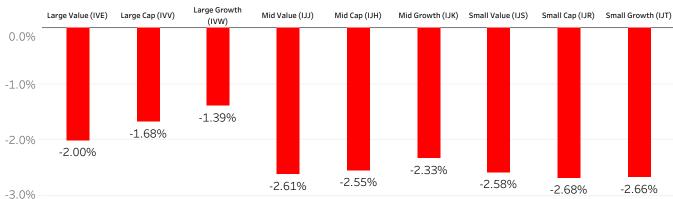


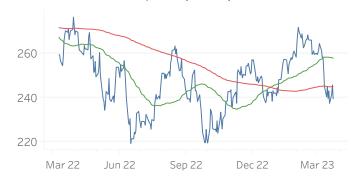
U.S. Size & Style Performance



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	0.05%
SQEW	LeaderShares Equity Skew ETF	-0.35%
RPHS	Regents Park Hedged Market Strategy ETF	-0.36%
ONOF	Global X Adaptive U.S. Risk Management ETF	-0.39%
JEPQ	J.P. Morgan Nasdaq Equity Premium Income ETF	-0.43%
WBIG	WBI BullBear Yield 3000 ETF	-0.57%
QQH	HCM Defender 100 Index ETF	-0.78%
ABEQ	Absolute Select Value ETF	-0.94%
USMC	Principal U.S. Mega-Cap ETF	-0.96%
WINN	Harbor Long-Term Growers ETF	-1.01%

Size & Style Most Overbought

Ticker	Fund	
SPC	CrossingBridge Pre-Merger SPAC ETF	67.15
JEPQ	J.P. Morgan Nasdaq Equity Premium Income ETF	60.70
PTNQ	Pacer Trendpilot 100 ETF	58.33
QQQ	Invesco QQQ Trust	58.10
QQQM	Invesco NASDAQ 100 ETF	57.95
MGK	Vanguard Mega Cap Growth ETF	57.38
WINN	Harbor Long-Term Growers ETF	56.86
QQH	HCM Defender 100 Index ETF	56.85
IWY	iShares Russell Top 200 Growth ETF	56.76
TMFC	Motley Fool 100 Index ETF	56.61

Small Cap Blend (S&P 600) IJR



Size & Style 1-Day Performance Laggards

Ticker	Fund	
XSLV	Invesco S&P SmallCap Low Volatility ETF	-3.31%
RDIV	Invesco S&P Ultra Dividend Revenue ETF	-3.11%
IWN	iShares Russell 2000 Value ETF	-3.06%
JHSC	John Hancock Multifactor Small Cap ETF	-3.05%
SDVY	First Trust SMID Cap Rising Dividend Achievers ETF	-3.03%
SVAL	iShares US Small Cap Value Factor ETF	-3.02%
DDIV	First Trust Dorsey Wright Momentum & Dividend ETF	-2.96%
SPYD	SPDR Portfolio S&P 500 High Dividend ETF	-2.95%
VTWO	Vanguard Russell 2000 ETF	-2.93%
VTWV	Vanguard Russell 2000 Value ETF	-2.92%

Size & Style Most Oversold

Ticker	Fund	_
DIV	Global X SuperDividend US ETF	25.83
RDIV	Invesco S&P Ultra Dividend Revenue ETF	27.69
SPYD	SPDR Portfolio S&P 500 High Dividend ETF	28.21
SPHD	Invesco S&P 500 High Dividend Low Volatility ETF	29.06
RPV	Invesco S&P 500 Pure Value ETF	29.08
WBIG	WBI BullBear Yield 3000 ETF	29.21
RZV	Invesco S&P Smallcap 600 Pure Value ETF	29.86
IWC	iShares Micro-Cap ETF	30.67
XSLV	Invesco S&P SmallCap Low Volatility ETF	30.89
NUMV	Nuveen ESG Mid-Cap Value ETF	31.12

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

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Large-Cap 30-Day Rolling Flows



Mid-Cap 30-Day Rolling Flows



Small-Cap 30-Day Rolling Flows



U.S. Size & Style Landscape Flows

	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Large Cap, Beta, Beta	25	\$1,241B	\$16.41B	(\$7.01B)	\$20.65B	\$41.34B
Large Cap, Beta, Beta: Growth	10	\$237B	\$0.07B	(\$0.01B)	\$10.35B	\$21.21B
Large Cap, Beta, Beta: Value	11	\$217B	(\$1.53B)	(\$0.71B)	\$1.28B	\$6.33B
Mid Cap, Beta, Beta	10	\$180B	(\$1.62B)	\$1.28B	\$6.22B	\$11.10B
Mid Cap, Beta, Beta: Growth	6	\$32B	(\$0.33B)	(\$0.74B)	(\$0.37B)	\$0.55B
Mid Cap, Beta, Beta: Value	6	\$39B	(\$0.78B)	(\$0.56B)	\$0.59B	\$0.50B
Small Cap, Beta, Beta	13	\$190B	(\$0.45B)	\$1.77B	\$5.27B	\$1.11B
Small Cap, Beta, Beta: Growth	7	\$31B	(\$0.26B)	(\$0.54B)	\$0.56B	\$0.68B
Small Cap, Beta, Beta: Value	7	\$48B	(\$1.18B)	(\$0.06B)	\$1.16B	(\$1.62B)

