GLOBAL X INSIGHTS

GLOBAL X

The Next Big Theme: May 2024

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The Next Big Theme

A Regular Pulse on Disruptive Trends by Global X ETFs



Artificial Intelligence & Technology

Al Infrastructure Ecosystem Continues to Grow and Expand

Hyperscalers are incrementally prioritizing in-house AI chips. Meta unveiled its latest AI accelerator chip, Artemis, which is designed to manage the increasing computing demands of AI applications on Facebook, Instagram, and WhatsApp.¹ Produced by Taiwan Semiconductor Manufacturing Company, Artemis offers three times the performance of Meta's initial processor, enabling the company to decrease its dependency on Nvidia's chips and cut energy costs.² Amidst growing corporate demand, Intel also unveiled its latest AI chip, Gaudi 3. Reportedly Gaudi 3 is more than twice as power-efficient and can run AI models one-and-a-half times faster than the H100 GPU that trained GPT language models like ChatGPT.³ Additionally, Intel plans to manufacture AI chips in a new Ohio factory set to open in 2027 or 2028.⁴ Nvidia and AMD may be among its customers.⁵ Google is developing its own custom Arm-based central processing unit (CPU) chips, named Axion, to support AI operations in its data centers.⁶ Google is also enhancing its Tensor Processing Units (TPU), an alternative to graphics processing units (GPUs) for AI acceleration, to support more intensive AI tasks.⁷

Defense Technology

Next-Generation Missile Technology to Advance Defense Systems

Raytheon secured a \$344 million contract to develop two missile variants, the SM-2 Block IIICU and SM-6 Block IU.⁸ Both variants utilize a newly designed common guidance section that includes advanced electronics and software to direct the missile to its target.⁹ These variants will also feature a new target detection device, an independent flight termination system, and a unified electronics unit.¹⁰ The integration of these systems allows for the manufacturing of both missiles on a single production line, enhancing flexibility, scalability, and cost-efficiency.¹¹ This initiative represents a significant advancement, enabling Raytheon to boost the production speed and efficiency of vital weapon systems for the U.S. Navy and its allies. Additionally, this initiative marks the inaugural deployment of Standard Missile active radar technology to U.S.'s international allies, heralding a new era in defense collaboration.¹² The Australian arm of Lockheed Martin also inked a USD \$320 million contract to build the country's Joint Air Battle Management System, considered foundational to the county's future air defense through the intercept of hostile missiles and aircraft.¹³

Cloud Computing

Generative AI Delivered a Boost to Cloud Computing Revenues

Cloud computing revenues for tech giants Amazon, Alphabet, and Microsoft rebounded in Q1, driven by strong corporate spending on AI-related investments following a slowdown in 2023 caused by IT cost optimization efforts. Microsoft's Azure cloud segment rose 31% year-over-year (YoY), compared to 30% in the previous quarter, with 7 percentage points of the gain attributed to AI.¹⁴ Amazon Web Services reaccelerated to 17% YoY growth and Google's cloud revenue grew 28% to \$9.57 billion, with the segment's operating income more than quadrupling to \$900 million.^{15,16} Foundational cloud infrastructure has shown healthy growth with corporations more open to long-term investments, which is likely to support the downstream adoption of generative AI. We believe hyperscale cloud solution

providers are well positioned to benefit from this trend, which we expect to remain strong in 2024 and 2025. We also expect it to have positive implications for the broader cloud software ecosystem, data management platforms, and vendors of critical solutions like cybersecurity.

Robotics & Artificial Intelligence

New Humanoid Robots Show Their Rapid Evolution

Boston Dynamics unveiled a new all-electric version of its Atlas humanoid robot, just one day after announcing the retirement of its previous hydraulic model.¹⁷ The robot boasts a significantly enhanced range of motion, with swiveling joints that enhance its strength, dexterity, and agility.¹⁸ These improvements make it better suited for performing hazardous or repetitive tasks. The new Atlas retains a human-like form, but Boston Dynamics aims for the robot's movements to exceed human capabilities by optimizing its movement efficiency for task completion. The previous model was limited to human motions.¹⁹ Apple is also exploring the development of personal home robots and a tabletop device that uses robotics to adjust a display screen.²⁰ Though the full scope of this early-stage initiative is unclear, we believe that robotics could enable Apple to gain a greater foothold in consumers' homes and capitalize on advances in artificial intelligence.

