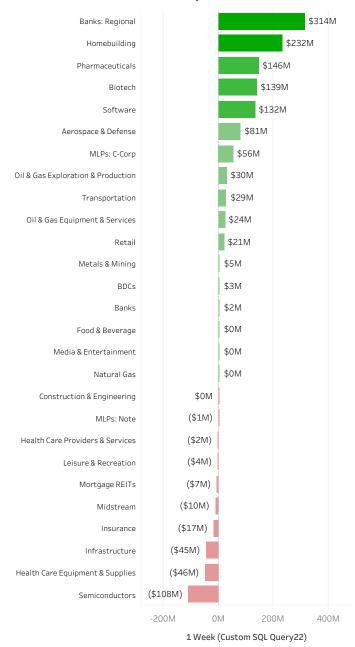
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2.0%

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U.S. Sector & Industry 1-Week Flows



U.S. Sector Landscape

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services	7	\$18B	(\$91M)	\$28M	\$1,635M	\$2,921M
Consumer Discretionary	12	\$23B	(\$386M)	(\$32M)	\$1,221M	\$1,387M
Consumer Staples	10	\$26B	\$77M	(\$2,115M)	(\$2,279M)	\$526M
Energy	31	\$75B	\$526M	\$3,892M	\$19M	(\$6,744M)
Financials	26	\$50B	(\$14M)	(\$6,257M)	(\$4,153M)	(\$3,119M)
Health Care	23	\$80B	\$192M	(\$2,617M)	(\$3,613M)	(\$5,623M)
Industrial	13	\$31B	(\$43M)	(\$742M)	\$1,179M	\$2,797M
Materials	9	\$11B	(\$67M)	(\$1,422M)	(\$2,144M)	(\$1,627M)
Multi-Sector	18	\$16B	(\$82M)	(\$527M)	\$2,121M	\$1,805M
Real Estate	25	\$49B	(\$38M)	(\$334M)	\$29M	(\$2,715M)
Technology	23	\$140B	\$334M	\$2,319M	\$2,030M	\$981M
Utilities	9	\$21B	(\$75M)	(\$1,247M)	(\$1,711M)	(\$1,452M)

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLE	Energy Select Sector SPDR Fund	\$408M	\$3,052M	\$255M	(\$1,870M)	\$39,011M
KRE	SPDR S&P Regional Banking ETF	\$320M	(\$547M)	(\$304M)	\$80M	\$2,475M
XLK	Technology Select Sector SPDR Fund	\$181M	\$128M	\$532M	(\$1,609M)	\$46,457M
XHB	SPDR S&P Homebuilders ETF	\$152M	(\$73M)	\$243M	(\$2M)	\$1,154M
IHE	iShares U.S. Pharmaceuticals ETF	\$146M	\$137M	\$119M	\$102M	\$484M
XBI	SPDR S&P BIOTECH ETF	\$137M	(\$69M)	(\$396M)	(\$1,054M)	\$5,015M
IGV	iShares Expanded Tech-Software Sector ETF	\$134M	(\$682M)	(\$353M)	(\$848M)	\$5,515M
XLP	Consumer Staples Select Sector SPDR Fund	\$91M	(\$443M)	(\$599M)	\$1,416M	\$15,782M
IYW	iShares U.S. Technology ETF	\$88M	\$800M	(\$409M)	\$369M	\$11,196M
ITB	iShares U.S. Home Construction ETF	\$80M	(\$389M)	(\$17M)	\$159M	\$1,670M

