GLOBAL X ETFs RESEARCH

The Next Big Theme: February 2023

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Topic: Disruptive Technology, Physical Environment, People & Demographics

Digital Health & Artificial Intelligence

Healthcare Prioritizes Wearables

The Food and Drug Administration (FDA) reported that it designated 135 medical devices with breakthrough status in 2022, a notable drop from 213 in 2021.[1] To resolve this, in 2023, the FDA plans to prioritize digital health given rapid advancements in artificial intelligence (AI) and machine learning (ML) and improved monitoring and wearable sensor technology. To facilitate innovation, the FDA intends to issue new algorithm change protocols, which can allow for more efficient implementation of modifications without additional submissions. This measure can be particularly beneficial to the wearable tech segment, especially with investment in the space rising. According to a survey of MedTech CFOs, 72% plan to invest in wearables development in 2023.[2] With a lower regulatory threshold than other segments, such as surgical robotics, wearable tech may offer a quicker return on investment for these companies given a wider addressable market.

Artificial Intelligence & Cloud Computing

Big Tech Making Waves with AI

Google reportedly invested over $300 million in AI startup Anthropic, which is developing a rival to OpenAI's ChatGPT, named Claude.[3] It is unclear if Google intends to integrate Claude in the same way Microsoft integrated ChatGPT. Anthropic said its partnership with Google Cloud can support the next phase of the company, which aims to deploy AI systems to a wider audience. Google's other advancements in AI include new features for Google Lens and multisearch. These updates allow users to search using images and text simultaneously and to search directly from their mobile screens with Google Lens. Microsoft introduced an advanced, AI-powered Bing search engine and Edge browser, designed to enhance search results, provide more comprehensive answers, enhance the chat experience, and facilitate content creation.

Social Media

Ad Spending Slumps as Brands Pull Back

Brands reducing their investments in digital marketing caused advertising spending to decline for the Technology sector in recent quarters. However, we expect ad spending can bounce back as economic conditions improve. As digital advertising becomes more automated and streamlined, platforms such as YouTube and Instagram are emerging as the leaders with most B2C companies eager to increase their ad spending on these channels. A recent survey found that 79% of companies plan to boost their YouTube advertising and 76% intend to increase their presence on Instagram.[4] However, in this digital ad decline, Meta Platforms shifted its focus to engagement growth. Meta reported a record 2 billion daily active users

Related Posts

Global X ETFs Survey: Future of Generative AI

FinTech: Offline Shoppers Stick to Digital Habits

Lithium Is Key to Current and Next Generation Battery Tech

Inflection Points – February 2023: Mind-Bending Breakthroughs

(DAUs) in Q4 2022 – a sign that digital social platforms continue to play a central role in our daily lives.[5]

U.S. Infrastructure

IIJA Turns to Mega Projects

The Biden Administration recently allocated nearly $1.2 billion in Infrastructure Investment and Jobs Act (IIJA) grants to nine premier surface transportation projects as a part of the National Infrastructure Project Assistance (Mega) program.[6] This program, which will invest $5 billion in infrastructure projects through 2026, supports projects deemed too massive or intricate for conventional funding programs.[7] Among the projects, $292 million has been allocated for the construction of the New York-New Jersey Hudson River tunnel, and $250 million will go towards renovating the Brent Spence Bridge linking Kentucky and Ohio.[8]

Metaverse

Advanced Headsets Augment VR Capabilities

Sony is preparing to release its next-gen virtual reality (VR) headset for PlayStation 5 in late February.[9] The PS VR2 boasts advanced features such as haptic feedback, adaptive triggers, inside-out tracking, and eye tracking. While current PS VR games may not be compatible with the PS VR2, developers are working on making their games compatible. Apple plans to integrate mixed reality (MR) in its Reality Pro VR headset, which it aims to launch in early 2023.[10] In VR, Meta announced that it plans to launch its new consumer-oriented headset, the Meta Quest 3, later this year.[11] The headset includes full-color MR features, marking a major shift in the VR industry and Meta's focus on shared virtual spaces.

