

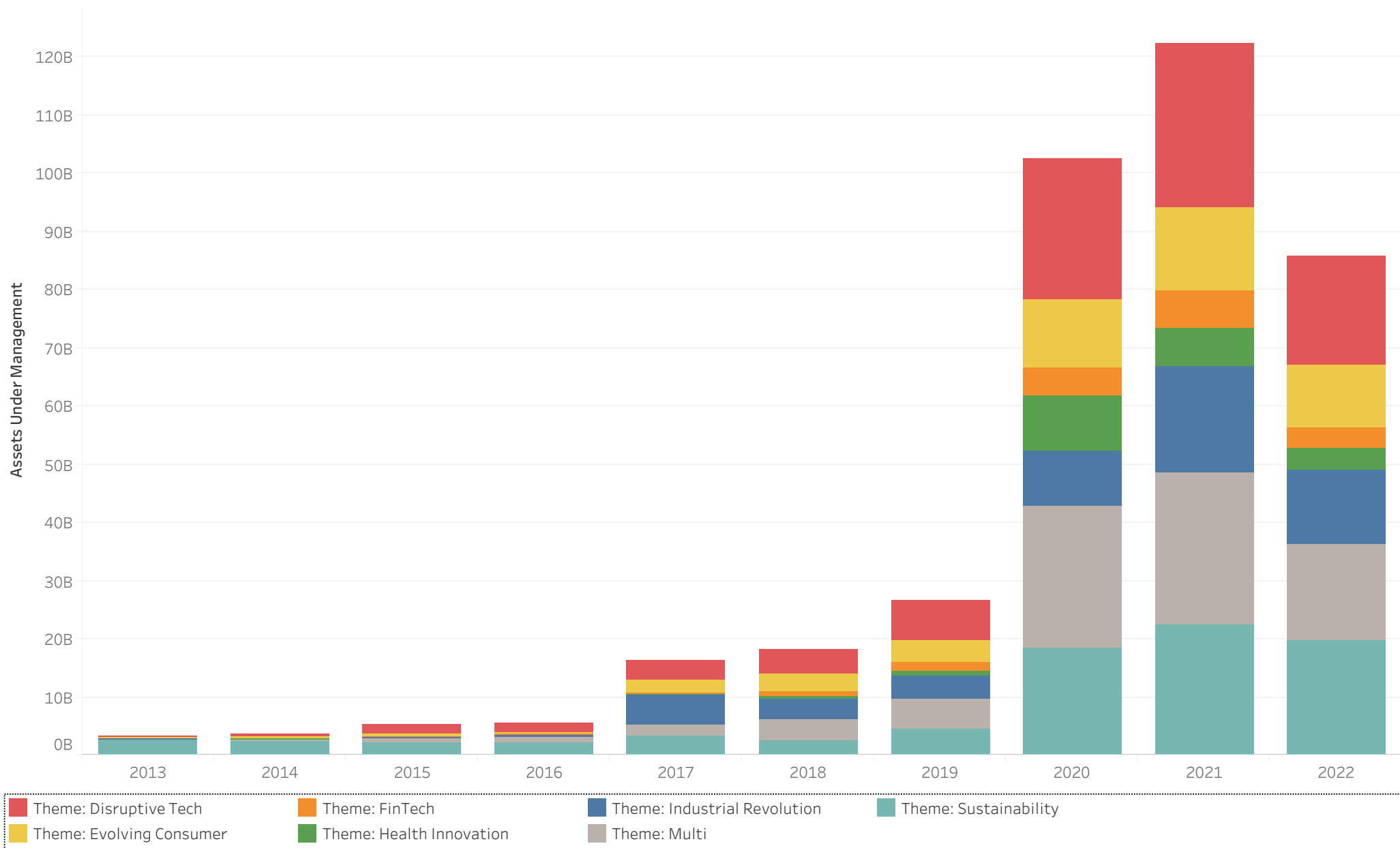
ETF Playbook

Global Themes



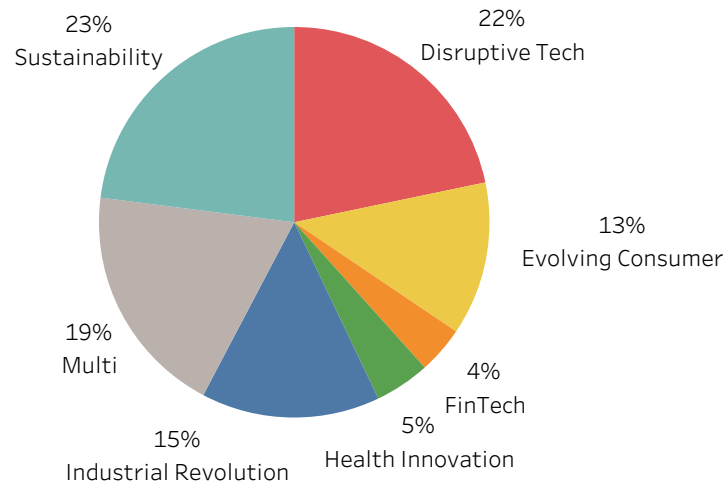
August 2, 2022

Annual AUM Growth



*Thematic landscape data is represented by Sub-asset class Equity > Thematic composite ETFs according to the ETF Action Classification System. Excludes inverse funds. **Flows delayed one day.

Thematic AUM Makeup



Landscape Assets & Flows

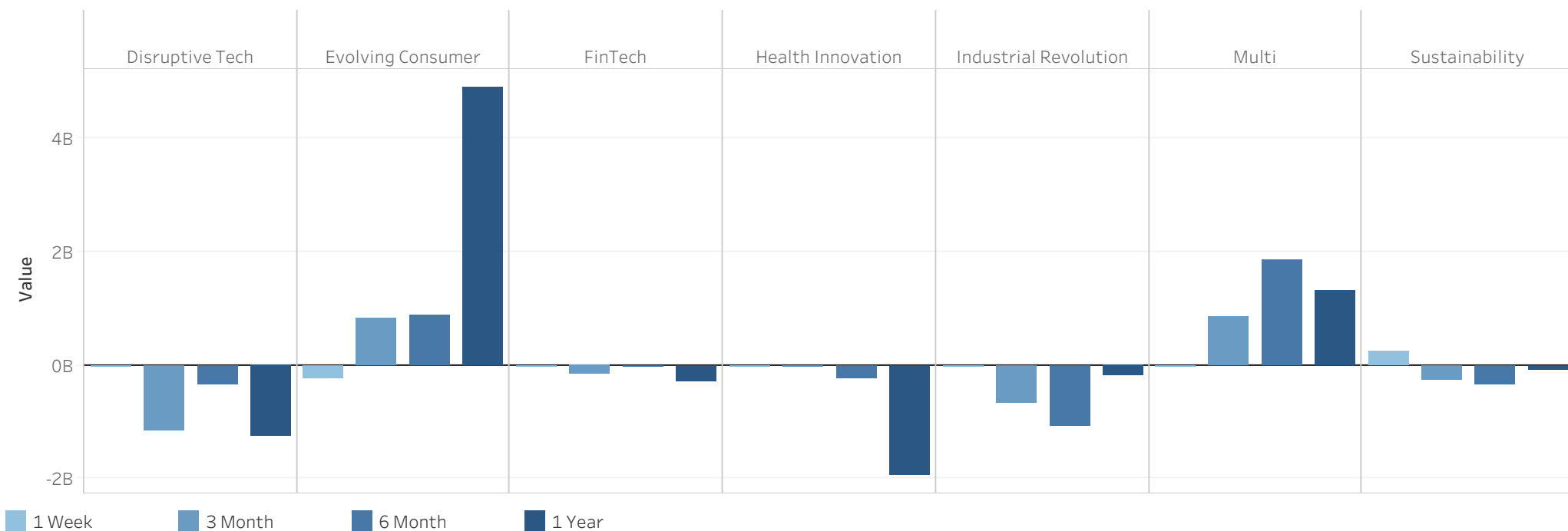
Segment	Funds	AUM	1 Week	3 Month	6 Month	1 Year
Disruptive Tech	35	\$18,623M	\$1M	(\$1,164M)	(\$340M)	(\$1,262M)
Evolving Consumer	48	\$10,907M	(\$225M)	\$836M	\$871M	\$4,889M
FinTech	24	\$3,351M	(\$32M)	(\$149M)	\$4M	(\$289M)
Health Innovation	19	\$3,909M	(\$34M)	(\$7M)	(\$245M)	(\$1,929M)
Industrial Revolution	32	\$12,686M	(\$3M)	(\$667M)	(\$1,082M)	(\$194M)
Multi	42	\$16,538M	\$0M	\$865M	\$1,857M	\$1,309M
Sustainability	42	\$19,697M	\$259M	(\$255M)	(\$334M)	(\$85M)