CleanTech

Renewable Energy a Focus Amidst Growing Demand for AI and Data Centers

Microsoft partnered with Brookfield Asset Management and its Brookfield Renewable affiliate in a deal worth over \$10 billion to enhance renewable energy capacity.²¹ The deal, the largest of its kind, will concentrate on developing wind, solar, and innovative carbon-free energy sources.²² Brookfield will provide 10.5 gigawatts (GW) of renewable energy to Microsoft between 2026 and 2030 across the U.S. and Europe.²³ To put this amount in context, 10.5 GW is triple the 3.5 GW currently used by data centers in Northern Virginia, the world's leading data center hub.²⁴ The initiative comes at a critical time in the United States, where electricity demand is escalating due to advancements in AI, expansions in semiconductor and battery production, and the electrification of the national vehicle fleet. Following a decade of stable consumption, total electricity consumption in the United States is projected to increase 20% by the end of the decade.²⁵

Video Games & Esports

Gaming Industry Looks to Advertising to Supercharge Growth

Roblox introduced virtual billboards with video advertisements in its latest move to monetize its free-to-play games. These ads, showcasing brands like Walmart and Warner Brothers, will appear as they do in real life and target Gen Z users, who make up half of the platform's 71.5 million daily active users.²⁶ The move aligns with a growing trend among gaming platforms to use advertising as a means of revenue diversification. A study by the Interactive Advertising Bureau (IAB) identified in-game advertising as one of the top investment growth areas alongside digital video. Notably, 86% of advertisers surveyed noted that advertising is a growing area of importance, and 40% confirmed plans to increase spend on games advertising in the coming year.²⁷ As gaming's popularity in the United States continues to surge, a market that already has 213 million gamers, we expect games advertising to become an increasingly reliable platform for advertisers.²⁸ In-game ad spend is projected to reach \$11.5 billion by 2027, up from \$8.5 billion in 2024.²⁹

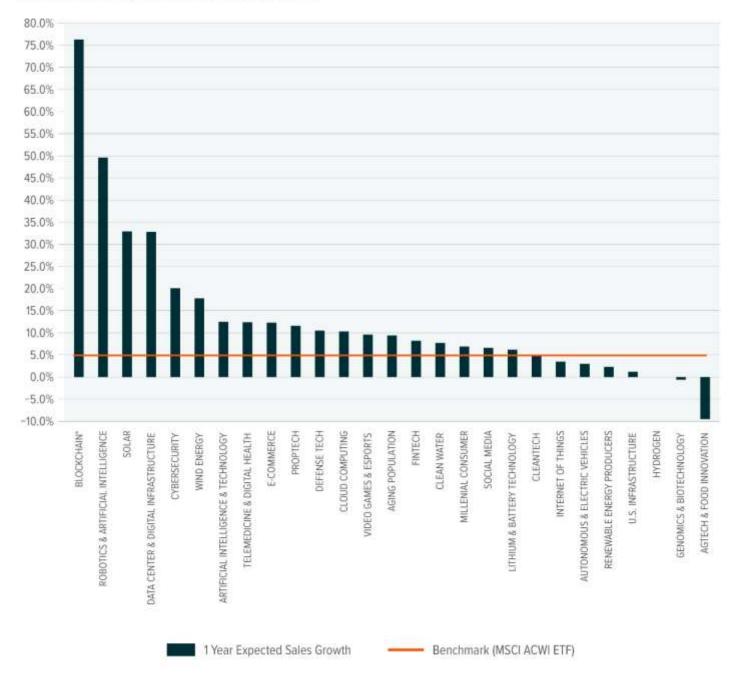


THE NUMBERS

The following charts examine returns and sales growth expectations by theme, based on their corresponding ETFs or indices.

THEMATIC EXPECTED SALES GROWTH

Source: Bloomberg, April 30, 2024, Global X ETFs.