Lithium & Battery Tech

Industry Leader Forecasts Strong Lithium Demand to Continue

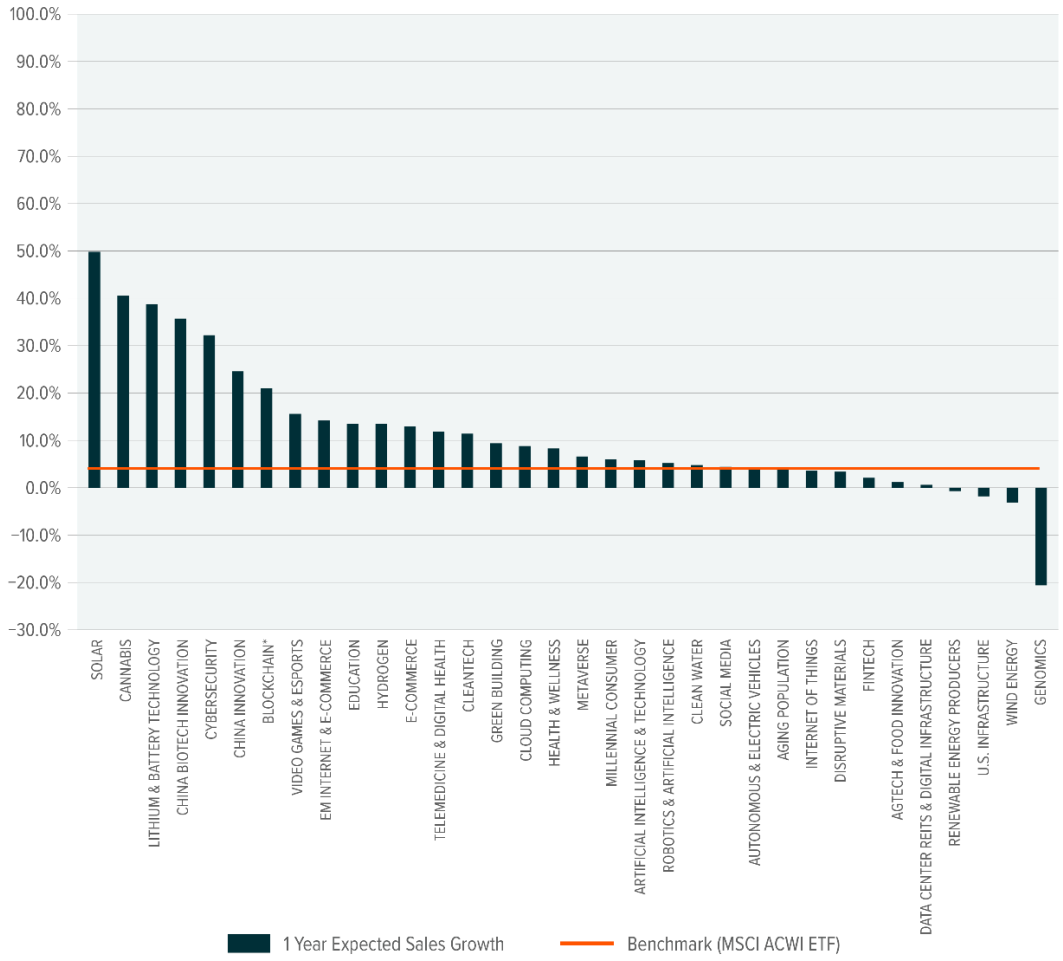
Albemarle, a leading lithium producer, recently shared its 2023 outlook, which includes upwardly revised projections for global lithium demand. The company now forecasts growth of 4.6x between 2022 and 2030, up 15% from its previous forecast. The company has consistently revised its projections higher since 2020.[12] To meet the increasing demand for lithium, Albemarle plans to expand its lithium mining and conversion capacity, targeting a significant increase from 200–225 kilo-tonnes per annum (ktpa) in 2022 to 400–650 ktpa by 2030.[13] With these strategic initiatives, the company expects its lithium sales to grow at a compound annual growth rate (CAGR) of 20–30% between 2022 and 2027.[14]