U.S. Sector & Industry Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLY	Consumer Discretionary Select Sector SPDR Fu	(\$300M)	\$157M	\$831M	\$326M	\$15,126M
XLF	Financial Select Sector SPDR Fund	(\$288M)	(\$4,333M)	(\$2,557M)	(\$987M)	\$28,550M
FDN	First Trust Dow Jones Internet Index Fund	(\$276M)	(\$482M)	\$739M	\$260M	\$4,817M
XLI	Industrial Select Sector SPDR Fund	(\$133M)	(\$557M)	\$968M	\$660M	\$13,746M
XLC	Communication Services Select Sector SPDR Fu	(\$95M)	(\$171M)	\$1,184M	\$2,364M	\$13,156M
SOXX	iShares Semiconductor ETF	(\$90M)	\$376M	\$209M	\$508M	\$7,980M
XLU	Utilities Select Sector SPDR Fund	(\$79M)	(\$727M)	(\$1,176M)	(\$575M)	\$13,348M
IYR	iShares U.S. Real Estate ETF	(\$62M)	\$23M	(\$24M)	(\$615M)	\$2,456M
VAW	Vanguard Materials ETF	(\$61M)	(\$140M)	(\$14M)	(\$62M)	\$2,632M
RSPD	Invesco S&P 500 Equal Weight Consumer Discr	(\$60M)	(\$34M)	(\$40M)	\$58M	\$400M

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





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Global Thematic Segment 1-Day Performance Global Thematic 1-Day Performance Landscape Big Data (AIQ) 0.67% co SRVR OO SNSR Disruptive Tech 0.66% Connectivity (FIVG) **Evolving Consumer** MSOS KWEB Advanced Materials (REMX) 0.47% O BLOK FinTech Cloud Computing (SKYY) 0.45% ARKG Health Innovation Casinos & Gaming (BETZ) 0.21% Industrial Revolution O ARKO O O O IRBO 0.00% Evolving Consumer (SOCL) ARKK **METV** Multi OOXT eSports & Video Games (ESPO -0.12% TAN ACES O OCLN GRID GRID Sustainability Clean Energy: Wind (FAN) -0.25% -4.0% -3.0% -2.0% 0.0% -7.0% -6.0% -5.0% -1.0% 1.0% Robotics & AI (ROBO) -0.53% -0.62% Cyber Security (HACK) NextGen Transportation (DRIV) -0.71% Global Thematic 1-Day Performance Leaders Thematic Most Overbought Smart Infrastructure (GRID) -0.80% Ticker Ticker Fund Fund 1.57% KraneShares MSCI China Clean Technology Index ETF **BITQ** Bitwise Crypto Industry Innovators ETF 51 11 Online Retail (IBUY) -1.04% KGRN Amplify Lithium & Battery Technology ETF 1.00% BI OK Amplify Transformational Data Sharing ETF 48 97 BATT -1.08% Blockchain (BLOK) **BKCH** 48.12 LIT Global X Lithium & Battery Tech ETF 0.88% Global X Blockchain ETF Water (PHO) -1.13% **SNSR** Global X Internet of Things ETF 0.78% **KWEB** KraneShares CSI China Internet ETF 45.34 ONLN ProShares Online Retail ETF 0.73% KGRN KraneShares MSCI China Clean Technology Index ETF 42.48 3D Printing (PRNT) -1.13% **KWEB** 0.72% **SRVR** 41.92 KraneShares CSI China Internet ETF Pacer Data & Infrastructure Real Estate ETF Industrial Revolution (ARKQ) -1.27% AIO Global X Artificial Intelligence & Technology ETF 0.67% **EMOO** EMQQ The Emerging Markets Internet & Ecommerce ETF 41.12 -1.31% Digital Infrastructure (SRVR) **FIVG** Defiance Next Gen Connectivity ETF 0.66% **BLCN** Siren ETF Trust Siren Nasdag NexGen Economy ETF 40.94 **OTUM** Defiance Quantum ETF 0.58% METV Roundhill Ball Metaverse ETF 37.50 Disruptive Tech (ARKW) -1.38% VanEck Rare Earth/Strategic Metals ETF 0.47% Global X Video Games & Esports ETF 37.20 REMX **HFRO** Space (UFO) -1.50% Global Thematic 1-Day Performance Laggards Thematic Most Oversold -1.73% Digital Payments (IPAY) -1.90% Multi-Theme (ARKK) Ticker Fund Ticker Fund **MSOS** AdvisorShares Pure US Cannabis ETF -6.93% HTEC ROBO Global Healthcare Technology and Innovation ETF 19.25 FinTech (FINX) -1.99% ETFMG U.S. Alternative Harvest ETF -5.12% **IZRL** ARK Israel Innovative Technology ETF 19.51 **MJUS** -2.68% Biotech ... TAN Invesco Solar ETF -4.88% **PRNT** 3D Printing ETF 20.62 Genomics (ARKG) -3.22% MJ ETFMG Alternative Harvest ETFMG Alternative Harvest -3.91% **EDOC** Global X Telemedicine & Digital Health ETF Registered 21.52 -3.55% **ROBO** ROBO Global Robotics & Automation Index ETF 22.62 IDNA iShares Genomics Immunology and Healthcare ETF -3.24% Clean Energy (PBW) -3.42% ARKG 22.84 CNRG SPDR S&P Kensho Clean Power ETF ARK Genomic Revolution ETF Cannabis (MJ) -3.91% **PBW** Invesco WilderHill Clean Energy ETF -3.24% MJUS ETFMG U.S. Alternative Harvest ETF 22.89 **ARKG** ARK Genomic Revolution ETF -3.22% **GDOC** Goldman Sachs Future Health Care Equity ETF 22.91 Clean Energy: Solar (TAN) -4.88% **ICLN** iShares Global Clean Energy ETF -3.16% **PBW** Invesco WilderHill Clean Energy ETF 23.47 -5.00% 0.00% ACES ALPS Clean Energy ETF -3.09% GNOM Global X Genomics & Biotechnology ETF 23.78