Note: Forward looking based on index data and analysis from 4/30/2024.

1 year annualized forward sales growth is the consensus analyst expectations for total sales growth in the next 12 months. Refer to Appendix below Footnotes for details on Indices used.

APRIL 2024 THEMATIC ETF RETURNS

Source: Bloomberg, April 30, 2024, Global X ETFs.



Note: The performance data quoted represents past performance and does not guarantee future results. *Blockchain reflects figures according to BKCH ETF

Performance data quoted represents past performance and does not guarantee future results. Investment return and principal value of an investment will fluctuate so that an investors' shares, when sold or redeemed, may be worth more or less than their original cost. Current performance may be higher or lower than the performance quoted. High short-term performance of the fund is unusual and investors should not expect such performance to be repeated. For performance data current to the most recent month end, please call 1-888-493-8631 or visit www.globalxetfs.com.

Standard Performance			Cumulative % Data as of month end (04/30/24)			Avg. Annualized % Data as of quarter end (03/31/24)					
	Expense Ratio		1 Month	3 Month	Since Inception	1 Year	3 Year	5 Year	10 Year	Since Inception	
ROBOTICS & ARTIFICIAL	0.68%	NAV	-5.56%	4.23%	109.07%	25.79%	-1.01%	10.08%	1	11,10%	
INTELLIGENCE Inception Date 9/12/2016		Market Price	-6.07%	4.55%	107.96%	25.00%	-1.16%	10.02%		11.10%	
		Index	-5.40%	4.45%	115.15%	26.10%	-0.48%	10.60%		11.49%	
		NAV	-9.83%	3.80%	76.94%	34.19%	-12.48%	1.29%	2	9.34%	
FINTECH Inception Date 9/12/2016	0.68%	Market Price	-10.19%	3.77%	76.16%	34.14%	-12.57%	1.27%	-	9.33%	
	0.0070	Index	-9.78%	3.96%	84.15%	34.86%	-12.19%	1.75%		9.91%	
		NAV	-4.35%	3.27%	145.73%	10.04%	3.73%	15.49%		13.30%	
INTERNET OF THINGS	0.68%	Market Price	-4.09%	3.89%	145.59%	9.68%	3.52%	15.39%		13.26%	
Inception Date 9/12/2016		Index	-4.38%	3.46%	152.41%	10.75%	4.17%	15.93%		13.71%	
		NAV	-7.52%	-10.24%	36.26%	18.87%	-4.84%	10.0070		8.11%	
CLOUD COMPUTING Inception Date 4/12/2019	0.68%	Market Price	-7.26%	-10.04%	36.87%	18.53%	-4.91%	-	-	8.14%	
		Index	-7.46%	-10.07%	40.69%	19.67%	-4.21%		- 8	8.79%	
SOCIAL MEDIA		NAV	1.02%	5.62%	183.06%	9.91%	-14.99%	4.98%	7.81%	8.67%	