U.S. Size & Style Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
SPY	SPDR S&P 500 ETF Trust	\$14.02B	(\$6.72B)	\$9.52B	\$3.51B	\$365.45B
QUAL	iShares MSCI USA Quality Factor ETF	\$6.46B	\$6.51B	\$5.87B	\$4.74B	\$25.26B
QQQ	Invesco QQQ Trust	\$1.45B	(\$1.01B)	(\$2.18B)	\$1.69B	\$165.38B
IWM	iShares Russell 2000 ETF	\$1.36B	(\$1.16B)	\$0.48B	(\$3.10B)	\$51.95B
- IVV	iShares Core S&P 500 ETF	\$0.83B	(\$3.31B)	(\$0.22B)	\$5.55B	\$300.12B
IWD	iShares Russell 1000 Value ETF	\$0.32B	(\$3.29B)	(\$1.84B)	(\$2.18B)	\$50.16B
IWF	iShares Russell 1000 Growth ETF	\$0.30B	(\$3.74B)	(\$0.67B)	(\$0.14B)	\$61.61B
VOO	Vanguard S&P 500 ETF	\$0.27B	\$3.13B	\$7.87B	\$19.47B	\$277.99B
MDY	SPDR S&P Midcap 400 ETF Trust	\$0.19B	(\$0.35B)	\$0.14B	(\$0.10B)	\$18.24B
MGK	Vanguard Mega Cap Growth ETF	\$0.15B	\$0.11B	(\$0.22B)	\$0.17B	\$11.12B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
ESGU	iShares ESG Aware MSCI USA ETF	(\$5.06B)	(\$6.14B)	(\$7.85B)	(\$7.18B)	\$14.23B
VTI	Vanguard Total Stock Market ETF	(\$3.14B)	\$3.18B	\$10.34B	\$21.10B	\$275.05B
VYM	Vanguard High Dividend Yield Index ETF	(\$2.41B)	\$0.09B	\$1.58B	\$6.73B	\$47.86B
DVY	iShares Select Dividend ETF	(\$2.31B)	(\$0.36B)	\$0.54B	\$1.95B	\$21.53B
VO	Vanguard Mid-Cap ETF	(\$1.61B)	\$0.25B	\$1.14B	\$3.33B	\$50.66B
VTV	Vanguard Value ETF	(\$1.46B)	\$3.76B	(\$0.02B)	\$5.26B	\$99.45B
MTUM	iShares MSCI USA Momentum Factor ETF	(\$1.31B)	(\$1.40B)	\$0.57B	(\$0.12B)	\$9.88B
VB	Vanguard Small-Cap ETF	(\$1.08B)	\$1.15B	\$1.41B	\$0.65B	\$42.15B
VBR	Vanguard Small Cap Value ETF	(\$0.93B)	\$0.36B	\$1.10B	\$0.28B	\$23.71B
VIG	Vanguard Dividend Appreciation ETF	(\$0.80B)	(\$1.12B)	\$0.54B	\$2.01B	\$63.96B

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S&P Sector & Industry 1 Day Performance