THE NUMBERS

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

THEMATIC EXPECTED SALES GROWTH

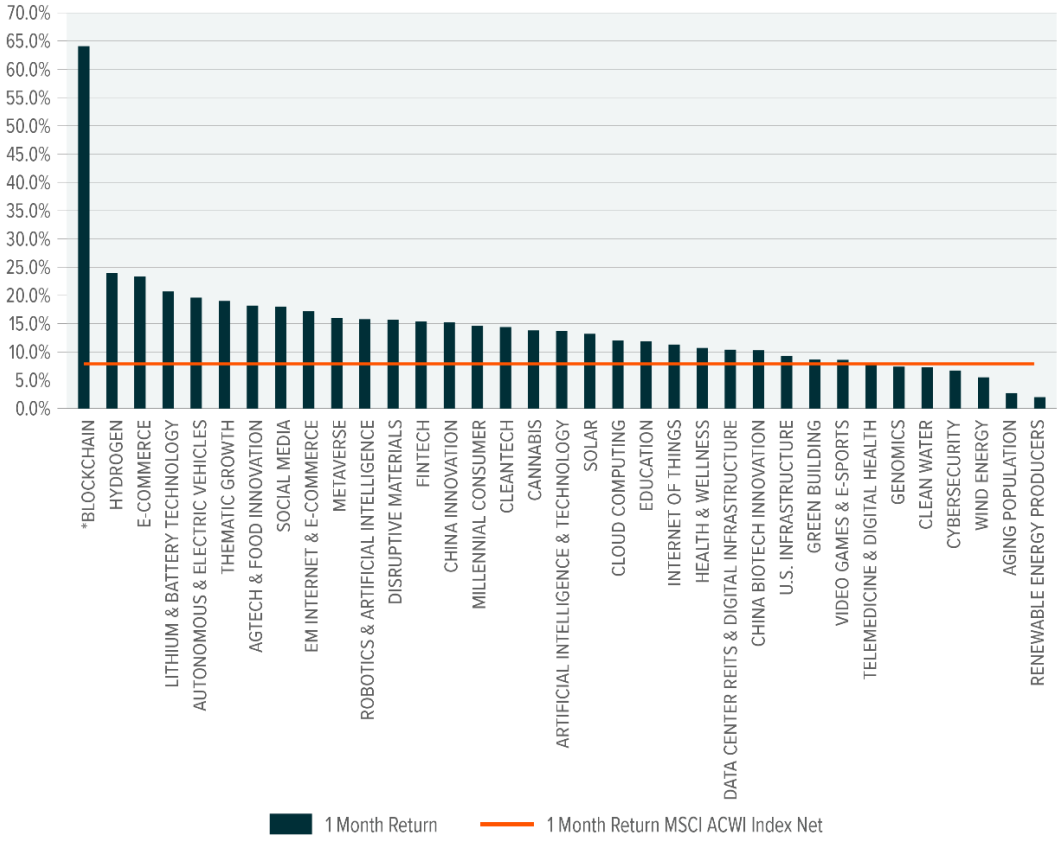
Source: Bloomberg, January 31, 2023, Global X ETFs.



Note: Forward looking based on data and analysis from 1/31/2023.
1 year annualized forward sales growth is the consensus analyst expectations for total sales growth in the next 12 months.
*Blockchain reflects figures according to BKCH ETF

JANUARY 2023 THEMATIC ETF RETURNS

Source: Bloomberg, January 31, 2023, 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 (01/31/23)			Avg. Annualized % Data as of quarter end (12/31/22)				
	Expense Ratio		1 Month	3 Month	Since Inception	1 Year	3 Year	5 Year	10 Year	Since Inception
Robotics & Artificial Intelligence Inception Date 9/12/2016	0.68%	NAV	14.64%	20.17%	64.26%	-42.49%	-1.93%	-2.16%	-	5.87%
		Market Price	15.82%	21.30%	65.31%	-42.69%	-1.87%	-2.24%	-	5.81%
		Index	14.77%	20.35%	68.29%	-42.20%	-1.31%	-1.69%	-	6.26%
Fintech Inception Date 9/12/2016	0.68%	NAV	15.61%	3.61%	55.58%	-52.01%	-12.68%	-1.50%	-	4.82%
		Market Price	15.38%	3.99%	55.99%	-51.79%	-12.53%	-1.49%	-	4.90%
		Index	15.63%	3.65%	61.08%	-51.92%	-12.31%	-0.96%	-	5.40%
Internet Of Things Inception Date 9/12/2016	0.68%	NAV	10.43%	17.33%	124.97%	-25.33%	7.71%	9.01%	-	11.95%
		Market Price	11.28%	18.05%	125.67%	-25.78%	7.52%	8.85%	-	11.87%
		Index	10.46%	17.36%	129.53%	-25.17%	8.11%	9.35%	-	12.30%
Cloud Computing Inception Date 4/12/2019	0.68%	NAV	11.72%	7.76%	21.12%	-39.52%	1.19%	-	-	2.19%
		Market Price	11.98%	7.87%	21.81%	-39.53%	1.15%	-	-	2.29%
		Index	11.78%	7.97%	24.02%	-39.10%	1.83%	-	-	2.83%