	0.65%	Market Price	0.47%	5.25%	180.91%	9.58%	-15.19%	4.97%	7.82%	8.65%	
Inception Date 11/14/2011		Index	1.10%	5.75%	202.26%	10.53%	-14.60%	5.53%	8.32%	9.24%	
ARTIFICIAL INTELLIGENCE &		NAV	-5.39%	2.65%	119.52%	38.60%	6.53%	17.10%	0,32.10	15.35%	
TECHNOLOGY Inception Date 5/11/2018	0.68%	Market Price	-5.51%	2.62%	119.39%	38.34%	6.37%	17.11%		15.36%	
		Index	-5.51%	2.81%	125.45%	39.81%	7.17%	17.72%		15.90%	
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AUTONOMOUS & ELECTRIC VEHICLES	0.68%	NAV	-5.61%	2.01%	68.09%	5.60%	-1.17%	14.49%		10.15%	
		Market Price	-5.87%	2.24%	67.24%	5.26%	-1.35%	14.37%	-	10.11%	
Inception Date 4/13/2018		Index	-5.73%	1.95%	69.65%	5.77%	-0.94%	14.75%		10.34%	
LITHIUM AND BATTERY TECH	0.75%	NAV	-2.58%	5.87%	70.44%	-27.66%		10.87%	6.76%	4.17%	
Inception Date 7/22/2010		Market Price	-3.25%	5.72%	68.96%	-28.01%	-7.48%	10.89%	6.67%	4.15%	
		Index	-2.73%	5.94%	81.63%	-27.26%		11.19%	7.05%	4.66%	
GENOMICS AND	0.50%	NAV	-13.29%	-8.46%	-35.43%	and the second sec	-20.26%		-	-5.73%	
BIOTECHNOLOGY		Market Price	-13.44%	-8.37%	-34.22%	-7.63%	-20.29%		, ¥.,	-5.35%	
Inception Date 4/5/2019		Index	-13.22%	-8.24%	-33.72%	-6.37%	-19.88%	-	.*.	-5.25%	
MILLENNIAL CONSUMER	0.50%	NAV	-4.32%	5.83%	157.97%	31.46%	-0.59%	10.83%		13.35%	
Inception Date 5/4/2016		Market Price	-4.40%	5.86%	156.83%	31.86%	-0.62%	10.83%		13,30%	
		Index	-4.27%	5.97%	167.79%	32.10%	-0.13%	11.39%		13,88%	
AGING POPULATION	0.50%	NAV	-4.17%	1,27%	100.05%	12.59%	3.44%	7.66%		9.77%	
Inception Date 5/09/2016		Market Price	-4.65%	1.56%	104.27%	13.50%	3.51%	7.65%		10.13%	
		Index	-4.20%	1.23%	104.17%	12.98%	3.67%	7.90%		10.05%	
E-COMMERCE	0,50%	NAV	-4.55%	13.13%	54.83%		-10.97%	6.70%	~	9.47%	
Inception Date 11/27/2018		Market Price	-4.40%	13.58%	54.76%	32.45%		6.61%	-	9.43%	
		Index	-4.53%	13.25%	58.54%		-10,60%			9.95%	
US INFRASTUCTURE DEVELOPMENT	0.47%	NAV	-5.88%	9.21%	161.37%	41.47%	17.58%	21.32%	1	15.53%	
		Market Price	-5.83%	9.24%	161.51%	41.42%	17.50%	21.30%	*	15.53%	
Inception Date 3/6/2017		Index	-5.85%	9.35%	171.72%	42.56%	18.29%	22.02%	-	16.16%	
VIDEO GAMES & ESPORTS	Sportpractice.	NAV	-5.30%	-0.71%	34.51%	2.86%	-12.28%	- e:		8.23%	
Inception Date 10/25/2019	0.50%	Market Price	-5.99%	-0.66%	33.18%	2.51%	-12.48%			8.17%	
inception bate forzarzo15		Index	-5.24%	-0.56%	37.32%	3.22%	-11.91%			8.72%	

