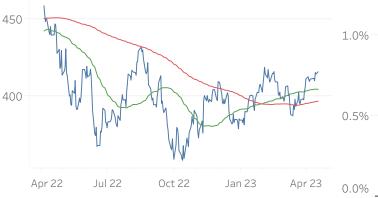


U.S. Size & Style Performance

Large Growth

Small Cap (IJR) Small Growth (IJT)

Large Cap Blend (S&P 500) IVV



Mid Value (IJJ) Large Value (IVE) Large Cap (IVV) (IVW) 0.71% 0.37% 0.00%

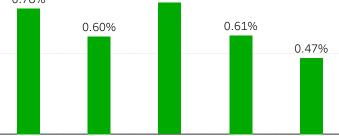
0.81% 0.78%

Mid Growth (IJK) Small Value (IJS)

U.S. Size & Style 1-Day Performance

0.93%

Mid Cap (IJH)



Mid Cap Blend (S&P 400) IJH



Size & Style 1-Day Performance Leaders

Ticker	Fund	
IWC	iShares Micro-Cap ETF	2.05%
FFTY	Innovator IBD 50 ETF	1.88%
XSLV	Invesco S&P SmallCap Low Volatility ETF	1.35%
BBSC	JPMorgan BetaBuilders U.S. Small Cap Equity ETF	1.31%
IPO	Renaissance IPO ETF	1.30%
IWM	iShares Russell 2000 ETF	1.29%
VTWO	Vanguard Russell 2000 ETF	1.28%
JSML	Janus Henderson Small Cap Growth Alpha ETF	1.25%
IWN	iShares Russell 2000 Value ETF	1.22%
IWO	iShares Russell 2000 Growth ETF	1.22%

Size & Style 1-Day Performance Laggards

Ticker	Fund	
AIEQ	AI Powered Equity ETF	-0.66%
QVAL	Alpha Architect US Quantitative Value ETF	-0.29%
COWZ	Pacer US Cash Cows 100 ETF	-0.29%
SPMO	Invesco S&P 500 Momentum ETF	-0.23%
RPG	Invesco S&P 500 Pure Growth ETF	-0.17%
HLAL	Wahed FTSE USA Shariah ETF	-0.15%
CSF	VictoryShares US Discovery Enhanced Volatility Wtd ETF	-0.14%
MTUM	iShares MSCI USA Momentum Factor ETF	-0.13%
TMFC	Motley Fool 100 Index ETF	-0.10%
AVLV	Avantis U.S. Large Cap Value ETF	-0.10%

Size & Style Most Overbought

	Ticker	Fund	
	SPC	CrossingBridge Pre-Merger SPAC ETF	72.91
	USMC	Principal U.S. Mega-Cap ETF	68.46
	SIXA	ETC 6 Meridian Mega Cap Equity ETF	67.46
	ABEQ	Absolute Select Value ETF	67.45
_	FDLO	Fidelity Low Volatility Factor ETF	67.45
	OMFL	Invesco Russell 1000 Dynamic Multifactor ETF	67.21
_	OUSA	ALPS O'Shares U.S. Quality Dividend ETF	66.87
	XLG	Invesco S&P 500 Top 50 ETF	66.59
	QUS	SPDR MSCI USA StrategicFactors ETF	66.18
	OEF	iShares S&P 100 ETF	66.13

Size & Style Most Oversold

	Ticker	Fund	
6	SVAL	iShares US Small Cap Value Factor ETF	43.53
6	XSLV	Invesco S&P SmallCap Low Volatility ETF	44.21
6	FDM	First Trust Dow Jones Select MicroCap Index Fund	45.76
6	SMLV	SPDR SSGA US Small Cap Low Volatility Index ETF	46.48
6	AIEQ	AI Powered Equity ETF	47.33
6	SMDV	ProShares Russell 2000 Dividend Growers ETF	47.53
6	CSF	VictoryShares US Discovery Enhanced Volatility Wt	47.75
6	FYT	First Trust Small Cap Value AlphaDEX Fund	48.39
6	VIOV	Vanguard S&P Small-Cap 600 Value ETF	48.63
6	SLYV	SPDR S&P 600 Small Cap Value ETF	48.77
6 /6 /6 /6 /6	AIEQ SMDV CSF FYT VIOV	Al Powered Equity ETF ProShares Russell 2000 Dividend Growers ETF VictoryShares US Discovery Enhanced Volatility Wt First Trust Small Cap Value AlphaDEX Fund Vanguard S&P Small-Cap 600 Value ETF	47 47 47 48 48