Social Media Inception Date 11/14/2011	0.65%	NAV	17.23%	46.30%	151.00%	-42.27%	-3.56%	-1.16%	9.41%	7.08%
		Market Price	17.97%	47.10%	152.17%	-42.38%	-3.51%	-1.16%	9.39%	7.06%
		Index	17.29%	46.54%	166.01%	-42.13%	-3.11%	-0.64%	9.94%	7.63%
Artificial Intelligence & Technology Inception Date 5/11/2018	0.68%	NAV	13.69%	17.02%	56.42%	-36.18%	4.53%	-	-	7.11%
		Market Price	13.73%	16.54%	56.02%	-36.45%	4.39%	-	-	7.04%
		Index	13.74%	17.12%	59.31%	-35.93%	4.98%	-	-	7.53%
Autonomous & Electric Vehicles Inception Date 4/13/2018	0.68%	NAV	18.59%	11.97%	68.01%	-33.63%	11.27%	-	-	7.66%
		Market Price	19.58%	12.32%	68.23%	-34.14%	11.01%	-	-	7.50%
		Index	18.68%	12.02%	69.56%	-33.57%	11.62%	-	-	7.85%
Lithium and Battery Tech Inception Date 7/22/2010	0.75%	NAV	19.29%	5.55%	168.07%	-29.69%	29.82%	10.10%	8.81%	6.72%
		Market Price	20.66%	6.76%	169.93%	-29.92%	29.70%	9.98%	8.79%	6.68%
		Index	19.33%	5.65%	184.56%	-29.28%	30.23%	10.28%	9.32%	7.23%
Genomics and Biotechnology Inception Date 4/5/2019	0.50%	NAV	7.03%	3.12%	-11.17%	-36.09%	-6.63%	-	-	-4.86%
		Market Price	7.35%	3.27%	-9.32%	-36.27%	-6.74%	-	-	-4.41%
		Index	7.11%	3.26%	-9.52%	-35.86%	-6.24%	-	-	-4.41%
Millennial Consumer Inception Date 5/4/2016	0.50%	NAV	14.54%	12.28%	105.65%	-38.50%	0.55%	6.65%	-	9.18%
		Market Price	14.60%	12.04%	104.83%	-38.46%	0.50%	6.59%	-	9.11%
		Index	14.60%	12.46%	112.27%	-38.24%	1.07%	7.20%	-	9.69%
Aging Population Inception Date 5/09/2016	0.50%	NAV	2.71%	8.06%	85.97%	-8.52%	4.18%	7.01%	-	9.34%
		Market Price	2.71%	8.12%	89.53%	-8.64%	4.14%	6.89%	-	9.65%
		Index	2.73%	8.13%	89.16%	-8.36%	4.39%	7.22%	-	9.62%
Health and Wellness Inception Date 5/9/2016	0.50%	NAV	9.95%	26.28%	64.53%	-23.93%	-0.12%	5.80%	-	6.25%
		Market Price	10.69%	26.52%	65.07%	-24.64%	-0.59%	5.44%	-	6.19%
		Index	9.96%	26.36%	68.91%	-23.71%	0.22%	6.16%	-	6.67%
E-Commerce Inception Date 11/27/2018	0.50%	NAV	23.00%	32.23%	35.58%	-40.77%	-3.51%	-	-	2.40%
		Market Price	23.29%	32.05%	35.30%	-40.96%	-3.72%	-	-	2.30%
		Index	23.12%	32.40%	38.10%	-40.55%	-3.13%	-	-	2.84%
Us Infrastucture Development Inception Date 3/6/2017	0.47%	NAV	9.28%	12.49%	100.59%	-7.08%	15.00%	10.39%	-	10.99%
		Market Price	9.25%	12.33%	100.45%	-7.18%	14.92%	10.32%	-	10.98%
		Index	9.33%	12.63%	106.70%	-6.55%	15.62%	10.95%	-	11.55%
Cannabis Inception Date 9/17/2019	0.50%	NAV	13.15%	-21.58%	-90.27%	-67.42%	-48.25%	-	-	-52.56%
		Market Price	13.84%	-21.66%	-90.43%	-67.30%	-48.34%	-	-	-52.89%
		Index	12.88%	-22.11%	-91.69%	-68.38%	-50.54%	-	-	-54.74%
Video Games & Esports Inception Date 10/25/2019	0.50%	NAV	8.37%	16.01%	38.23%	-33.52%	5.34%	-	-	7.94%