NAV -5.71% -6.49% 89.83% 27.23% 6.89% 17.09% CYBERSECURITY 0.50% -5.71% -6.59% 93.02% 27.00% 6.71% 17.53% Market Price Inception Date 10/25/2019 Index -5.89% -6.12% 93.69% 28.14% 7.42% 17.67% NAV -5.56% 134% -4.57% -3.58% -19.14% 0.24% -THEMATIC GROWTH -6.01% -3.94% -3.34% -19.13% 0.50% Market Price 0.67% 0.49% Inception Date 10/25/2019 Index -5.56% 1.25% -5.59% -3.78% -19.36% -0.01% **TELEMEDICINE & DIGITAL** NAV -7.33% -5.55% -41.87% -19.00% -20.63% --11.92% HEALTH 0.68% Market Price -7.47% -5.78% -42.20% -18.86% -20.77% -12.02% Inception Date 7/29/2020 Index -7.24% -5.42% -40.84% -18.54% -20.28% -11.52% NAV -9.23% -3.85% -41.26% -39.49% -23.61% -11.93% -CLEANTECH 0.50% Market Price -9.67% -3.98% -41.66% -39.27% -23.94% -11.98% Inception Date 10/27/2020 -9.11% -3.84% -42.15% 39.50% -24.06% -12.35% Index NAV -8.11% -1.38% 0.46% 19.46% 1.55% 2.64% **DATA CENTER & DIGITAL** . -0.50% -8.17% -1.52% 19.80% INFRASTRUCTURE Market Price 0.55% 1.50% 2.68% Inception Date 10/27/2020 -8.09% -1.25% 0.59% 19.86% 1.60% Index 2.67% -7.35% -2.84% -16.26% -19.70% -13.64% NAV -3.31% -1.67% RENEWABLE ENERGY 0.65% PRODUCERS Market Price -3.76% -7.15% -17.21% -19.38% -13.72% -3.43% -1.69% Inception Date 05/27/2015 -2.81% -19.34% -13.27% Index -7.18% -13.32% -2.96% -1.28% -2.51% 7.91% NAV 18.49% 21.59% 6.76% CLEAN WATER 0.50% -2.74% 7.73% 21.77% Market Price 18.13% 6.74% Inception Date 04/08/2021 -2.47% 8.06% 19,74% Index 22.09% 7.13% ---NAV 4.87% -3.15% -56.36% -22.74% -25.40% AGTECH AND FOOD ---INNOVATION 0.51% Market Price -3.41% 4.87% -56.36% -22.06% -25.33% --Inception Date 07/12/2021 Index -3.11% 5.02% -55.89% -22.46% -25.12% --NAV -6.28% -13.72% -7914% -49.04% -42.44% HYDROGEN -13.58% -79.14% -48.45% 0.50% Market Price -7.45% -42.17% -. -Inception Date 07/12/2021 Index -6.24% -13.70% -78.82% -48.54% -42.12% . NAV -22.32% 16,44% -57.36% 136.45% -19.78% --BLOCKCHAIN Market Price -21.87% 0.50% 16.94% -57.19% 134.45% -19.84% Inception Date 07/12/2021 Index -22.34% 16.39% -58.87% 134.60% -20.83% -NAV -7.75% 0.84% -55.22% -43.58% -24.58% SOLAR 0.50% Market Price -7.82% 1.31% -55.14% -43.52% -24.51% * Inception Date 09/08/2021 -43,36% 0.95% -54.61% Index -7.72% -24.19% -. -NAV -1.24% -2.85% -50.95% -29.95% -23.90% ---WIND ENERGY 0.51% Market Price -2.31% -3.19% -51.40% -29.43% -23.85% --Inception date 09/08/2021 Index -1.27% -2.76% -50.42% -29.71% -23.58% . NAV -6.37% 1.18% 22.41% PROPTECH 0.51% Market Price -6.42% 1.35% 22.50% ---Inception date 04/11/23 Index -6.32% 1.34% 22.97% --. -NAV -1.15% 16.29% 32.05% . DEFENSE TECH Market Price -1.27% 16.45% 32.41% 0.50% --Inception date 09/11/23 Index -1.10% 16.46% 32.50% -