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



Ticker

ARKG PBW

AIQ

FMIL MSOS

WGMI

REMX

TARK

AXS 2X Innovation ETF

Thematic 1 Week Flow Leaders

mematic 1 Week How Leaders	
Fund	
iShares Cybersecurity & Tech ETF	\$40M
ARK Genomic Revolution ETF	\$22M
Invesco WilderHill Clean Energy ETF	\$21M
Global X Artificial Intelligence & Technology ETF	\$13M
Fidelity New Millennium ETF	\$10M
AdvisorShares Pure US Cannabis ETF	\$5M
Valkyrie Bitcoin Miners ETF	\$4M
VanEck Rare Earth/Strategic Metals ETF	\$3M

\$2M \$2M

Thematic 1 Week Flow Laggards

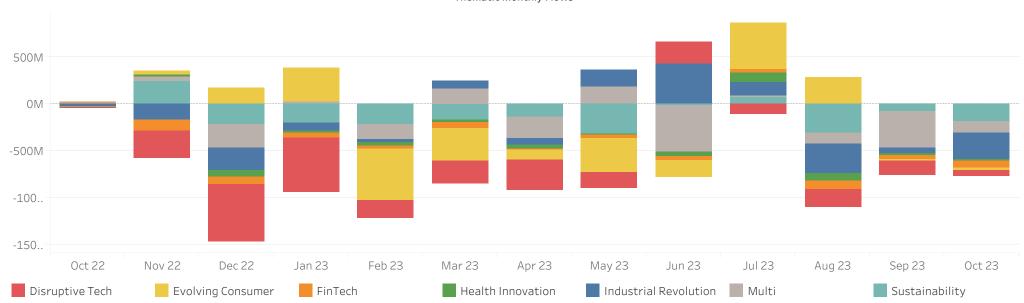
WisdomTree Artificial Intelligence and Innovation Fund

Ticker	Fund	
ARKK	ARK Innovation ETF	(\$57M)
ICLN	iShares Global Clean Energy ETF	(\$39M)
GRID	First Trust Nasdaq Clean Edge Smart GRID Infrastructure Index	(\$17M)
XT	iShares Exponential Technologies ETF	(\$13M)
KWEB	KraneShares CSI China Internet ETF	(\$13M)
SRVR	Pacer Data & Infrastructure Real Estate ETF	(\$12M)
FIVG	Defiance Next Gen Connectivity ETF	(\$12M)
SKYY	First Trust Cloud Computing ETF	(\$11M)
LIT	Global X Lithium & Battery Tech ETF	(\$11M)
ARKQ	ARK Autonomous Technology & Robotics ETF	(\$10M)