		Market Price	8.64%	16.43%	38.40%	-33.37%	5.25%	-	-	7.89%
		Index	8.42%	16.09%	40.32%	-33.32%	5.84%	-	-	8.43%
Cybersecurity Inception Date 10/25/2019	0.50%	NAV	6.50%	-11.18%	49.31%	-33.68%	8.87%	-	-	11.19%
		Market Price	6.65%	-11.06%	52.13%	-33.67%	8.65%	-	-	11.79%
		Index	6.55%	-10.92%	51.45%	-33.28%	9.39%	-	-	11.67%
Thematic Growth Inception Date 10/25/2019	0.50%	NAV	19.05%	2.68%	11.84%	-48.03%	-4.60%	-	-	-1.94%
		Market Price	18.99%	1.77%	12.41%	-48.09%	-4.81%	-	-	-1.77%
		Index	19.02%	2.63%	10.87%	-48.16%	-4.85%	-	-	-2.20%
Education Inception Date 7/10/2020	0.50%	NAV	12.40%	26.17%	-45.50%	-18.37%	-	-	-	-25.34%
		Market Price	11.85%	24.73%	-45.79%	-17.95%	-	-	-	-25.36%
		Index	12.43%	26.34%	-44.77%	-17.89%	-	-	-	-24.95%
Telemedicine & Digital Health Inception Date 7/29/2020	0.68%	NAV	7.02%	6.84%	-17.90%	-29.43%	-	-	-	-10.36%
		Market Price	7.86%	6.93%	-17.96%	-29.99%	-	-	-	-10.67%
		Index	7.03%	6.97%	-16.77%	-29.07%	-	-	-	-9.85%
China Biotech Innovation Inception Date 9/22/2020	0.65%	NAV	9.39%	26.57%	-30.42%	-33.21%	-	-	-	-18.05%
		Market Price	10.30%	26.40%	-31.02%	-33.91%	-	-	-	-18.65%
		Index	9.51%	26.81%	-29.29%	-32.74%	-	-	-	-17.50%
Cleantech Inception Date 10/27/2020	0.50%	NAV	13.47%	18.59%	11.41%	-16.60%	-	-	-	-0.84%
		Market Price	14.37%	18.80%	11.61%	-16.82%	-	-	-	-1.12%
		Index	13.57%	18.76%	9.51%	-16.22%	-	-	-	-1.66%
Data Center Reits & Digital Infrastructure Inception Date 10/27/2020	0.50%	NAV	10.46%	18.90%	-3.82%	-30.47%	-	-	-	-6.16%
		Market Price	10.42%	18.50%	-4.15%	-30.97%	-	-	-	-6.29%
		Index	10.59%	18.91%	-3.79%	-30.51%	-	-	-	-6.19%
Emerging Markets Internet & E-Commerce Inception Date 11/09/2020	0.65%	NAV	14.63%	49.76%	-44.52%	-28.05%	-	-	-	-28.73%
		Market Price	17.15%	50.15%	-44.06%	-28.81%	-	-	-	-29.18%
		Index	14.73%	50.06%	-43.82%	-27.76%	-	-	-	-28.34%
Renewable Energy Producers Inception Date 05/27/2015	0.65%	NAV	1.67%	2.93%	15.26%	-15.06%	-2.25%	3.81%	-	1.66%
		Market Price	1.98%	2.92%	15.24%	-15.15%	-2.31%	3.74%	-	1.62%
		Index	1.69%	3.01%	18.67%	-14.73%	-1.88%	4.22%	-	2.05%
China Innovation Inception Date 02/22/2021	0.75%	NAV	13.73%	32.57%	-44.19%	-32.37%	-	-	-	-31.87%
		Market Price	15.16%	32.89%	-44.27%	-33.05%	-	-	-	-32.39%
		Index	-	-	-	-	-	-	-	
Clean Water Inception Date 04/08/2021	0.50%	NAV	7.23%	11.33%	1.47%	-19.62%	-	-	-	-3.14%
		Market Price	7.30%	10.83%	1.46%	-19.81%	-	-	-	-3.18%
		Index	7.24%	11.44%	2.04%	-19.38%	-	-	-	-2.83%
Agtech and Food Innovation ETF Inception Date 07/12/2021	0.50%	NAV	17.67%	10.37%	-32.87%	-27.09%	-	-	-	-31.72%
		Market Price	18.19%	9.94%	-32.44%	-27.23%	-	-	-	-31.62%
		Index	17.71%	10.46%	-32.45%	-26.76%	-	-	-	-31.44%