P/S AND EV/S

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Source: Bloomberg, data is as of 4/30/24 and 3/31/24, Global X ETFs.

Ticker	Name	P	/S	EV/S		
		4/30/24	3/31/24	4/30/24	3/31/24	
GNOM	Global X Genomics & Biotechnology ETF	6.51	7.51	5.55	6.61	
BUG	Global X Cybersecurity ETF	5.45	5.80	5.21	5.54	
BOTZ	Global X Robotics & Artificial Intelligence ETF	3.96	4.17	4.45	4.82	
CLOU	Global X Cloud Computing ETF	3.74	4.05	3.97	4.29	
AGNG	Global X Aging Population ETF	3.66	3.89	4.24	4.43	
BKCH	Global X Blockchain ETF	3.58	4.64	4.45	5.62	
AIQ	Global X Artificial Intelligence & Technology ETF	3.52	3.69	3.55	3.73	
DTCR	Global X Data Center & Digital Infrastructure ETF	3.39	3.66	5.90	6.50	
FINX	Global X Fintech ETF	3.36	3.68	3.87	4.27	
SNSR	Global X Internet of Things ETF	3.08	3.14	3.42	3.34	
SOCL	Global X Social Media ETF	3.06	3.16	2.95	3.04	
HERO	Global X Video Games & Esports ETF	2.83	2.99	2.78	2.93	
SPY	SPDR S&P 500 ETF TRUST	2.68	2.83	3.05	3.20	
AQWA	Global X Clean Water ETF	2.59	2.66	3.61	3.68	
MILN	Global X Millennial Consumer ETF	2.22	2.30	2.54	2.66	
HYDR	Global X Hydrogen ETF	2.16	2.31	2.13	2.32	
PTEC	Global X PropTech ETF	2.06	2.19	3.44	3.74	
RNRG	Global X Renewable Energy Producers ETF	2.04	2.16	5.88	5.44	
EDOC	Global X Telemedicine & Digital Health ETF	1.99	2.15	1.99	2.14	
ACWI	MSCI ACWI ETF	1.97	2.08	2.30	2.85	
PAVE	Global X US Infrastructure Development ETF	1.72	1.84	2.02	2.14	
SHLD	Global X Defense Tech ETF	1.70	1.75	1.93	1.98	
WNDY	Global X Wind Energy ETF	1.54	1.58	2.76	2.77	
LIT	Global X Lithium & Battery Tech ETF	1.54	1.57	1.74	1.76	
RAYS	Global X Solar ETF	1.33	1.36	1.99	1.99	
EBIZ	Global X E-Commerce ETF	1.23	1.28	1.15	1,21	
KROP	Global X Agtech & Food Innovation ETF	0.98	1.02	1.30	1.32	
DRIV	Global X Autonomous & Electric Vehicles ETF	0.82	0.89	0.94	0.99	
CTEC	Global X Cleantech ETF	0.77	0.85	1.17	1.26	

Note: P/S and EV/S refer to price-to-sales and enterprise value-to-sales, respectively.



F12M SALES GROWTH, PSG, AND EVSG

Source: Bloomberg, data is as of 4/30/24 and 3/31/24, Global X ETFs.

Ticker	Name	F12M Sa	iles (%)	PSG		EVSG	
		4/30/24	3/31/24	4/30/24	3/31/24	4/30/24	3/31/24
BKCH	Global X Blockchain ETF	76.3%	62.7%	0.05	0.07	0.06	0.09
BOTZ	Global X Robotics & Artificial Intelligence ETF	49.6%	47.3%	0.08	0.09	0.09	0.10
RAYS	Global X Solar ETF	32.9%	27.5%	0.04	0.05	0.06	0.07
DTCR	Global X Data Center & Digital Infrastructure ETF	32.8%	31.7%	0.10	0.12	0.18	0.21
BUG	Global X Cybersecurity ETF	20.1%	19.1%	0.27	0.30	0.26	0.29
WNDY	Global X Wind Energy ETF	17.8%	17.0%	0.09	0.09	0.16	0.16
AIQ	Global X Artificial Intelligence & Technology ETF	12.5%	13.8%	0.28	0.27	0.28	0.27
EDOC	Global X Telemedicine & Digital Health ETF	12.4%	11.3%	0.16	0.19	0.16	0.19
EBIZ	Global X E-Commerce ETF	12.3%	13.0%	0.10	0.10	0.09	0.09
PTEC	Global X PropTech ETF	11.6%	10.5%	0.18	0.21	0.30	0.36
SHLD	Global X Defense Tech ETF	10.5%	12.2%	0.16	0.14	0.18	0.16
CLOU	Global X Cloud Computing ETF	10.3%	12.3%	0.36	0.33	0.38	0.35
HERO	Global X Video Games & Esports ETF	9.6%	9.4%	0.30	0.32	0.29	0.31
AGNG	Global X Aging Population ETF	9.4%	11.4%	0.39	0.34	0.45	0.39
FINX	Global X FinTech ETF	8.2%	8.3%	0.41	0.44	0.47	0.52
AQWA	Global X Clean Water ETF	7.7%	7.6%	0.34	0.35	0.47	0.49
MILN	Global X Millenial Consumer ETF	6.9%	9.1%	0.32	0.25	0.37	0.29
SOCL	Global X Social Media ETF	6.6%	10.5%	0.46	0.30	0.44	0.29
LIT	Global X Lithium & Battery Technology ETF	6.2%	7,2%	0.25	0.22	0.28	0.25
SPY	S&P 500 ETF	5.4%	6.6%	0.50	0.43	0.56	0.49
CTEC	Global X CleanTech ETF	4.9%	4,3%	0.16	0.20	0.24	0.29
ACWI	MSCI ACWI ETF	4.8%	5.6%	0.41	0.37	0.48	0.51
SNSR	Global X Internet of Things ETF	3.5%	3.6%	0.88	0.88	0.98	0.93
DRIV	Global X Autonomous & Electric Vehicles ETF	3.0%	3.9%	0.27	0.23	0.31	0.25
RNRG	Global X Renewable Energy Producers ETF	2.3%	3.6%	0.88	0.60	2.55	1.51
PAVE	Global X US Infrastructure Development ETF	1.2%	0.6%	1,44	2.86	1.69	3.33
HYDR	Global X Hydrogen ETF	0.0%	2.7%	-131.27	0.85	-129.45	0.86
GNOM	Global X Genomics & Biotechnology ETF	-0.6%	-0,4%	-11.38	-20.10	-9.70	-17.69
KROP	Global X AgTech & Food Innovation ETF	-9.5%	-9.3%	-0.10	-0.11	-0.14	-0.14