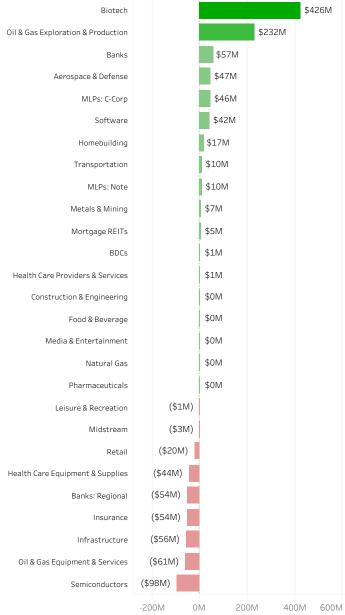
Select Sector SPDRs Technicals

Cons Staples (XLP) Technology (XLK)		-0.92% -1.00%	Ticker	Fund Name	%	6 From 52W High	% From 52W Low	% Abv/Below 50 SMA	% Abv/Below 200 SMA	RSI (14D)
	1		XLI	Industrial Select Sector SPDR Fund		-6.64%	16.84%	-4.19%	1.48%	39.05
Health Care (XLV)	-1.	51%	XLK	Technology Select Sector SPDR Fund		-9.38%	22.90%	3.79%	7.86%	59.01
S&P 500 (SPY)	-1.7	0%	XLP	Consumer Staples Select Sector SPDR Fund		-10.60%	8.32%	-1.22%	-1.34%	45.59
Semiconductor (XSD)	-1.7	1%	XLV	Health Care Select Sector SPDR Fund		-11.92%	4.93%	-3.66%	-3.62%	41.27
Homebuilders (XHB)	-1.7	2%	SPY	SPDR S&P 500 ETF Trust		-13.06%	9.97%	-2.17%	-0.05%	45.83
Retail (XRT	-1.7		XLB	Materials Select Sector SPDR Fund		-15.76%	13.31%	-6.48%	-1.58%	38.23
,			XLE	Energy Select Sector SPDR Fund		-16.37% -17.60%	16.58% 3.07%	-8.67% -11.34%	-4.45% -7.74%	38.16 31.68
Comm Svcs (XLC)	-1.7	5%	XLF	Financial Select Sector SPDR Fund Utilities Select Sector SPDR Fund		-17.61%	4.62%	-4.85%	-7.75%	38.80
Materials (XLB)	-1.78	3%	XLC	Communication Services Select Sector SPDR Full	nd	-21.10%	22.13%	1.68%	5.23%	55.68
Aerospace & Defense (XAR)	-1.84	! %	XLY	Consumer Discretionary Select Sector SPDR Fur		-23.12%	12.62%	-1.91%	-2.63%	47.34
Industrial (XLI)	-1.92	26	XLRE	Real Estate Select Sector SPDR Fund		-31.17%	3.14%	-10.43%	-11.31%	28.29
Utilities (XLU)	-1.969			Sector & Industry 1 Day Performance Leaders			Sector 8	andustry Most	Overbought	
Internet (XWEB)	-2.009	6	T	5 . 1		T '	F			
Energy (XLE)	-2.13%		Ticker FSTA	Fund FIDELITY COVINGTON TRUST MSCI CONSUMER ST	-0.87%	Ticker IYW	Fund iShares U.S. Tech	anology ETE		60.78
Metals & Mining (XME)	-2.16%		VDC	Vanguard Consumer Staples ETF	-0.87%	XLK		t Sector SPDR Fun	d	59.01
- · · · · ·			IYK	iShares U.S. Consumer Staples ETF	-0.92%	VGT		ation Technology I		57.62
Cons Discretionary (XLY)	-2.23%		XLP	Consumer Staples Select Sector SPDR Fund	-0.92%	IGM		d Tech Sector ETF	-11	57.02
Transportation (XTN)	-2.24%		SOXQ	Invesco PHLX Semiconductor ETF	-0.98%	FTEC		ormation Technolo	av Index ETF	57.08
Health Care Svcs (XHS)	-2.28%		SOXX	iShares Semiconductor ETF	-0.99%	SOXX	iShares Semicon		gymacxem	56.65
Financials (XLF)	-2.32%		XLK	Technology Select Sector SPDR Fund	-1.00%	SOXQ	Invesco PHLX Ser			56.53
Pharmaceuticals (XPH)	-2.37%		PBJ	Invesco Dynamic Food & Beverage ETF	-1.03%	XLC		Services Select Sec	tor SPDR Fund	55.68
, ,			FTXG	First Trust Nasdag Food & Beverage ETF	-1.07%	XNTK	SPDR NYSE Tech	nology ETF		55.29
Telecom (XTL)	-2.46%		RHS	Invesco S&P 500 Equal Weight Consumer Staples	-1.08%	IETC		Independence Foo	cused ETF	55.05
Capital Mkts (KCE)	-2.47%			, , ,						
Oil & Gas Expl. & Prod (XOP)	-2.69%			Sector & Industry 1 Day Performance Laggards	5		Sector	& Industry Mos	st Oversold	
Insurance (KIE)	-2.73%		Ticker	Fund		Ticker	Fund			
Health Care Equipment (XHE)	-2.96%		IAT	iShares U.S. Regional Banks ETF	-5.78%	KBWY	Invesco KBW Pre	mium Yield Equity	REIT ETF	18.83
Software & Svcs (XSW)	-3.23%		KRE	SPDR S&P Regional Banking ETF	-5.69%	KBWB	Invesco KBW Bar	nk ETF		25.42
Real Estate (XLRE)	-3.65%		KBWR	Invesco KBW Regional Banking ETF	-5.64%	KRE	SPDR S&P Region	nal Banking ETF		25.79
, ,	-3.72%		KBE	SPDR S&P Bank ETF	-5.16%	RWR	SPDR Dow Jones	REIT ETF		25.87
Oil & Gas Equip. & Svcs (XES)			KBWY	Invesco KBW Premium Yield Equity REIT ETF	-4.96%	EWRE	Invesco S&P 500	Equal Weight Real	Estate ETF	26.02
Biotech (XBI)	-3.80%		KBWB	Invesco KBW Bank ETF	-4.74%	IAT	iShares U.S. Reg	ional Banks ETF		26.19
Banks (KBE)	-5.16%		QABA	First Trust NASDAQ ABA Community Bank Index Fund	-4.71%	PPTY	US Diversified Re	eal Estate ETF		26.33
Regional Banking (KRE)	-5.69%		FTXO	First Trust Nasdaq Bank ETF	-4.40%	FTXO	First Trust Nasda	aq Bank ETF		26.44
	-6.0% -4.0% -	-2.0% 0.0%	USRT	iShares Core U.S. REIT ETF	-3.95%	PSR	Invesco Active U	.S. Real Estate Fun	d	26.47