Hydrogen Inception Date 07/12/2021	0.50%	NAV	22.19%	23.09%	-46.53%	-46.74%	-	-	-	-42.98%
		Market Price	23.99%	23.31%	-46.10%	-47.24%	-	-	-	-43.23%
		Index	22.22%	23.21%	-46.32%	-46.64%	-	-	-	-42.84%
Blockchain Inception Date 07/12/2021	0.50%	NAV	63.86%	-9.17%	-77.95%	-85.23%	-	-	-	-74.42%
		Market Price	64.05%	-9.35%	-77.81%	-85.16%	-	-	-	-74.33%
		Index	63.44%	-10.01%	-78.47%	-85.50%	-	-	-	-74.78%
Solar Inception Date 09/08/2021	0.50%	NAV	12.20%	13.59%	-5.31%	-12.44%	-	-	-	-12.13%
		Market Price	13.15%	14.67%	-4.65%	-13.31%	-	-	-	-12.23%
		Index	12.28%	13.76%	-4.57%	-11.95%	-	-	-	-11.65%
Wind Energy Inception Date 09/08/2021	0.50%	NAV	4.22%	15.53%	-23.90%	-22.26%	-	-	-	-21.31%
		Market Price	5.47%	16.54%	-23.33%	-22.94%	-	-	-	-21.58%
		Index	4.27%	15.72%	-23.38%	-21.90%	-	-	-	-20.93%
Disruptive Materials Inception Date 01/24/22	0.59%	NAV	13.91%	24.61%	-4.02%	-	-	-	-	-
		Market Price	15.70%	26.42%	-3.16%	-	-	-	-	-
		Index	13.99%	24.82%	-3.54%	-	-	-	-	-
Green Building Inception Date 04/11/22	0.45%	NAV	8.06%	19.47%	-10.39%	-	-	-	-	-
		Market Price	8.68%	20.20%	-10.27%	-	-	-	-	-
		Index	8.11%	19.64%	-10.46%	-	-	-	-	-
Metaverse Inception Date 04/26/22	0.50%	NAV	15.04%	19.83%	-9.82%	-	-	-	-	-
		Market Price	16.04%	20.22%	-9.53%	-	-	-	-	-
		Index	15.14%	20.00%	-9.56%	-	-	-	-	-