Note: F12M Growth is calculated using consensus analyst expectations for total sales in the next 12 months and weighted average trailing 12 month revenue.

Please note that substantial month-over-month variations in F12M Sales may be the result of Bloomberg coverage and estimates of underlying securities.

PSG and EVSG refer to Price-to-Sales over F12 Sales Growth and Enterprise Value over F12 Sales Growth, respectively.



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To see individual ETF holdings and current performance across the Global X Thematic Growth Suite, including information on the indexes shown, click these links:

- Disruptive Technology: Artificial Intelligence & Technology ETF (AIQ), Robotics & Artificial Intelligence ETF (BOTZ), Cybersecurity ETF (BUG), Cloud Computing ETF (CLOU), Autonomous & Electric Vehicles ETF (DRIV), FinTech ETF (FINX), Video Games & Esports ETF (HERO), Lithium and Battery Tech ETF (LIT), Internet of Things ETF (SNSR), Social Media ETF (SOCL), Data Centers & Digital Infrastructure ETF (DTCR), AgTech & Food Innovation ETF (KROP), Blockchain ETF (BKCH), Blockchain & Bitcoin Strategy ETF (BITS), PropTech ETF (PTEC), Defense Tech ETF (SHLD), Bitcoin Trend Strategy ETF (BTRN)
- People and Demographics: Millennial Consumer ETF (MILN), E-Commerce ETF (EBIZ), Genomics & Biotechnology ETF (GNOM), Aging Population ETF (AGNG), Telemedicine & Digital Health ETF (EDOC)
- Physical Environment: U.S. Infrastructure Development ETF (PAVE), CleanTech ETF (CTEC), Renewable Energy Producers (RNRG), Clean Water ETF (AQWA), Hydrogen ETF (HYDR), Solar ETF (RAYS), Wind Energy ETF (WNDY)
- Multi-Theme: Thematic Growth ETF (GXTG)