Small Cap Blend (S&P 600) IJR



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



U.S. Size & Style Flows

Large-Cap 30-Day Rolling Flows



Mid-Cap 30-Day Rolling Flows



Small-Cap 30-Day Rolling Flows



	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Large Cap, Beta, Beta	25	\$1,288B	\$6.32B	\$1.65B	\$2.37B	\$51.38B
Large Cap, Beta, Beta: Growth	10	\$246B	(\$0.18B)	\$2.44B	\$9.81B	\$20.76B
Large Cap, Beta, Beta: Value	11	\$221B	(\$0.37B)	(\$2.62B)	(\$2.77B)	\$3.25B
Mid Cap, Beta, Beta	10	\$184B	\$0.23B	\$1.10B	\$5.42B	\$11.15B
Mid Cap, Beta, Beta: Growth	6	\$33B	\$0.03B	(\$0.24B)	(\$0.18B)	\$0.92B
Mid Cap, Beta, Beta: Value	6	\$39B	(\$0.03B)	(\$0.71B)	\$0.32B	\$0.63B
Small Cap, Beta, Beta	13	\$188B	(\$0.18B)	(\$0.60B)	\$3.05B	\$1.84B
Small Cap, Beta, Beta: Growth	7	\$31B	\$0.20B	(\$0.36B)	\$0.38B	\$1.31B
Small Cap, Beta, Beta: Value	7	\$48B	(\$0.08B)	(\$0.40B)	\$0.69B	(\$0.45B)

U.S. Size & Style Landscape 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	\$6.29B	(\$5.94B)	(\$5.08B)	\$2.33B	\$380.32B
VOO	Vanguard S&P 500 ETF	\$0.72B	\$5.34B	\$8.21B	\$28.04B	\$289.31B
QUAL	iShares MSCI USA Quality Factor ETF	\$0.68B	\$8.14B	\$7.84B	\$5.99B	\$27.87B
SPLG	SPDR Portfolio S&P 500 ETF	\$0.46B	\$0.76B	\$1.26B	\$2.72B	\$16.47B
IVV	iShares Core S&P 500 ETF	\$0.37B	(\$1.92B)	(\$3.21B)	\$8.04B	\$308.66B
IJH	iShares Core S&P Mid-Cap ETF	\$0.20B	\$0.87B	\$3.14B	\$5.56B	\$66.16B
IWO	iShares Russell 2000 Growth ETF	\$0.16B	(\$0.55B)	(\$0.24B)	(\$0.04B)	\$9.41B
PABU	iShares Paris-Aligned Climate MSCI USA ETF	\$0.16B	\$0.18B	\$0.26B	\$0.52B	\$1.12B
IJR	iShares Core S&P Small Cap ETF	\$0.14B	\$0.20B	\$1.42B	\$2.15B	\$65.61B
VYM	Vanguard High Dividend Yield Index ETF	\$0.12B	\$0.35B	\$0.99B	\$6.39B	\$49.71B

U.S. Size & Style Flow Laggards

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
QQQ	Invesco QQQ Trust	(\$1.75B)	\$1.56B	(\$2.40B)	\$1.41B	\$171.58B
IWM	iShares Russell 2000 ETF	(\$0.35B)	(\$2.42B)	(\$1.47B)	(\$1.76B)	\$49.57B
VTV	Vanguard Value ETF	(\$0.29B)	\$2.69B	(\$0.91B)	\$4.47B	\$102.22B
IVE	iShares S&P 500 Value ETF	(\$0.16B)	(\$1.20B)	(\$0.65B)	(\$0.47B)	\$24.38B
MGK	Vanguard Mega Cap Growth ETF	(\$0.14B)	\$0.57B	\$0.34B	\$0.51B	\$11.86B
ESGU	iShares ESG Aware MSCI USA ETF	(\$0.13B)	(\$5.90B)	(\$8.47B)	(\$8.15B)	\$14.08B
SMLF	iShares U.S. SmallCap Equity Factor ETF	(\$0.07B)	(\$0.07B)	(\$0.09B)	(\$0.07B)	\$0.90B
IJIJ	iShares S&P Mid-Cap 400 Value ETF	(\$0.07B)	(\$0.12B)	(\$0.03B)	(\$0.14B)	\$7.20B
RPV	Invesco S&P 500 Pure Value ETF	(\$0.07B)	(\$0.55B)	(\$0.32B)	(\$0.60B)	\$2.82B
IWF	iShares Russell 1000 Growth ETF	(\$0.06B)	(\$2.17B)	(\$0.98B)	\$0.99B	\$63.45B

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

RSI (14D)

% Abv/Below

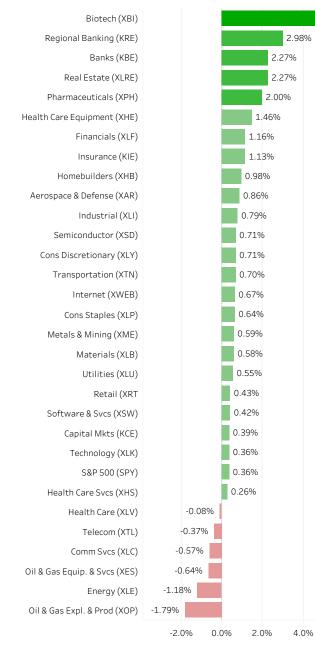
200 SMA

S&P Sector & Industry 1 Day Performance

4.66%

Ticker

Fund Name



Select Sector SPDRs Technicals % From 52W % From 52W % Abv/Below **50 SMA** High Low Tochnology Soloct Soctor SPDP Fund 1 560% 27 00% 1 30%