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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	\$13B	\$28M	(\$209M)	\$123M	(\$827M)
Consumer Discretionary	12	\$21B	\$77M	(\$48M)	(\$528M)	(\$3,258M)
Consumer Staples	10	\$29B	\$216M	(\$318M)	\$1,167M	\$4,641M
Energy	32	\$70B	(\$157M)	(\$3,457M)	(\$2,067M)	(\$8,117M)
Financials	26	\$53B	\$350M	\$1,048M	\$1,059M	(\$14,644M)
Health Care	23	\$89B	\$124M	(\$3,317M)	(\$352M)	\$4,202M
Industrial	13	\$31B	\$415M	\$1,510M	\$1,921M	(\$1,375M)
Materials	9	\$14B	(\$136M)	\$646M	\$234M	(\$2,648M)
Multi-Sector	19	\$14B	(\$58M)	\$125M	(\$380M)	(\$3,385M)
Real Estate	25	\$55B	(\$233M)	(\$2,281M)	(\$2,928M)	(\$5,554M)
Technology	23	\$127B	\$586M	(\$1,379M)	\$1,763M	\$1,134M
Utilities	9	\$25B	\$203M	(\$121M)	(\$683M)	\$3,716M

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
IYW	iShares U.S. Technology ETF	\$526M	\$581M	\$2,556M	\$2,074M	\$10,016M
XLF	Financial Select Sector SPDR Fund	\$503M	(\$365M)	\$40M	(\$9,395M)	\$28,350M
XBI	SPDR S&P BIOTECH ETF	\$432M	(\$702M)	\$268M	\$356M	\$6,848M
XLI	Industrial Select Sector SPDR Fund	\$399M	\$244M	\$71M	(\$1,767M)	\$13,583M
XOP	SPDR S&P Oil & Gas Exploration & Production E	\$236M	(\$647M)	(\$147M)	(\$2,308M)	\$3,607M
XLP	Consumer Staples Select Sector SPDR Fund	\$227M	(\$320M)	\$911M	\$1,790M	\$16,704M
XLU	Utilities Select Sector SPDR Fund	\$177M	(\$110M)	(\$384M)	\$2,551M	\$15,597M
XLK	Technology Select Sector SPDR Fund	\$122M	(\$2,086M)	(\$1,370M)	(\$75M)	\$41,753M
XLY	Consumer Discretionary Select Sector SPDR Fu	\$114M	(\$250M)	(\$603M)	(\$947M)	\$13,668M
IAT	iShares U.S. Regional Banks ETF	\$91M	\$208M	\$155M	(\$269M)	\$763M

U.S. Sector & Industry Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLV	Health Care Select Sector SPDR Fund	(\$287M)	(\$1,321M)	\$18M	\$3,989M	\$38,064M
XLE	Energy Select Sector SPDR Fund	(\$172M)	(\$599M)	(\$150M)	(\$2,529M)	\$35,575M
VNQ	Vanguard Real Estate ETF	(\$169M)	(\$705M)	(\$1,607M)	(\$3,501M)	\$32,012M
KRE	SPDR S&P Regional Banking ETF	(\$141M)	\$865M	\$684M	(\$1,571M)	\$2,941M
VDE	Vanguard Energy ETF	(\$138M)	(\$181M)	(\$282M)	(\$1,116M)	\$7,537M
XLB	Materials Select Sector SPDR Fund	(\$133M)	\$100M	(\$188M)	(\$1,368M)	\$5,252M
IFRA	iShares U.S. Infrastructure ETF	(\$79M)	\$1M	\$94M	\$990M	\$1,784M
ITB	iShares U.S. Home Construction ETF	(\$55M)	(\$98M)	(\$34M)	(\$443M)	\$1,505M
XSD	SPDR S&P Semiconductor ETF	(\$54M)	\$135M	\$120M	\$96M	\$1,391M
VFH	Vanguard Financials ETF	(\$52M)	(\$359M)	(\$600M)	(\$2,271M)	\$7,758M

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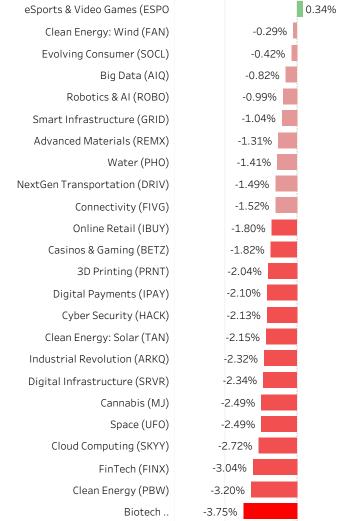


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Global Thematic Performance

Global Thematic Segment 1-Day Performance



Genomics (ARKG)

Disruptive Tech (ARKW)

Multi-Theme (ARKK)

Blockchain (BLOK)