Appendix: Thematic Expected Sales Growth Graph Indices

AgTech & Food Innovation: Solactive AgTech & Food Innovation Index Aging Population: Indxx Aging Population Thematic Index Artificial Intelligence & Technology: Indxx Artificial Intelligence & Big Data Index Autonomous & Electric Vehicles: Solactive Autonomous & Electric Vehicles Index Blockchain: Solactive Blockchain Index Clean Water: Solactive Global Clean Water Industry Index CleanTech: Indxx Global CleanTech Index Cloud Computing: Indxx Global Cloud Computing Index Cybersecurity: Indxx Cybersecurity Index Data Center & Digital Infrastructure: Solactive Data Center REITs & Digital Infrastructure Index Defense Tech: Global X Defense Tech Index E-Commerce: Solactive E-commerce Index FinTech: Indxx Global FinTech Thematic Index Genomics: Solactive Genomics Index Hydrogen: Solactive Global Hydrogen Index Internet Of Things: Indxx Global Internet of Things Thematic Index Lithium & Battery Technology: Solactive Global Lithium Index Millennial Consumer: Indxx Millennials Thematic Index **PropTech:** Global X PropTech Index Renewable Energy Producers: Indxx Renewable Energy Producers Index Robotics & Artificial Intelligence: Indxx Global Robotics & Artificial Intelligence Thematic Index Social Media: Solactive Social Media Total Return Index Solar: Solactive Solar Index Telemedicine & Digital Health: Solactive Telemedicine & Digital Health Index U.S. Infrastructure: Indxx U.S. Infrastructure Development Index Video Games & Esports: Solactive Video Games & Esports Index Wind Energy: Solactive Wind Energy Index



Footnotes

- 1. CNBC. (2024, April 10). Meta debuts new generation of AI chip.
- 2. Ibid.
- 3. Intel. (2024, April 9). Intel Breaks Down Proprietary Walls to Bring Choice to Enterprise GenAl Market.
- 4. Spectrum News. (2024, March 25). Biden administration officials: Ohio semiconductor factories will play a role in strengthening national security.
- 5. Ibid.
- 6. Google Cloud. (2024, April 9). Introducing Google Axiom Processors, our new Arm-based CPUs.
- 7. Ibid.
- 8. RTX. (2024, April 15). RTX awarded \$344 million contract to modernize electronics unit for missile development program.
- 9. Ibid.
- 10. Ibid.
- 11. Ibid.
- 12. Ibid.
- 13. Yahoo! Finance. (2024, April 24). Lockheed to supply Australia with air battle management system.
- 14. CNBC. (2024, April 25). Microsoft cloud growth accelerates on back of AI push.
- 15. CNBC. (2024, April 30). Amazon profit more than triples, topping Wall Street expectations.
- 16. CNBC. (2024, April 25). Alphabet shares jump 14% on earnings beat, first-ever dividend.
- 17. The Verge. (2024. April 17). Boston Dynamics' new Atlas robot is a swiveling, shape-shifting nightmare.
- 18. Boston Dynamics. (2024, April 17). An Electric New Era for Atlas..
- 19. Ibid.
- 20. Bloomberg. (2024, April 3). Apple Explores Home Robotics as Potential 'Next Big Thing' After Car Fizzles.
- 21. CNBC. (2024, May 1). Microsoft signs deal to invest more than \$10 million on renewable energy capacity to power data centers.
- 22. Ibid.
- 23. Ibid.
- 24. Ibid.
- 25. Ibid.
- 26. Reuters. (2024, May 1). Roblox players to start seeing video ads in its virtual realms.
- 27. IAB. (2024, March 26). New IAB Study Reveals Games Advertising Among Top Three Investment Growth Areas Alongside Digital Video.
- 28. Ibid.
- 29. Ibid.

Investing involves risk, including the possible loss of principal. International investments may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles or from economic or political instability in other nations. Narrowly focused investments may be subject to higher volatility. The funds are non-diversified.

The companies in which the Disruptive Technology Funds invest may be subject to rapid changes in technology, intense competition, rapid obsolescence of products and services, loss of intellectual property protections, evolving industry standards and frequent new product productions, and changes in business cycles and government regulation.

Video Game and Esports companies are subject to risks associated with additional regulatory oversight with regard to privacy/cybersecurity concerns, shifting consumer preferences, and potential licensing challenges.

CleanTech companies may be slightly affected by fluctuations in energy prices and in the supply and demand of renewable energy, tax incentives, subsidies and other governmental regulations and policies.

Carefully consider the Funds' investment objectives, risk factors, charges, and expenses before investing. This and additional information can be found in the Funds' summary or full prospectus, which may be obtained by calling 1.888.493.8631, or by visiting globalxetfs.com. Please read the prospectus carefully before investing.

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Indices are unmanaged and do not include the effect of fees, expenses or sales charges. One cannot invest directly in an index.

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