Monthly Flows



*Thematic landscape data is represented by Sub-asset class Equity > Thematic composite ETFs according to the ETF Action Classification System. Excludes inverse funds. **Flows delayed one day.

Flows by Time Frames Bar Chart



Weekly Flows Leaders

ETF Ticker	ETF Name	AUM	1 Week
TAN	Invesco Solar ETF	\$2,302M	\$199M
ICLN	iShares Global Clean Energy ETF	\$4,883M	\$35M
ONLN	ProShares Online Retail ETF	\$255M	\$16M
FIW	First Trust Water ETF	\$1,189M	\$12M
BUG	Global X Cybersecurity ETF	\$1,082M	\$10M
BOTZ	Global X Robotics & Artificial Intelligence ETF	\$1,398M	\$9M
PHO	Invesco Water Resources ETF	\$1,651M	\$8M
PBW	Invesco WilderHill Clean Energy ETF	\$1,029M	\$8M
KOMP	SPDR S&P Kensho New Economies Composite ETF	\$1,610M	\$7M
CRPT	First Trust SkyBridge Crypto Industry & Digital E..	\$23M	\$2M

Weekly Flows Laggards

ETF Ticker	ETF Name	AUM	1 Week
KWEB	KraneShares CSI China Internet ETF	\$7,585M	(\$246M)
ARKG	ARK Genomic Revolution ETF	\$2,799M	(\$52M)
IPAY	ETFMG Prime Mobile Payments ETF	\$609M	(\$19M)
ARKK	ARK Innovation ETF	\$8,945M	(\$19M)
FINX	Global X FinTech ETF	\$605M	(\$16M)
IBUY	Amplify Online Retail ETF	\$225M	(\$13M)
WCLD	WisdomTree Cloud Computing Fund	\$622M	(\$13M)
ARKW	ARK Next Generation Internet ETF	\$1,372M	(\$8M)
ARKQ	ARK Autonomous Technology & Robotics ETF	\$1,131M	(\$8M)
NXTG	First Trust Indxx NextG ETF	\$580M	(\$7M)

*Thematic landscape data is represented by Sub-asset class Equity > Thematic composite ETFs according to the ETF Action Classification System. Excludes inverse funds. **Flows delayed one day.