-4.29%

-4.76%

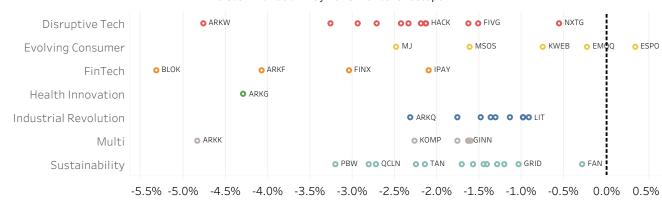
-4.83%

-5.00%

0.00%

-5.32%

Global Thematic 1-Day Performance Landscape



Global Thematic 1-Day Performance Leaders

Thematic Most Overbought

Ticker	Fund		Ticker	Fund	
ESPO	VanEck Video Gaming and eSports ETF	0.34%	ESPO	VanEck Video Gaming and eSports ETF	62.54
GAMR	Wedbush ETFMG Video Game Tech ETF Wedbush ETFMG	0.10%	TIME	Clockwise Capital Innovation ETF	58.28
KGRN	KraneShares MSCI China Clean Technology Index ETF	0.00%	METV	Roundhill Ball Metaverse ETF	57.66
EMQQ	EMQQ The Emerging Markets Internet & Ecommerce ETF	-0.23%	AIQ	Global X Artificial Intelligence & Technology ETF	55.46
BATT	Amplify Lithium & Battery Technology ETF	-0.25%	BOTZ	Global X Robotics & Artificial Intelligence ETF	55.46
FAN	First Trust Global Wind Energy ETF	-0.29%	вксн	Global X Blockchain ETF	55.27
SOCL	Global X Social Media ETF	-0.42%	TECB	iShares U.S. Tech Breakthrough Multisector ETF	55.22
KARS	KraneShares Electric Vehicles & Future Mobility Index ETF	-0.55%	GAMR	Wedbush ETFMG Video Game Tech ETF Wedbush ETFMG V	55.05
HERO	Global X Video Games & Esports ETF	-0.56%	SOCL	Global X Social Media ETF	54.81
NXTG	First Trust Indxx NextG ETF	-0.56%	NXTG	First Trust Indxx NextG ETF	54.59

Global Thematic 1-Day Performance Laggards

Ticker Fund **BITO** Bitwise Crypto Industry Innovators ETF -7.36% -6.61% **BKCH** Global X Blockchain ETF BLOK Amplify Transformational Data Sharing ETF -5.32% -4.83% ARKK ARK Innovation ETF **ARKW** ARK Next Generation Internet ETF -4.76% -4.29% ARKG ARK Genomic Revolution ETF ARKF ARK Fintech Innovation ETF -4.07% SBIO ALPS Medical Breakthroughs ETF -3.75% BTEC Principal Healthcare Innovators ETF -3.55%

WisdomTree Cloud Computing Fund

Thematic Most Oversold

Ticker	Fund	
MJ	ETFMG Alternative Harvest ETFMG Alternative Harvest	26.41
SBIO	ALPS Medical Breakthroughs ETF	26.84
UFO	Procure Space ETF	30.40
MJUS	ETFMG U.S. Alternative Harvest ETF	31.54
IDNA	iShares Genomics Immunology and Healthcare ETF	32.95
RNRG	Global X Renewable Energy Producers ETF	33.76
PBW	Invesco WilderHill Clean Energy ETF	34.29
REMX	VanEck Rare Earth/Strategic Metals ETF	34.72
BTEC	Principal Healthcare Innovators ETF	34.96
MSOS	AdvisorShares Pure US Cannabis ETF	35.01

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WCLD

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-3.26%

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Thematic 1 Week Flow Leaders

Ticker	Fund	
BOTZ	Global X Robotics & Artificial Intelligence ETF	\$14M
LEGR	First Trust Indxx Innovative Transaction & Process ETF	\$9M
ROBT	First Trust Nasdaq Artificial Intelligence & Robotics ETF	\$8M
PBW	Invesco WilderHill Clean Energy ETF	\$5M
TARK	AXS 2X Innovation ETF	\$4M
GTEK	Goldman Sachs Future Tech Leaders Equity ETF	\$3M
HJEN	Direxion Hydrogen ETF	\$3M
TMAT	Main Thematic Innovation ETF	\$0M
DAPP	VanEck Digital Transformation ETF	\$0M
MSGR	Direxion mRNA ETF	\$0M

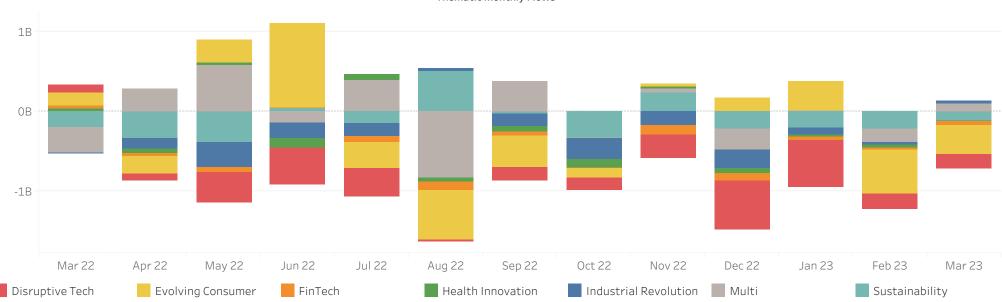
Thematic 1 Week Flow Laggards

Ticker	Fund	
ARKK	ARK Innovation ETF	(\$114M)
KWEB	KraneShares CSI China Internet ETF	(\$58M)
ARKG	ARK Genomic Revolution ETF	(\$38M)
ARKF	ARK Fintech Innovation ETF	(\$23M)
CIBR	First Trust NASDAQ Cybersecurity ETF	(\$16M)
ICLN	iShares Global Clean Energy ETF	(\$15M)
GRID	First Trust Nasdaq Clean Edge Smart GRID Infrastructure Index	(\$14M)
XT	iShares Exponential Technologies ETF	(\$13M)
TAN	Invesco Solar ETF	(\$11M)
DRIV	Global X Autonomous & Electric Vehicles ETF	(\$10M)