XLK	Technology Select Sector SPDR Fund	-1.56%	27.99%	4.39%	10.88%	59.71
XLI	Industrial Select Sector SPDR Fund	-2.94%	21.46%	0.40%	4.33%	56.38
XLP	Consumer Staples Select Sector SPDR Fund	-3.15%	13.77%	3.19%	3.27%	64.88
SPY	SPDR S&P 500 ETF Trust	-3.67%	16.09%	2.90%	4.88%	63.82
XLV	Health Care Select Sector SPDR Fund	-4.03%	12.15%	3.68%	2.72%	66.16
XLC	Communication Services Select Sector SPDR Fund	-6.43%	29.69%	5.45%	11.21%	62.91
XLB	Materials Select Sector SPDR Fund	-8.02%	20.92%	1.47%	4.39%	58.72
XLE	Energy Select Sector SPDR Fund	-8.38%	27.72%	2.41%	3.41%	57.25
XLF	Financial Select Sector SPDR Fund	-10.11%	9.81%	-1.50%	-1.81%	58.95
XLU	Utilities Select Sector SPDR Fund	-11.33%	12.60%	3.25%	-0.62%	59.36
XLY	Consumer Discretionary Select Sector SPDR Fund	-14.47%	17.17%	1.73%	1.04%	58.09
XLRE	Real Estate Select Sector SPDR Fund	-19.68%	10.84%	-0.70%	-3.78%	53.81

Sector & Industry 1 Day Performance Leaders

Ticker	Fund	
XBI	SPDR S&P BIOTECH ETF	4.66%
PTH	Invesco DWA Healthcare Momentum ETF	4.59%
IAT	iShares U.S. Regional Banks ETF	3.13%
KBWR	Invesco KBW Regional Banking ETF	3.07%
KRE	SPDR S&P Regional Banking ETF	2.98%
FTXO	First Trust Nasdaq Bank ETF	2.77%
RWR	SPDR Dow Jones REIT ETF	2.37%
KBWY	Invesco KBW Premium Yield Equity REIT ETF	2.35%
USRT	iShares Core U.S. REIT ETF	2.35%
ICF	iShares Cohen & Steers REIT ETF	2.29%

Sector & Industry 1 Day Performance Laggards

Ticker	Fund	
PXE	Invesco Dynamic Energy Exploration & Production ETF	-1.94%
IEO	iShares U.S. Oil & Gas Exploration & Production ETF	-1.79%
ХОР	SPDR S&P Oil & Gas Exploration & Production ETF	-1.79%
FTXN	First Trust Nasdaq Oil & Gas ETF	-1.56%
PSCE	Invesco S&P SmallCap Energy ETF	-1.55%
FCG	First Trust Natural Gas ETF	-1.54%
PXI	Invesco DWA Energy Momentum ETF	-1.48%
RYE	Invesco S&P 500 Equal Weight Energy ETF	-1.41%
FXN	First Trust Energy AlphaDEX Fund	-1.24%
IGN	iShares North American Tech-Multimedia Networking	-1.19%

Sector & Industry Most Overbought

Ticker	Fund	
IHI	iShares U.S. Medical Devices ETF	66.82
PSL	Invesco DWA Consumer Staples Momentum ETF	66.69
XLV	Health Care Select Sector SPDR Fund	66.16
PTH	Invesco DWA Healthcare Momentum ETF	65.99
FHLC	Fidelity MSCI Health Care Index ETF	65.86
VHT	Vanguard Health Care ETF	65.79
IYH	iShares U.S. Healthcare ETF	65.58
VDC	Vanguard Consumer Staples ETF	65.29
XLP	Consumer Staples Select Sector SPDR Fund	64.88
IYK	iShares U.S. Consumer Staples ETF	64.73

Sector & Industry Most Oversold

	Ticker	Fund	
)	QABA	First Trust NASDAQ ABA Community Bank Index Fund	38.12
)	KRE	SPDR S&P Regional Banking ETF	40.52
	KBWR	Invesco KBW Regional Banking ETF	41.71
)	KBWY	Invesco KBW Premium Yield Equity REIT ETF	42.52
	XTL	SPDR S&P Telecom ETF	42.53
)	NETL	NETLease Corporate Real Estate ETF	42.98
)	IAT	iShares U.S. Regional Banks ETF	43.15
	IGN	iShares North American Tech-Multimedia Networking ETF	43.22
)	KBE	SPDR S&P Bank ETF	45.03
•	PSCT	Invesco S&P SmallCap Information Technology ETF	45.41