Thematic Landscape Assets & Flows

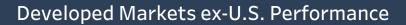
Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	34	\$15B	\$16M	(\$399M)	(\$447M)	(\$2,697M)
Evolving Consumer	39	\$8B	(\$1M)	\$231M	\$185M	(\$245M)
FinTech	17	\$2B	\$3M	(\$194M)	(\$236M)	(\$590M)
Health Innovation	18	\$2B	\$16M	(\$98M)	(\$97M)	(\$291M)
Industrial Revolution	30	\$9B	(\$23M)	(\$649M)	\$111M	(\$425M)
Multi	37	\$12B	(\$23M)	(\$610M)	(\$925M)	(\$1,330M)
Sustainability	40	\$12B	(\$17M)	(\$600M)	(\$850M)	(\$1,566M)
Grand Total	215	\$61B	(\$29M)	(\$2,320M)	(\$2,259M)	(\$7,143M)

Thematic Monthly Flows

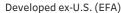


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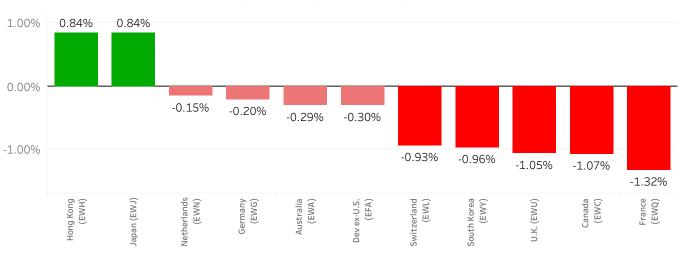






Developed ex-U.S. 1-Day Performance Top 10 Countries





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

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

Developed ex-U.S. Most Overbought

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0B				V %	
	Nov 22	Feb 23	May 23	Aug 23	Nov 23

Ticker	Fund	
DFJ	WisdomTree Japan SmallCap Dividend Fund	1.34%
SCJ	iShares MSCI Japan Small-Cap ETF	1.25%
DXJS	WisdomTree Japan Hedged SmallCap Equity Fund	1.07%
FLJP	Franklin FTSE Japan ETF	0.99%
BBJP	JPMorgan BetaBuilders Japan ETF	0.90%
EWH	iShares MSCI Hong Kong ETF	0.84%
EWJ	iShares MSCI Japan ETF	0.84%
JPXN	iShares JPX-Nikkei 400 ETF	0.80%
EWJV	iShares MSCI Japan Value ETF	0.77%
AVDV	Avantis International Small Cap Value ETF	0.77%

	Ticker	Fund	
	GREK	Global X MSCI Greece ETF	48.61
	DXJS	WisdomTree Japan Hedged SmallCap Equity Fund	47.74
	DFJ	WisdomTree Japan SmallCap Dividend Fund	43.68
	DXJ	WisdomTree Japan Hedged Equity Fund	42.24
	EWH	iShares MSCI Hong Kong ETF	41.59
	SCJ	iShares MSCI Japan Small-Cap ETF	39.63
	EWJV	iShares MSCI Japan Value ETF	39.31
	DBJP	Xtrackers MSCI Japan Hedged Equity ETF	39.26
	FYLD	Cambria Foreign Shareholder Yield ETF	39.16
ı	HEWJ	iShares Currency Hedged MSCI Japan ETF	39.11