Thematic Landscape Assets & Flows

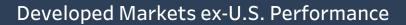
Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	34	\$15B	(\$35M)	(\$1,087M)	(\$2,004M)	(\$3,392M)
Evolving Consumer	45	\$9B	(\$62M)	(\$596M)	(\$649M)	(\$519M)
FinTech	19	\$3B	(\$8M)	(\$146M)	(\$356M)	(\$622M)
Health Innovation	19	\$3B	(\$31M)	(\$101M)	(\$213M)	(\$407M)
Industrial Revolution	31	\$10B	(\$1M)	(\$164M)	(\$806M)	(\$1,681M)
Multi	41	\$14B	(\$239M)	(\$152M)	\$52M	\$101M
Sustainability	40	\$16B	(\$114M)	(\$651M)	(\$880M)	(\$1,366M)
Grand Total	229	\$70B	(\$491M)	(\$2,895M)	(\$4,856M)	(\$7,887M)

Thematic Monthly Flows

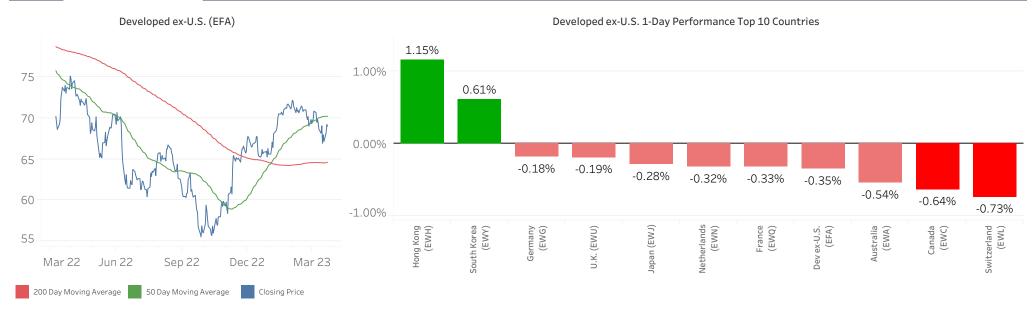


^{*} ETF Landscape represented using the ETF Action classification system**Leaders/Laggards/Overbought/Oversold ETFs must have \$50 million to qualify ***Flows delayed one day

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

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

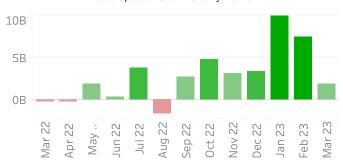
Developed ex-U.S. 1-Day Performance Leaders

Ti alaan	Fored	
Ticker	Fund	
AIA	iShares Asia 50 ETF	1.23%
EWS	iShares MSCI Singapore ETF	1.20%
EWH	iShares MSCI Hong Kong ETF	1.15%
FLKR	Franklin FTSE South Korea ETF	0.75%
AAXJ	iShares MSCI All Country Asia ex Japan ETF	0.63%
EWY	iShares MSCI South Korea ETF	0.61%
ENZL	iShares MSCI New Zealand ETF	0.56%
BKCI	BNY Mellon Concentrated International ETF	0.25%
IDLV	Invesco S&P International Developed Low Volatility ETF	0.22%
VPI	Vanguard FTSE Pacific FTF	0.18%

Developed ex-U.S. Most Overbought

	Ticker	Fund	
ó	EFAV	iShares MSCI EAFE Min Vol Factor ETF	56.07
ó	EIRL	iShares MSCI Ireland ETF	55.27
ó	EWS	iShares MSCI Singapore ETF	54.72
ó	IQDG	WisdomTree International Quality Dividend Growth Fund	54.62
ó	EFG	iShares MSCI EAFE Growth ETF	54.32
ó	BKCI	BNY Mellon Concentrated International ETF	54.15
ó	EUDG	WisdomTree Europe Quality Dividend Growth Fund	53.98
ó	EDEN	iShares MSCI Denmark ETF	53.79
ó	QLVD	FlexShares Developed Markets ex-US Quality Low Volatilit	52.36
ó	DAX	Global X DAX Germany ETF	52.32