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

6.0%

U.S. Sector Landscape

U.S. Sector & Industry 1-Week Flows

\$236M



	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Communication Services	7	\$15B	\$739M	\$950M	\$1,408M	\$796M
Consumer Discretionary	12	\$22B	(\$11M)	\$507M	\$301M	(\$2,307M)
Consumer Staples	10	\$31B	\$131M	\$11M	\$2,107M	\$4,509M
Energy	32	\$75B	(\$368M)	(\$3,800M)	(\$4,244M)	(\$8,079M)
Financials	26	\$55B	\$498M	\$1,131M	\$1,739M	(\$9,726M)
Health Care	23	\$93B	(\$242M)	(\$3,987M)	(\$874M)	\$2,279M
Industrial	13	\$31B	(\$231M)	(\$340M)	\$1,610M	(\$1,410M)
Materials	9	\$15B	\$231M	\$264M	\$540M	(\$3,032M)
Multi-Sector	19	\$14B	(\$28M)	\$121M	\$156M	(\$1,900M)
Real Estate	25	\$55B	(\$113M)	(\$2,445M)	(\$2,249M)	(\$5,894M)
Technology	23	\$131B	(\$421M)	\$733M	\$1,585M	(\$441M)
Utilities	9	\$26B	(\$170M)	(\$75M)	(\$625M)	\$2,836M

U.S. Sector Landscape

U.S. Sector & Industry Flow Leaders

Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUM
XLC	Communication Services Select Sector SPDR Fu	\$711M	\$944M	\$1,412M	\$1,115M	\$11,034M
XLF	Financial Select Sector SPDR Fund	\$325M	\$141M	\$1,795M	(\$5,546M)	\$30,464M
XLB	Materials Select Sector SPDR Fund	\$279M	\$98M	\$181M	(\$1,190M)	\$5,967M
IYR	iShares U.S. Real Estate ETF	\$242M	(\$477M)	(\$169M)	(\$923M)	\$3,150M
SOXX	iShares Semiconductor ETF	\$212M	\$378M	\$281M	(\$362M)	\$7,553M
KRE	SPDR S&P Regional Banking ETF	\$170M	\$1,417M	\$675M	(\$169M)	\$3,103M
XBI	SPDR S&P BIOTECH ETF	\$111M	(\$1,548M)	(\$187M)	\$478M	\$6,542M
KBWB	Invesco KBW Bank ETF	\$98M	\$95M	(\$167M)	(\$317M)	\$1,324M
VFH	Vanguard Financials ETF	\$76M	(\$359M)	(\$573M)	(\$2,017M)	\$7,840M
XLP	Consumer Staples Select Sector SPDR Fund	\$76M	(\$23M)	\$1,452M	\$1,762M	\$17,681M

U.S. Sector & Industry Flow Laggards

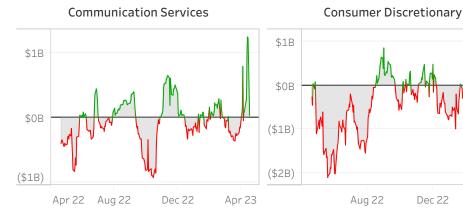
	Ticker	Fund	1 Week	3 Month	6 Month	1 Year	AUN
	VGT	Vanguard Information Technology ETF	(\$386M)	(\$384M)	(\$308M)	(\$965M)	\$45,825N
	XLE	Energy Select Sector SPDR Fund	(\$321M)	(\$91M)	(\$776M)	(\$1,394M)	\$40,393N
	XLK	Technology Select Sector SPDR Fund	(\$320M)	(\$1,876M)	(\$1,834M)	(\$1,832M)	\$43,103N
	XLV	Health Care Select Sector SPDR Fund	(\$301M)	(\$1,456M)	(\$92M)	\$2,162M	\$40,118N
	XLI	Industrial Select Sector SPDR Fund	(\$295M)	(\$1,254M)	(\$277M)	(\$1,605M)	\$13,197N
	XLRE	Real Estate Select Sector SPDR Fund	(\$180M)	(\$623M)	(\$389M)	\$17M	\$4,4871
	XLU	Utilities Select Sector SPDR Fund	(\$101M)	\$198M	(\$293M)	\$2,250M	\$16,231
800M	VNQ	Vanguard Real Estate ETF	(\$82M)	(\$702M)	(\$1,086M)	(\$4,120M)	\$31,8841
	XRT	SPDR S&P Retail ETF	(\$80M)	(\$55M)	\$7M	\$164M	\$308
	IAI	iShares U.S. Broker-Dealers & Securities Excha	(\$77M)	(\$120M)	\$231M	\$221M	\$691

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



U.S. Sector Rolling 30-Day Flows

April 17, 2023









Materials

Energy



Financials





Consumer Staples



\$2B





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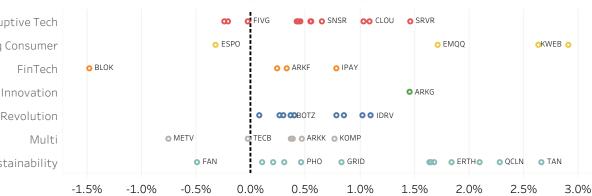
Global Thematic Performance