Thematic Performance Dynamics

Monthly Performance

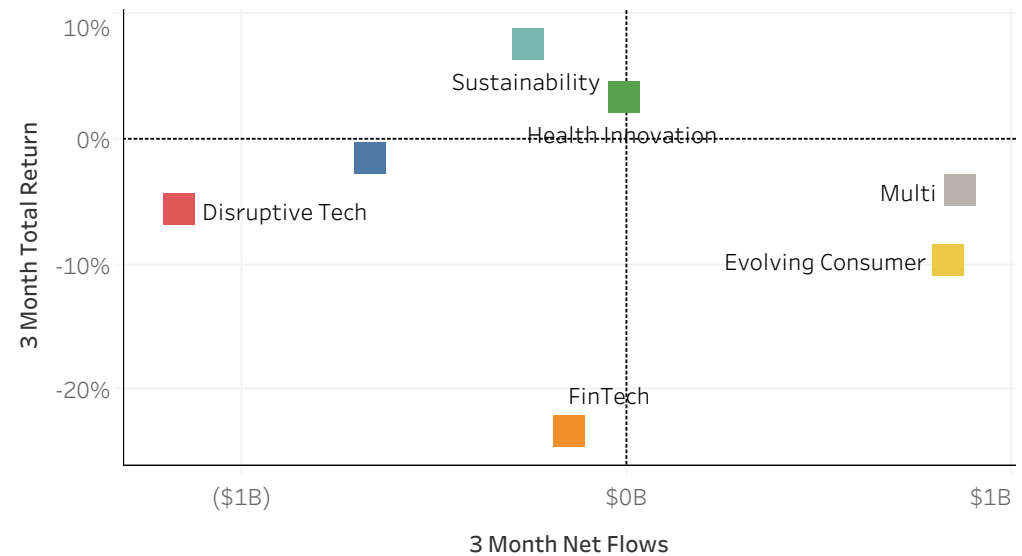
September 2021	October 2021	November 2021	December 2021	January 2022	February 2022	March 2022	April 2022	May 2022	June 2022	July 2022	MTD
-4.88%	13.61%	-2.03%	-0.80%	-9.97%	3.32%	2.75%	-12.11%	2.39%	0.37%	23.17%	2.22%
-5.38%	12.65%	-2.43%	-0.81%	-10.25%	0.29%	2.21%	-12.18%	1.78%	-6.67%	12.76%	1.02%
-5.40%	6.72%	-3.31%	-1.47%	-10.88%	-0.68%	0.74%	-13.39%	-3.11%	-7.57%	10.02%	0.82%
-5.73%	6.65%	-4.25%	-2.61%	-12.21%	-1.93%	0.56%	-14.03%	-4.07%	-8.31%	9.01%	0.77%
-5.78%	6.15%	-4.72%	-4.26%	-13.26%	-2.83%	0.37%	-14.06%	-4.17%	-10.10%	8.43%	0.21%
-6.85%	-0.22%	-6.88%	-5.07%	-16.31%	-3.23%	-0.08%	-15.22%	-4.54%	-10.25%	7.41%	0.07%
-8.80%	-0.33%	-7.98%	-14.84%	-16.48%	-4.44%	-2.25%	-22.26%	-14.37%	-25.94%	5.48%	-0.19%