P/S AND EV/S

Bloomberg, data is as of 1/31/23 and 12/31/22, Global X ETFs.

Ticker	Name	P/S		EV/S	
		1/31/23	12/31/22	1/31/23	12/31/22
GNOM	Global X Genomics & Biotechnology ETF	6.57	6.14	6.09	5.57
HYDR	Global X Hydrogen ETF	6.23	5.09	5.19	4.05
BUG	Global X Cybersecurity ETF	5.62	5.27	5.55	5.20
CHB	Global X China Biotech Innovation ETF	5.54	5.07	5.08	4.62
CLOU	Global X Cloud Computing ETF	4.18	3.74	4.41	3.98
VR	Global X Metaverse ETF	4.06	3.55	3.92	3.34
BOTZ	Global X Robotics & Artifical Intelligence ETF	3.98	3.49	3.86	3.43
AGNG	Global X Aging Population ETF	3.76	3.66	4.38	4.27
SOCL	Global X Social Media ETF	3.19	2.75	3.01	2.55
HERO	Global X Video Games & Esports ETF	3.17	2.93	3.09	2.82
EDOC	Global X Telemedicine & Digital Health ETF	3.13	2.94	3.17	2.96
VPN	Global X Data Center REITs & Digital Infrastructure ETF	3.12	2.87	4.46	4.25
FINX	Global X FinTech ETF	3.07	2.66	3.83	3.41
AIQ	Global X Artificial Intelligence & Technology ETF	2.98	2.63	3.04	2.70
KEJI	Global X China Innovation ETF	2.79	2.43	2.25	1.91
SNSR	Global X Internet of Things ETF	2.72	2.47	2.99	2.75
RNRG	Global X Renewable Energy Producers ETF	2.69	2.65	4.66	4.62
EWEB	Global X Emerging Markets Internet & E-commerce ETF	2.53	2.22	2.49	2.15
RAYS	Global X Solar ETF	2.46	2.20	3.00	2.73
POTX	Global X Cannabis ETF	2.42	2.00	2.60	2.22
AQWA	Global X Clean Water ETF	2.40	2.24	3.26	3.12
SPX	S&P 500 Index	2.34	2.23	2.62	2.52
LIT	Global X Lithium and Battery Tech ETF	2.29	1.96	2.27	1.96
WNDY	Global X Wind Energy ETF	2.15	2.06	3.12	3.02
MILN	Global X Millennial Consumer ETF	2.04	1.78	2.33	2.07
EDUT	Global X Education ETF	2.01	1.61	2.17	1.87
GRNR	Global X Green Building ETF	1.86	1.74	3.34	3.22
BKCH	Global X Blockchain ETF	1.85	1.11	2.42	1.78
ACWI	MSCI ACWI Index	1.81	1.70	2.05	1.93
DMAT	Global X Disruptive Materials ETF	1.71	1.54	1.92	1.74
CTEC	Global X Cleantech ETF	1.47	1.29	1.79	1.60
PAVE	Global X U.S. Infrastructure ETF	1.39	1.28	1.66	1.54
KROP	Global X AgTech & Food Innovation ETF	1.35	1.15	1.70	1.50
BFIT	Global X Health & Wellness ETF	1.33	1.21	1.51	1.39
EBIZ	Global X E-commerce ETF	1.25	1.02	1.16	0.93
DRIV	Global X Autonomous & Electric Vehicles ETF	0.90	0.77	0.96	0.84

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

F12M SALES GROWTH, PSG, AND EVSG

Bloomberg, data is as of 1/31/23 and 12/31/22, Global X ETFs.

Ticker	Name	F12M Sales (%)		PSG		EVSG	
		1/31/23	12/31/22	1/31/23	12/31/22	1/31/23	12/31/22
RAYS	Global X Solar ETF	49.8%	43.1%	0.05	0.05	0.06	0.06
POTX	Global X Cannabis ETF	40.5%	30.4%	0.06	0.07	0.06	0.07
LIT	Global X Lithium and Battery Tech ETF	38.8%	38.7%	0.06	0.05	0.06	0.05
CHB	Global X China Biotech Innovation ETF	35.7%	26.1%	0.16	0.19	0.14	0.18
BUG*	Global X Cybersecurity ETF	32.2%	182.7%	0.17	0.03	0.17	0.03
KEJI	Global X China Innovation ETF	24.6%	19.0%	0.11	0.13	0.09	0.10
BKCH	Global X Blockchain ETF	21.0%	9.9%	0.09	0.11	0.12	0.18
HERO	Global X Video Games & Esports ETF	15.6%	13.3%	0.20	0.22	0.20	0.21
EWEB	Global X Emerging Markets Internet & E-commerce ETF	14.2%	10.1%	0.18	0.22	0.18	0.21
EDUT	Global X Education ETF	13.5%	14.2%	0.15	0.11	0.16	0.13
HYDR	Global X Hydrogen ETF	13.5%	15.0%	0.46	0.34	0.39	0.27
EBIZ	Global X E-commerce ETF	13.0%	10.8%	0.10	0.09	0.09	0.09
EDOC	Global X Telemedicine & Digital Health ETF	11.9%	12.9%	0.26	0.23	0.27	0.23
CTEC	Global X Cleantech ETF	11.4%	12.1%	0.13	0.11	0.16	0.13
GRNR	Global X Green Building ETF	9.4%	7.2%	0.20	0.24	0.35	0.44
CLOU	Global X Cloud Computing ETF	8.8%	8.3%	0.48	0.45	0.50	0.48
BFIT	Global X Health & Wellness ETF	8.3%	6.8%	0.16	0.18	0.18	0.20
VR	Global X Metaverse ETF	6.6%	5.7%	0.61	0.62	0.59	0.58
MILN	Global X Millennial Consumer ETF	6.0%	5.5%	0.34	0.33	0.39	0.38
AIQ	Global X Artificial Intelligence & Technology ETF	5.8%	4.9%	0.51	0.53	0.52	0.55
BOTZ	Global X Robotics & Artificial Intelligence ETF	5.2%	3.3%	0.77	1.06	0.75	1.04
AQWA	Global X Clean Water ETF	4.8%	4.6%	0.50	0.49	0.68	0.69
SOCL	Global X Social Media ETF	4.4%	2.1%	0.72	1.29	0.68	1.20
DRIV	Global X Autonomous & Electric Vehicles ETF	4.2%	6.2%	0.21	0.13	0.23	0.14
SPX	S&P 500 Index	4.1%	5.2%	0.57	0.43	0.64	0.48
AGNG	Global X Aging Population ETF	3.8%	2.7%	1.00	1.34	1.17	1.57
ACWI	MSCI ACWI Index	3.7%	4.1%	0.50	0.41	0.56	0.47
SNSR	Global X Internet of Things ETF	3.6%	2.5%	0.76	1.01	0.84	1.12
DMAT	Global X Disruptive Materials ETF	3.4%	2.4%	0.50	0.64	0.56	0.72
FINX	Global X FinTech ETF	2.1%	1.5%	1.44	1.76	1.79	2.25
KROP	Global X AgTech & Food Innovation ETF	1.2%	0.6%	1.10	2.07	1.38	2.70
VPN	Global X Data Center REITs & Digital Infrastructure ETF	0.6%	1.4%	4.94	2.00	7.07	2.97
RNRG	Global X Renewable Energy Producers ETF	-0.7%	-1.6%	-3.79	-1.70	-6.57	-2.97
PAVE	Global X U.S. Infrastructure Development ETF	-1.8%	-3.6%	-0.78	-0.36	-0.93	-0.43
WNDY	Global X Wind Energy ETF	-3.1%	-7.4%	-0.69	-0.28	-1.01	-0.41
GNOM	Global X Genomics & Biotechnology ETF	-20.6%	-21.4%	-0.32	-0.29	-0.30	-0.26