Developed ex-U.S. Monthly Flows

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

Developed ex-U.S. Most Oversold

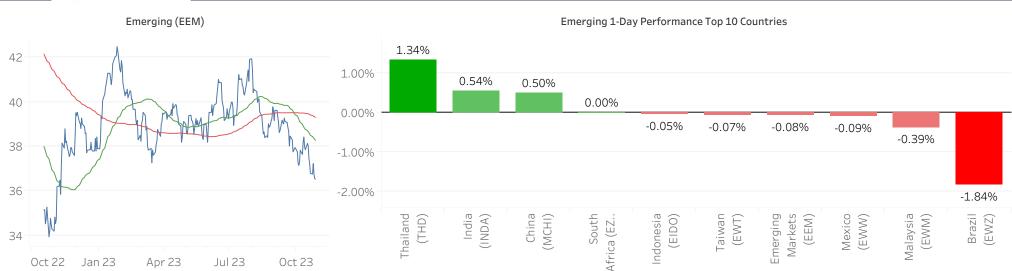
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	Oct 22	Nov 22	Dec 22	Jan 23	Feb 23	Mar 23	Apr 23	Мау	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23

Ticker	Fund	
HEDJ	WisdomTree Europe Hedged Equity Fund	-1.73%
EUDG	WisdomTree Europe Quality Dividend Growth Fund	-1.62%
EWS	iShares MSCI Singapore ETF	-1.49%
EWQ	iShares MSCI France ETF	-1.32%
FLCA	Franklin FTSE Canada ETF	-1.29%
HDEF	Xtrackers MSCI EAFE High Dividend Yield Equity ETF	-1.14%
ENZL	iShares MSCI New Zealand ETF	-1.13%
BBCA	JPMorgan BetaBuilders Canada ETF	-1.08%
EWC	iShares MSCI Canada ETF	-1.07%
EWU	iShares MSCI United Kingdom ETF	-1.05%

Ticker	Fund	
EIS	iShares MSCI Israel ETF	17.54
QLVD	FlexShares Developed Markets ex-US Quality Low V	26.31
EWY	iShares MSCI South Korea ETF	26.36
SCHC	Schwab International Small-Cap Equity ETF	26.38
FLKR	Franklin FTSE South Korea ETF	26.56
FICS	First Trust International Developed Capital Strengt	26.87
ENZL	iShares MSCI New Zealand ETF	27.16
PIZ	Invesco Dorsey Wright Developed Markets Moment	27.43
CIL	VictoryShares International Volatility Wtd ETF	27.63
TPIF	Timothy Plan International ETF	27.67

^{*}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

50 Day Moving Average

200 Day Moving Average



Emerging 1-Day Performance Leaders

Ticker	Fund	
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	1.34%
THD	iShares MSCI Thailand ETF	1.34%
ECNS	iShares MSCI China Small-Cap ETF	1.26%
ECH	iShares MSCI Chile ETF	1.08%
GLIN	VanEck India Growth Leaders ETF	1.08%
GXC	SPDR S&P China ETF	0.90%
CNYA	iShares MSCI China A ETF	0.79%
RAYC	Rayliant Quantamental China Equity ETF	0.74%
SMIN	iShares MSCI India Small Cap ETF	0.72%
FLIN	Franklin FTSE India ETF	0.69%

Emerging Most Overbought

Ticker	Fund	
EPOL	iShares MSCI Poland ETF	60.64
ILF	iShares Latin America 40 ETF	46.37
FLBR	Franklin FTSE Brazil ETF	45.85
EWZ	iShares MSCI Brazil ETF	45.57
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	44.71
FLN	First Trust Latin America AlphaDEX Fund	44.48
ECNS	iShares MSCI China Small-Cap ETF	44.28
FXI	iShares China Large-Cap ETF	44.16
FLLA	Franklin FTSE Latin America ETF	44.03
MCHI	iShares MSCI China ETF	43.49

Emerging Monthly Flows



Emerging 1-Day Performance Laggards

	Ticker	Fund	
	EWZS	iShares MSCI Brazil Small-Cap ETF	-2.67%
	TUR	iShares MSCI Turkey ETF	-2.16%
	EWZ	iShares MSCI Brazil ETF	-1.84%
	FLBR	Franklin FTSE Brazil ETF	-1.57%
	KSA	iShares MSCI Saudi Arabia ETF	-1.30%
	FLN	First Trust Latin America AlphaDEX Fund	-1.30%
	EPHE	iShares MSCI Philippines ETF	-1.11%
	FLLA	Franklin FTSE Latin America ETF	-0.98%
	EPOL	iShares MSCI Poland ETF	-0.97%
	QAT	iShares MSCI Qatar ETF	-0.81%