Performance

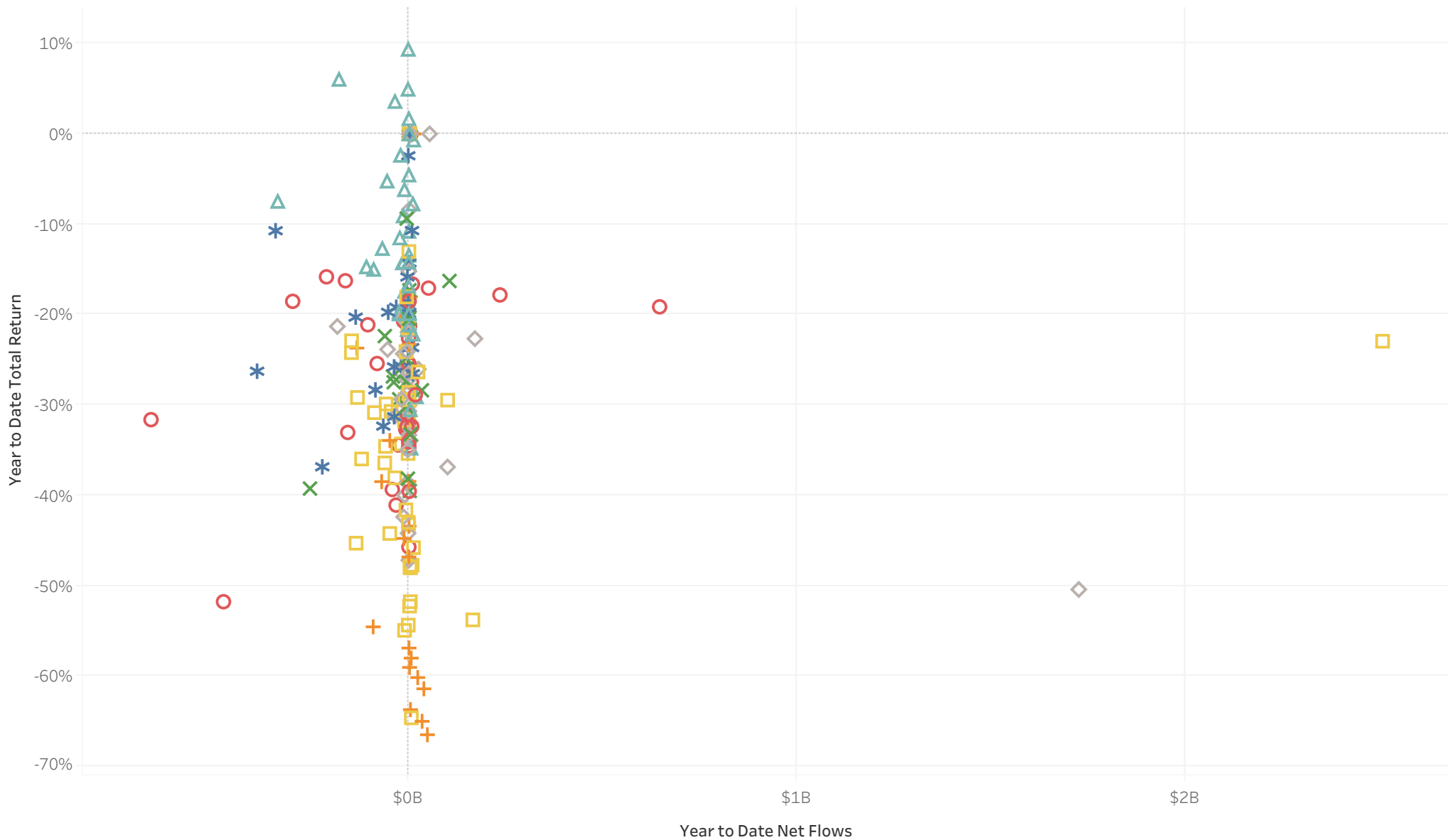
Segment	1 Month	3 Month	YTD	1 Year
Theme: Disruptive Tech	7.19%	-5.70%	-28.51%	-27.19%
Theme: Evolving Consumer	5.66%	-9.70%	-35.25%	-46.34%
Theme: FinTech	24.69%	-23.32%	-46.12%	-47.19%
Theme: Health Innovation	7.39%	3.42%	-26.51%	-34.79%
Theme: Industrial Revolution	8.95%	-1.52%	-21.38%	-21.21%
Theme: Multi	9.03%	-4.15%	-29.36%	-33.82%
Theme: Sustainability	11.78%	7.55%	-13.00%	-15.41%

3 Month Total Return vs Net Flows



*Thematic landscape data is represented by Sub-asset class Equity > Thematic composite ETFs according to the ETF Action Classification System. Excludes inverse funds. **Flows delayed one day.