April 17, 2023

Global Thematic Segment 1-Day Performance

Biotech	7.44%
Cannabis (MJ)	2.72%
Clean Energy: Solar (TAN)	2.66%
Clean Energy (PBW)	1.65%
Digital Infrastructure (SRVR)	1.46%
Genomics (ARKG)	1.45%
Space (UFO)	1.12%
Online Retail (IBUY)	0.92%
Evolving Consumer (SOCL)	0.87%
Advanced Materials (REMX)	0.85%
Smart Infrastructure (GRID)	0.83%
3D Printing (PRNT)	0.82%
NextGen Transportation (DRIV)	0.78%
Digital Payments (IPAY)	0.78%
Casinos & Gaming (BETZ)	0.74%
Cloud Computing (SKYY)	0.55%
Cyber Security (HACK)	0.54%
Multi-Theme (ARKK)	0.46%
Water (PHO)	0.46%
Big Data (AIQ)	0.37%
Industrial Revolution (ARKQ)	0.29%
FinTech (FINX)	0.24%
Robotics & AI (ROBO)	0.07%
Connectivity (FIVG)	-0.03%
Disruptive Tech (ARKW)	-0.21%
eSports & Video Games (ESPO	-0.33%
Clean Energy: Wind (FAN)	-0.50%
Blockchain (BLOK)	-1.48%
	-5.00% 0.00% 5.00% 10.00%





Global Thematic 1-Day Performance Landscape

Global Thematic 1-Day Performance Leaders

Ticker	Fund	
SBIO	ALPS Medical Breakthroughs ETF	7.44%
BTEC	Principal Healthcare Innovators ETF	4.07%
KGRN	KraneShares MSCI China Clean Technology Index ETF	2.96%
KWEB	KraneShares CSI China Internet ETF	2.91%
MJ	ETFMG Alternative Harvest ETFMG Alternative Harvest	2.72%
TAN	Invesco Solar ETF	2.66%
MSOS	AdvisorShares Pure US Cannabis ETF	2.63%
QCLN	First Trust Nasdaq Clean Edge Green Energy Index Fund	2.28%
ACES	ALPS Clean Energy ETF	2.09%
MJUS	ETFMG U.S. Alternative Harvest ETF	2.05%

Global Thematic 1-Day Performance Laggards

Ticker	Fund	
BITQ	Bitwise Crypto Industry Innovators ETF	-2.95%
вксн	Global X Blockchain ETF	-1.72%
BLOK	Amplify Transformational Data Sharing ETF	-1.48%
BLCN	Siren ETF Trust Siren Nasdaq NexGen Economy ETF	-1.28%
HERO	Global X Video Games & Esports ETF	-0.83%
METV	Roundhill Ball Metaverse ETF	-0.76%
PAWZ	ProShares Pet Care ETF	-0.52%
FAN	First Trust Global Wind Energy ETF	-0.50%
ESPO	VanEck Video Gaming and eSports ETF	-0.33%
GAMR	Wedbush ETFMG Video Game Tech ETF Wedbush ETF	-0.33%

Thematic Most Overbought

	Ticker	Fund	
)	AGNG	Global X Aging Population ETF	71.61
b	BKCH	Global X Blockchain ETF	67.79
)	BITQ	Bitwise Crypto Industry Innovators ETF	67.46
5	GDOC	Goldman Sachs Future Health Care Equity ETF	66.23
)	BLOK	Amplify Transformational Data Sharing ETF	63.83
)	SBIO	ALPS Medical Breakthroughs ETF	63.25
)	KLDW	Knowledge Leaders Developed World ETF	63.21
)	НАСК	${\sf ETFMG}\ {\sf Prime}\ {\sf Cyber}\ {\sf Security}\ {\sf ETFMG}\ {\sf Prime}\ {\sf Cyber}\ {\sf Security}\$	62.49
)	PAWZ	ProShares Pet Care ETF	61.86
)	BJK	VanEck Gaming ETF	61.26

Thematic Most Oversold

Ticker	Fund	
MJ	ETFMG Alternative Harvest ETFMG Alternative Harvest	38.89
MSOS	AdvisorShares Pure US Cannabis ETF	40.09
MJUS	ETFMG U.S. Alternative Harvest ETF	40.92
IZRL	ARK Israel Innovative Technology ETF	45.50
HAIL	SPDR S&P Kensho Smart Mobility ETF	45.78
ONLN	ProShares Online Retail ETF	46.83
ARKX	ARK Space Exploration & Innovation ETF	47.40
ARKQ	ARK Autonomous Technology & Robotics ETF	47.40
PBW	Invesco WilderHill Clean Energy ETF	47.81
KWEB	KraneShares CSI China Internet ETF	48.04
	MJ MSOS MJUS IZRL HAIL ONLN ARKX ARKQ PBW	MJ ETFMG Alternative Harvest ETFMG Alternative Harvest MSOS AdvisorShares Pure US Cannabis ETF MJUS ETFMG U.S. Alternative Harvest ETF IZRL ARK Israel Innovative Technology ETF HAIL SPDR S&P Kensho Smart Mobility ETF ONLN ProShares Online Retail ETF ARKX ARK Space Exploration & Innovation ETF ARKQ ARK Autonomous Technology & Robotics ETF PBW Invesco WilderHill Clean Energy ETF