Note: F12 Sales Growth refers to the consensus analyst expectations for total sales growth in the next 12 months.
**Please note that 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. N/As reflect a negative growth number in the denominator and similar to traditional PEG ratios aren't typically displayed as such (hence the N/A).

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- **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), China Biotech Innovation ETF (CHB), Data Center REITs & Digital Infrastructure ETF (VPN), Emerging Markets Internet & E-Commerce ETF (EWEB), AgTech & Food Innovation ETF (KROP), Blockchain ETF (BKCH), Blockchain & Bitcoin Strategy ETF (BITS), Metaverse ETF (VR)

- **People and Demographics:** Cannabis ETF (POTX), Millennial Consumer ETF (MILN), Health & Wellness ETF (BFIT), E-Commerce ETF (EBIZ), Genomics & Biotechnology ETF (GNOM), Aging Population ETF (AGNG), Telemedicine & Digital Health ETF (EDOC), Education ETF (EDUT)

- **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), Disruptive Materials ETF (DMAT), Green Building ETF (GRNR)

- **Multi-Theme:** Thematic Growth ETF (GXTG), China Innovation ETF (KEJI)

Footnotes

1. MedTech Dive. (2023, January 31). FDA device center's 2022 report reveals 37% drop in annual breakthrough designations.
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3. The Verge. (2023, February 3). Google invested $300 million in AI firm founded by former OpenAI researchers.
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5. Meta Platforms. (2023, February 1). Meta Reports Fourth Quarter and Full Year 2022 Results.
6. The White House. (2023, January 31). FACT SHEET: President Biden Announces Funding for Major Transportation Projects Funded by Bipartisan Infrastructure Law.
7. Ibid.
8. U.S. Department of Transportation. (2023, January 31). President Biden Announces First of its Kind Infrastructure Investment for Nine Nationally Significant Mega Projects.
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10. XR Today. (2023, February 8). Where is Apple's MR Headset?
11. XR Today. (2023, February 3). Meta Reality Platform to Boost Quest 3 MR, Zuckerberg Says.

12. Albemarle. (2023, January 23). ALBEMARLE TO HOST 2023 STRATEGIC UPDATE INCLUDING NEW 5-YEAR OUTLOOK AND PRELIMINARY 2022 RESULTS.
13. Ibid.
14. Ibid.

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