Emerging Most Oversold

Ticker	Fund	
QAT	iShares MSCI Qatar ETF	22.32
EIDO	iShares MSCI Indonesia ETF	22.68
FM	iShares Frontier and Select EM ETF	27.99
DGS	WisdomTree Emerging Markets SmallCap Dividend F	29.35
EPHE	iShares MSCI Philippines ETF	29.55
XCEM	Columbia EM Core ex-China ETF	29.74
EEMV	iShares MSCI Emerging Markets Min Vol Factor ETF	30.00
INDY	iShares India 50 ETF	30.43
DGRE	WisdomTree Emerging Markets Quality Dividend Gr	30.44
MFEM	PIMCO RAFI Dynamic Multi-Factor Emerging Market	30.59

^{*}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.	l	Perform	
FIXEU	Income	Pertorm	าลทсค

Ticker	Name	1 Day	1 Month	YTD
AGG	U.S. Aggregate	-0.03%	-1.07%	-2.29%
SHY	1-3 Year Treasury Bonds	0.06%	0.59%	2.03%
IEF	7-10 Year Treasury Bonds	0.16%	-1.10%	-3.95%
TLT	20+ Year Treasury Bonds	-0.42%	-4.26%	-13.15%
TIP	TIPS Bonds	0.15%	-0.01%	-0.99%
FLOT	Floating Rate Bonds	-0.02%	0.49%	5.33%
LQD	Investment Grade Corporate	-0.20%	-2.01%	-2.58%
HYG	High Yield Corporate	-0.12%	-1.00%	2.76%
BKLN	Senior Loan	-0.19%	-0.14%	8.74%
PFF	Preferred & Income Securities	-0.52%	-4.89%	-2.22%
MUB	Municipal Bonds	-0.12%	-1.32%	-2.15%
MBB	MBS	0.02%	-1.65%	-4.04%
EMB	Dollar Denominated EM Bonds	0.05%	-1.30%	-0.64%
LEMB	Local Currency EM Bond	0.29%	-0.41%	-0.95%

Commodities Performance

Ticker	Name	1 Day	1 Month	YTD
DJP	Broad Commodities	1.12%	0.37%	-3.23%
DBE	Energy	1.40%	-3.64%	1.90%
USO	WTI Crude Oil	1.91%	-5.48%	11.77%
BNO	Brent Crude Oil	1.75%	-4.09%	11.17%
UNG	Natural Gas	-1.50%	7.14%	-48.94%
UGA	Gasoline	2.34%	-8.92%	8.89%
DBP	Precious Metals	1.23%	6.05%	6.48%
GLD	Gold	1.16%	6.92%	9.73%
SLV	Silver	1.58%	2.32%	-3.81%
PPLT	abrdn Physical Platin	-0.34%	1.40%	-16.14%
PALL	abrdn Physical Palla	-0.79%	-8.21%	-37.42%
DBB	Base Metals	1.38%	-0.49%	-5.76%
CPER	Copper	1.30%	0.71%	-1.86%
DBA	Agriculture	0.92%	2.04%	9.43%
CORN	Corn	0.56%	-0.30%	-17.29%
SOYB	Soybeans	1.35%	0.17%	-3.31%
WEAT	Wheat	-0.34%	-0.51%	-27.32%
CANE	Sugar	1.13%	3.30%	59.08%

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD
UUP	Long Dollar	-0.13%	0.33%	7.77%
UDN	Short Dollar	0.30%	0.69%	-0.78%
FXE	Euro	0.10%	0.81%	-0.01%
FXB	British Pound Sterling	-0.01%	-0.01%	2.59%
FXF	Swiss Franc	-0.25%	2.13%	2.26%
FXY	Japanese Yen	0.58%	-0.02%	-12.66%
FXC	Canadian Dollar	-0.34%	-2.46%	-0.68%
FXA	Australian Dollar	0.30%	-0.16%	-6.12%

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