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



Global Thematic Flows

Thematic 1 Week Flow Leaders

Ticker	Fund	
ARKK	ARK Innovation ETF	\$81M
IHAK	iShares Cybersecurity & Tech ETF	\$48M
CLIX	ProShares Long Online/Short Stores ETF	\$6M
IRBO	iShares Robotics and Artificial Intelligence Multisector ETF	\$6M
SMOG	VanEck Low Carbon Energy ETF	\$6M
SNSR	Global X Internet of Things ETF	\$4M
ACES	ALPS Clean Energy ETF	\$3M
TARK	AXS 2X Innovation ETF	\$3M
WGMI	Valkyrie Bitcoin Miners ETF	\$2M
AIQ	Global X Artificial Intelligence & Technology ETF	\$1M

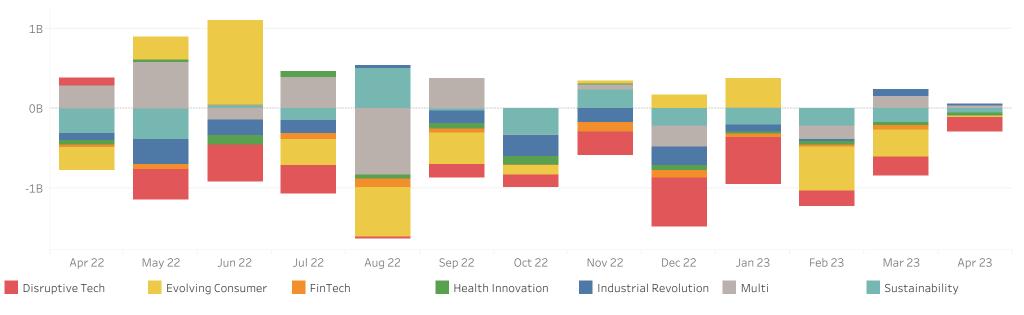
Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	34	\$15B	(\$13M)	(\$947M)	(\$2,166M)	(\$3,545M)
Evolving Consumer	44	\$9B	(\$10M)	(\$777M)	(\$416M)	(\$751M)
FinTech	19	\$3B	(\$2M)	(\$95M)	(\$342M)	(\$666M)
Health Innovation	19	\$3B	(\$20M)	(\$142M)	(\$200M)	(\$495M)
Industrial Revolution	31	\$11B	(\$8M)	\$93M	(\$537M)	(\$1,563M)
Multi	41	\$15B	\$106M	\$112M	(\$40M)	\$515M
Sustainability	40	\$17B	(\$37M)	(\$530M)	(\$856M)	(\$1,266M)
Grand Total	228	\$72B	\$15M	(\$2,285M)	(\$4,557M)	(\$7,770M)

Thematic Landscape Assets & Flows

Thematic 1 Week Flow Laggards

Ticker Fund SKYY First Trust Cloud Computing ETF (\$159M) (\$33M) SRVR Pacer Data & Infrastructure Real Estate ETF ICLN iShares Global Clean Energy ETF (\$20M) (\$18M) TAN Invesco Solar ETF (\$14M) ARKG ARK Genomic Revolution ETF KWEB KraneShares CSI China Internet ETF (\$8M) DRIV Global X Autonomous & Electric Vehicles ETF (\$8M) QCLN First Trust Nasdaq Clean Edge Green Energy Index Fund (\$7M) (\$5M) ROBO Global Healthcare Technology and Innovation ETF HTEC LIT Global X Lithium & Battery Tech ETF (\$5M)

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

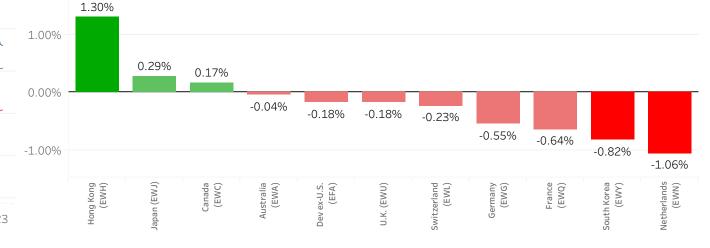


Developed Markets ex-U.S. Performance

April 17, 2023

Developed ex-U.S. (EFA)