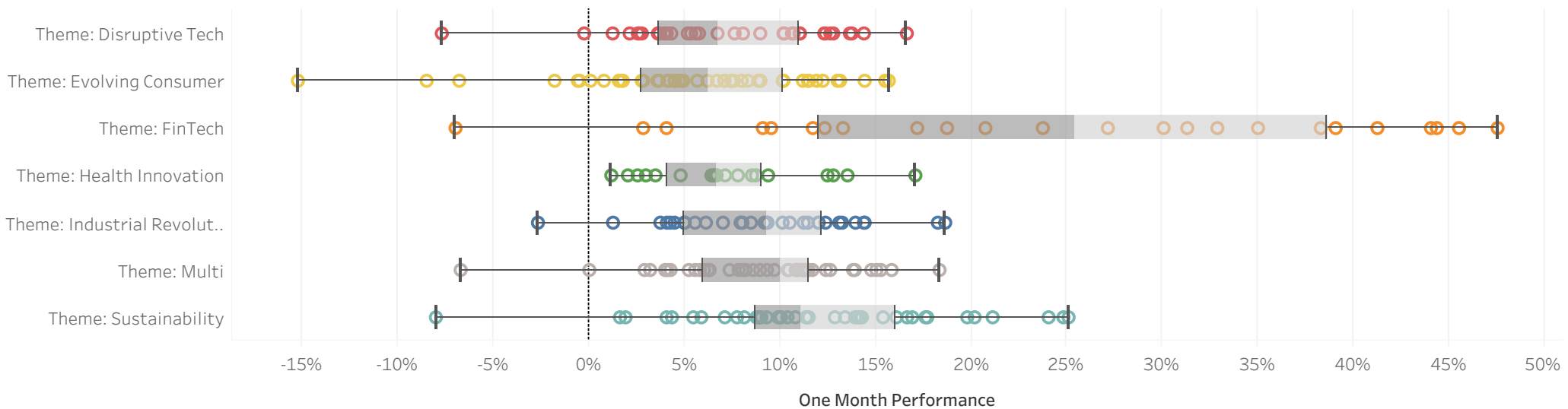
YTD Performance vs YTD Net Flows



- Theme: Disruptive Tech
- Theme: FinTech
- Theme: Industrial Revolution
- Theme: Sustainability
- Theme: Evolving Consumer
- Theme: Health Innovation
- Theme: Multi

*Thematic landscape data is represented by Sub-asset class Equity > Thematic composite ETFs according to the ETF Action Classification System. Excludes inverse funds. **Flows delayed one day.

One Month Performance Ranges - Box & Whisker Plot



One Month Performance Leaders

ETF Ticker	ETF Name	1 Mo	YTD
CRPT	First Trust SkyBridge Crypto Industry & Digital ..	47.53%	-60.15%
DAPP	VanEck Digital Transformation ETF	45.52%	-64.99%
IBLC	iShares Blockchain and Tech ETF	44.36%	
BITQ	Bitwise Crypto Industry Innovators ETF	44.05%	-61.40%
BKCH	Global X Blockchain ETF	41.25%	-66.48%
DAM	VanEck Digital Assets Mining ETF	39.06%	
RIGZ	Viridi Cleaner Energy Crypto-Mining & Semicon..	38.28%	-63.70%
SATO	Invesco Alerian Galaxy Crypto Economy ETF	35.00%	-59.03%
FDIG	Fidelity Crypto Industry and Digital Payments ..	32.87%	
WGMI	Valkyrie Bitcoin Miners ETF	31.29%	

One Month Performance Laggards

ETF Ticker	ETF Name	1 Mo	YTD
KWEB	KraneShares CSI China Internet ETF	-15.25%	-22.94%
EWEB	Global X Emerging Markets Internet & E-commerce ETF	-8.52%	-28.58%
KGRN	KraneShares MSCI China Clean Technology Index ETF	-8.03%	-18.85%
KFVG	KraneShares CICC China 5G & Semiconductor Index ETF	-7.72%	-32.41%
BTCR	Volt Crypto Industry Revolution and Tech ETF	-7.00%	-56.89%
EMQQ	EMQQ The Emerging Markets Internet & Ecommerce E..	-6.81%	-29.16%
KEJI	Global X China Innovation ETF	-6.73%	-21.99%
DMAT	Global X Disruptive Materials ETF	-2.69%	
KEMQ	KraneShares Emerging Markets Consumer Technology..	-1.82%	-34.31%
SOCL	Global X Social Media ETF	-0.60%	-38.05%

*Thematic landscape data is represented by Sub-asset class Equity > Thematic composite ETFs according to the ETF Action Classification System. Excludes inverse funds. **Flows delayed one day.

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 <https://www.etfaction.com/terms>.

© 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