Developed ex-U.S. Monthly Flows



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

Ticker	Fund	
GREK	Global X MSCI Greece ETF	-1.89%
HSCZ	iShares Currency Hedged MSCI EAFE Small-Cap ETF	-1.64%
TOK	iShares MSCI Kokusai ETF	-1.52%
DXJ	WisdomTree Japan Hedged Equity Fund	-1.51%
EWD	iShares MSCI Sweden ETF	-1.40%
HEZU	iShares Currency Hedged MSCI Eurozone ETF	-1.30%
HEDJ	WisdomTree Europe Hedged Equity Fund	-1.27%
FDD	First Trust Stoxx European Select Dividend Index Fund	-1.21%
IEUS	iShares MSCI Europe Small-Cap ETF	-1.20%
HEWJ	iShares Currency Hedged MSCI Japan ETF	-1.20%

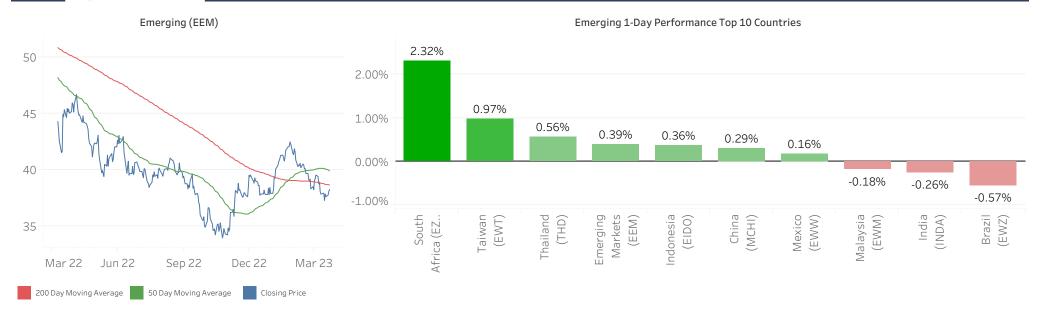
Developed ex-U.S. Most Oversold

Ticker	Fund	
BBAX	JPMorgan BetaBuilders Developed Asia Pacific-ex Ja	34.37
BBCA	JPMorgan BetaBuilders Canada ETF	35.45
FLCA	Franklin FTSE Canada ETF	37.20
HSCZ	iShares Currency Hedged MSCI EAFE Small-Cap ETF	37.70
EWC	iShares MSCI Canada ETF	38.45
EWA	iShares MSCI Australia ETF	38.49
FIDI	Fidelity International High Dividend ETF	38.82
ISDX	Invesco RAFI Strategic Developed ex-US ETF	39.21
FDD	First Trust Stoxx European Select Dividend Index Fu	39.46
EPP	iShares MSCI Pacific ex-Japan ETF	39.91

^{*}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 Markets Performance



Emerging 30-Day Rolling Flows



Emerging 1-Day Performance Leaders

Ticker	Fund	
EZA	iShares MSCI South Africa ETF	2.32%
TUR	iShares MSCI Turkey ETF	1.81%
PIE	Invesco DWA Emerging Markets Momentum ETF	1.07%
EDIV	SPDR S&P Emerging Markets Dividend ETF	1.06%
EWT	iShares MSCI Taiwan ETF	0.97%
NFTY	First Trust India NIFTY 50 Equal Weight ETF	0.92%
FLTW	Franklin FTSE Taiwan ETF	0.91%
QAT	iShares MSCI Qatar ETF	0.80%
EEMX	SPDR MSCI Emerging Markets Fossil Fuel Free ETF	0.80%
JEMA	JPMorgan ActiveBuilders Emerging Markets Equity ETF	0.69%

Emerging Most Overbought

Ticker	Fund	
FLTW	Franklin FTSE Taiwan ETF	58.49
EDIV	SPDR S&P Emerging Markets Dividend ETF	57.87
EWT	iShares MSCI Taiwan ETF	56.27
EEMV	iShares MSCI Emerging Markets Min Vol Factor ETF	53.32
KSA	iShares MSCI Saudi Arabia ETF	51.75
EIDO	iShares MSCI Indonesia ETF	49.80
VNM	VanEck Vietnam ETF	49.72
EPHE	iShares MSCI Philippines ETF	49.55
XCEM	Columbia EM Core ex-China ETF	49.37
DEM	WisdomTree Emerging Markets High Dividend Fund	48.79

Emerging Monthly Flows



Emerging 1-Day Performance Laggards

Ticker	Fund	
PGJ	Invesco Golden Dragon China ETF	-1.73%
EPOL	iShares MSCI Poland ETF	-1.53%
EPU	iShares MSCI Peru ETF	-0.99%
EWZ	iShares MSCI Brazil ETF	-0.57%
ILF	iShares Latin America 40 ETF	-0.57%
KSA	iShares MSCI Saudi Arabia ETF	-0.51%
FLBR	Franklin FTSE Brazil ETF	-0.47%
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	-0.42%
FLLA	Franklin FTSE Latin America ETF	-0.40%
PIN	Invesco India ETF	-0.39%