Ticker Fund

iShares MSCI Denmark ETF

iShares MSCI Canada ETF

iShares MSCI Switzerland ETF

Franklin FTSE Switzerland ETF

JPMorgan BetaBuilders Canada ETF

iShares MSCI EAFE Min Vol Factor ETF

EDEN

EWL

FLSW

IMFL

BBCA

IDHQ

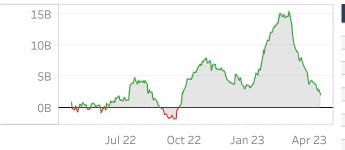
EFAV

IHDG

EWC

QLVD

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



Developed ex-U.S. Monthly Flows

Aug 22

Sep 22

Oct 22

Nov 22

Feb 23 Mar 23

23 Apr

Jan 23 Dec 22

10B

5B

0B

Apr 22

May .. Jun 22 Jul 22 Developed ex-U.S. 1-Day Performance Leaders

Ticker	Fund	
EWH	iShares MSCI Hong Kong ETF	1.30%
ISRA	VanEck Israel ETF	1.13%
HEWJ	iShares Currency Hedged MSCI Japan ETF	0.83%
AIA	iShares Asia 50 ETF	0.81%
DBJP	Xtrackers MSCI Japan Hedged Equity ETF	0.68%
MINV	Matthews Asia Innovators Active ETF	0.64%
AAXJ	iShares MSCI All Country Asia ex Japan ETF	0.62%
EWJV	iShares MSCI Japan Value ETF	0.62%
DXJ	WisdomTree Japan Hedged Equity Fund	0.61%
EDEN	iShares MSCI Denmark ETF	0.59%

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

Ticker	Fund	
EWN	iShares MSCI Netherlands ETF	-1.06%
EWY	iShares MSCI South Korea ETF	-0.82%
EWI	iShares MSCI Italy ETF	-0.82%
FLKR	Franklin FTSE South Korea ETF	-0.81%
FEZ	SPDR EURO STOXX 50 ETF	-0.80%
DAX	Global X DAX Germany ETF	-0.80%
GREK	Global X MSCI Greece ETF	-0.78%
EZU	iShares MSCI Eurozone ETF	-0.75%
EWQ	iShares MSCI France ETF	-0.64%
EWP	iShares MSCI Spain ETF	-0.62%

FlexShares Developed Markets ex-US Quality Low Volatilit ...

WisdomTree International Hedged Quality Dividend Grow..

Invesco International Developed Dynamic Multifactor ETF

Invesco S&P International Developed High Quality ETF

Developed ex-U.S. Most Overbought

Developed ex-U.S. Most Oversold

	Ticker	Fund	
5	EIS	iShares MSCI Israel ETF	41.97
ó	MINV	Matthews Asia Innovators Active ETF	48.67
ò	ENZL	iShares MSCI New Zealand ETF	49.01
5	ISRA	VanEck Israel ETF	49.60
5	AIA	iShares Asia 50 ETF	52.35
ó	DFJ	WisdomTree Japan SmallCap Dividend Fund	52.51
ò	EWN	iShares MSCI Netherlands ETF	54.90
5	SCJ	iShares MSCI Japan Small-Cap ETF	56.70
ó	AAXJ	iShares MSCI All Country Asia ex Japan ETF	56.90
ó	NORW	Global X MSCI Norway ETF	57.01

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

76.76

73.43

73.11

72.97

71.26

70.46

70.36

70.31

70.09

70.02

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



Emerging Markets Performance

April 17, 2023

Emerging (EEM)



2.09% 0.79% 0.43% 0.14% -0.13% -0.27% -0.35% -0.51% -1.18% -1.36% Emerging Markets (EEM) China (EWW) Thailand Malaysia India (INDA) South (EIDO) (IMCHI) Mexico Taiwan (EWM) Indonesia (THD) (EWT) Brazil (EWZ) Africa (EZ.

Ticker Fund

EDIV

KSA

UEVM

DVYE

EPOL

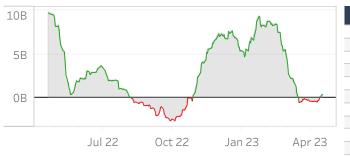
DEM

ARGT EWX

EPU

Emerging 1-Day Performance Top 10 Countries

Emerging 30-Day Rolling Flows



Emerging Monthly Flows

0ct 22 Nov 22 Dec 22 Jan 23 Feb 23

Aug 22 Sep 22

5B

0B

Apr 22

Jun 22 Jul 22

May 22

Emerging 1-Day Performance Leaders

Ticker	Fund	
PGJ	Invesco Golden Dragon China ETF	3.22%
FXI	iShares China Large-Cap ETF	2.72%
MCHI	iShares MSCI China ETF	2.09%
FLCH	Franklin FTSE China ETF	2.03%
GXC	SPDR S&P China ETF	2.01%
CXSE	WisdomTree China ex-State-Owned Enterprises Fund	1.75%
NUEM	Nuveen ESG Emerging Markets Equity ETF	1.49%
KBA	KraneShares Bosera MSCI China A 50 Connect Index ETF	1.47%
ASHR	Xtrackers Harvest CSI 300 China A-Shares ETF	1.34%
KSA	iShares MSCI Saudi Arabia ETF	1.22%

Emerging 1-Day Performance Laggards

Ticker	Fund		Ticker	Fund
QAT	iShares MSCI Qatar ETF	-1.38%	EPHE	iShares MSCI Philippines ETF
EIDO	iShares MSCI Indonesia ETF	-1.36%	QAT	iShares MSCI Qatar ETF
EZA	iShares MSCI South Africa ETF	-1.18%	PGJ	Invesco Golden Dragon China ETF
TUR	iShares MSCI Turkey ETF	-0.99%	THD	iShares MSCI Thailand ETF
FLBR	Franklin FTSE Brazil ETF	-0.73%	TUR	iShares MSCI Turkey ETF
SMIN	iShares MSCI India Small Cap ETF	-0.58%	VNM	VanEck Vietnam ETF
EWZ	iShares MSCI Brazil ETF	-0.51%	FM	iShares MSCI Frontier and Select EM ETF
INDY	iShares India 50 ETF	-0.48%	RAYC	Rayliant Quantamental China Equity ETF
EPHE	iShares MSCI Philippines ETF	-0.46%	EWT	iShares MSCI Taiwan ETF
FPU	iShares MSCI Peru and Global Exposure ETE	-0.41%	CXSE	WisdomTree China ex-State-Owned Enterprises Fund

Emerging Most Oversold

Emerging Most Overbought

ECOW Pacer Emerging Markets Cash Cows 100 ETF

iShares MSCI Saudi Arabia ETF

iShares MSCI Poland ETF

Global X MSCI Argentina ETF

SPDR S&P Emerging Markets Dividend ETF

iShares Emerging Markets Dividend ETF

SPDR S&P Emerging Markets Small Cap ETF

iShares MSCI Peru and Global Exposure ETF

VictoryShares Emerging Markets Value Momentum E.

WisdomTree Emerging Markets High Dividend Fund

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

Mar 23 23

Apr

73.68

73.22

70.70

70.52 69.70

69.25

68.98

68.92

68.87

68.67

37.54

42.32 48.89 49.13 49.23

50.86 51.30

52.61

52.78

53.42



Fixed Income, Commodities & Currencies

April 17, 2023









Currencies Performance

Fixed Income Performance

Commodities Performance

Ticker Name 1 Month YTD Ticker Name 1 Day 1 Month YTD Ticker Name 1 Month 1 Day 1 Day 0.12% 6.59% -3.56% DJP **Broad Commodities** -0.50% -0.35% 2.72% AGG U.S. Aggregate -1.00% 10.82% -5.80% 0.51% -1.35% 0.04% DBE Energy UUP Long Dollar -1.73% 20.76% 1.04% US0 WTI Crude Oil SHY -0.15% -0.26% 1.49% 1-3 Year Treasury Bonds -1.87% 17.71% 0.14% BNO Brent Crude Oil IEF 7-10 Year Treasury Bonds -0.64% -0.78% 3.26% UNG Natural Gas 6.58% -8.59% -49.43% -0.47% 2.00% 2.11% UDN Short Dollar -1.83% 13.78% 5.36% UGA Gasoline TLT 20+ Year Treasury Bonds -1.19% -2.58% 5.08% DBP Precious Metals -0.63% 3.17% 8.07% -0.45% 0.96% 9.37% GLD Gold -0.62% 2.65% 2.38% FXE Euro -0.46% 2.84% TIP **TIPS Bonds** 0.78% -1.24% 11.59% 4.54% SLV Silver -2.31% PPLT abrdn Physical Platin. 0.49% 7.66% 0.08% 1.59% 1.54% FLOT Floating Rate Bonds PALL abrdn Physical Palla. 3.73% 11.45% -12.54% FXB British Pound Sterling -0.24% 1.93% 3.17% -0.63% 0.97% 4.11% DBB Base Metals -0.55% 2.26% 2.21% LQD Investment Grade Corporate CPER Copper -0.80% 5.01% 8.01% HYG High Yield Corporate -0.27% 2.80% 3.55% 1.13% LD -2.56% -8.18% Lead -0.54% 3.03% 2.76% FXF Swiss Franc 1.39% 5.83% -16.95% JJN Nickel 4.27% 0.29% 3.08% BKLN Senior Loan JJU -0.67% 4.07% -1.93% Aluminum JJT Tin 9.05% 21.75% 9.75% -0.29% 4.23% 4.21% PFF Preferred & Income Securities -0.49% -1.87% -2.50% FXY Japanese Yen 1.39% 6.91% 5.21% DBA Agriculture 0.88% 2.26% -5.94% CORN Corn -0.18% 0.78% 2.78% MUB Municipal Bonds 0.85% 0.51% -4.53% SOYB Soybeans Canadian Dollar -0.15% 2.81% 1.65% -0.58% -1.01% 2.02% 1.58% -1.26% -11.53% FXC MBS WEAT Wheat MBB 0.89% 17.48% 31.16% CANE Sugar -0.64% 2.12% 1.78% EMB Dollar Denominated EM Bonds BAL 0.41% 7.72% 0.59% Cotton 0.91% 10.69% 17.38% FXA Australian Dollar 0.00% 0.31% -1.30% NIB Cocoa -0.47% 2.12% 3.28% LEMB Local Currency EM Bond JO 2.99% 13.89% 21.50% Coffee

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

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