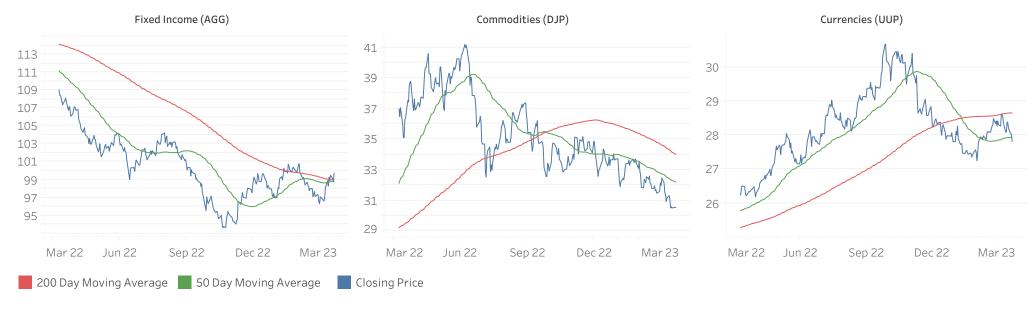
Emerging Most Oversold

Ticker	Fund	
ECNS	iShares MSCI China Small-Cap ETF	33.38
KWT	iShares MSCI Kuwait ETF	35.58
FLBR	Franklin FTSE Brazil ETF	36.07
EWZ	iShares MSCI Brazil ETF	36.67
EWZS	iShares MSCI Brazil Small-Cap ETF	37.67
DVYE	iShares Emerging Markets Dividend ETF	37.82
FM	iShares MSCI Frontier and Select EM ETF	37.89
QAT	iShares MSCI Qatar ETF	38.05
FLN	First Trust Latin America AlphaDEX Fund	38.10
SMIN	iShares MSCI India Small Cap ETF	38.28

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Fixed Income Performance

Ticker	Name	1 Day	1 Month	YTD
AGG	U.S. Aggregate	0.96%	2.72%	3.35%
SHY	1-3 Year Treasury Bonds	0.46%	1.66%	1.71%
IEF	7-10 Year Treasury Bonds	1.32%	4.15%	4.10%
TLT	20+ Year Treasury Bonds	1.33%	5.29%	7.41%
TIP	TIPS Bonds	1.37%	2.87%	3.33%
FLOT	Floating Rate Bonds	-0.52%	-0.85%	0.29%
LQD	Investment Grade Corporate	0.58%	3.20%	3.90%
HYG	High Yield Corporate	0.09%	0.81%	1.65%
BKLN	Senior Loan	-0.24%	-0.78%	2.04%
PFF	Preferred & Income Securities	-0.36%	-6.29%	0.25%
MUB	Municipal Bonds	0.57%	1.89%	1.93%
МВВ	MBS	1.34%	2.71%	3.38%
EMB	Dollar Denominated EM Bonds	0.87%	1.81%	1.94%
LEMB	Local Currency EM Bond	1.37%	2.09%	2.92%

Commodities Performance

Ticker	Name	1 Day	1 Month	YTD
DJP	Broad Commodities	-0.07%	-3.48%	-9.43%
DBE	Energy	0.20%	-3.89%	-12.88%
USO	WTI Crude Oil	0.62%	-5.10%	-12.12%
BNO	Brent Crude Oil	0.72%	-5.41%	-11.00%
UNG	Natural Gas	-4.53%	-2.64%	-47.66%
UGA	Gasoline	1.41%	1.57%	-4.24%
DBP	Precious Metals	1.90%	7.66%	5.17%
GLD	Gold	1.70%	8.12%	8.13%
SLV	Silver	2.73%	6.84%	-4.18%
PPLT	abrdn Physical Platin	1.49%	3.93%	-8.05%
PALL	abrdn Physical Palla	2.73%	-2.81%	-19.28%
DBB	Base Metals	0.36%	-4.72%	0.72%
CPER	Copper	0.78%	-2.61%	6.80%
LD	Lead	0.52%	1.48%	-8.26%
JJN	Nickel	2.22%	-13.59%	-23.37%
JJU	Aluminum	0.73%	-5.67%	-5.32%
JJT	Tin	1.96%	-11.89%	-5.45%
DBA	Agriculture	-0.35%	-3.94%	-1.89%
CORN	Corn	-0.24%	-7.84%	-9.17%
SOYB	Soybeans	-1.79%	-7.84%	-7.61%
WEAT	Wheat	-2.03%	-10.83%	-15.41%
CANE	Sugar	1.60%	4.98%	13.54%
BAL	Cotton	0.01%	-4.47%	-6.09%
NIB	Cocoa	1.96%	4.22%	11.38%

Currencies Performance

Ticker	Name	1 Day	1 Month	YTD
UUP	Long Dollar	-0.75%	-1.59%	0.04%
UDN	Short Dollar	0.80%	2.29%	1.62%
FXE	Euro	0.90%	2.59%	1.67%
FXB	British Pound Sterling	0.51%	2.11%	2.16%
FXF	Swiss Franc	0.50%	1.52%	0.61%
FXY	Japanese Yen	1.00%	2.88%	-0.08%
FXC	Canadian Dollar	-0.01%	-1.25%	-1.00%
FXA	Australian Dollar	0.23%	-1.64%	-1.63%

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Coffee

-1.70%

-7.52%

6.93%

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