GLOBAL X ETFs RESEARCH

The Next Big Theme: November 2022

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Topic: Disruptive Technology, Physical Environment, People & Demographics

Social Media

User Engagement a Positive as Digital Ad Spending Slowed

Earnings reports from major social media platforms highlighted that no company is immune to the slowdown in digital advertising spend amid recessionary concerns. Alphabet Inc. reported that YouTube ad revenue slid roughly 2% year-over-year (YoY) to $7.07 billion in Q3 2022.[1] For Google, verticals such as insurance, loans, and mortgages pulled back significantly.[2] However, travel and retail were positives for Google Services revenue.[3] Snapchat stated that marketing budgets for their ad partners are lower due to operating headwinds, inflationary pressures, and rising cost of capital. Meta's ad revenue decreased 4% YoY to $27.2 billion.[4]

On the positive side, user engagement continued to grow. Snapchat's daily active users (DAU) beat projections by increasing 19% to 363 million in Q3.[5] Facebook's monthly active users (MAUs) totaled 2.96 billion as of Q3, up 2% YoY.[6] Also, 3.71 billion users logged in to at least one of Meta's apps (Facebook, Instagram, WhatsApp, or Messenger), a 4% YoY increase.[7]

Cloud Computing

Cloud Growth Persisted at a Moderated Pace

A year ago, each of the top three Hyperscalers reported revenue growth of over 40%, but growth slowed in Q3 2022. Amazon Web Services' revenue grew 27% YoY and Microsoft Azure's 35% YoY.[8,9] For Azure, consumption revenue growth continued to moderate, and higher energy costs hurt its gross margin. Google Cloud's revenue increased 38% YoY.[10] The $600 million increase since Q2 was the same as Azure's – indicating that Google Cloud is aggressively adding share against its other two bigger rivals.[11] Despite what moderating industry growth in Q3 suggests, we expect businesses to continue to invest in critical long-term projects such as infrastructure tools, monitoring systems, software defined networking, and security software.

E-commerce

Digital Sales Ring in a Hopeful Holiday Outlook

The fate of e-commerce this holiday season remains impacted by inflationary concerns. According to one estimate, U.S. consumers' digital spending is expected to grow a modest 6.1% YoY in November and December, but still higher than total retail sales at 4% YoY.[12] Key online retailers' Q3 earnings provided hope for the e-commerce outlook. Amazon saw profitability rise after two consecutive quarters of losses. The nation's largest retailer reported total sales of $127.1 billion in Q3, a 15% YoY jump from $110.8

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billion.[13] Amazon's e-commerce sales jumped 13% YoY to $53.4 billion.[14] Etsy's shares soared after a revenue beat and encouraging guidance for Q4. In Q3, Etsy's revenue grew 11.7% YoY, some of which is attributed to Etsy's transaction fee hike.[15] Also, eBay reported earnings exceeding expectations, helped by gross merchandise volume (GMV) growth in non-new (used and refurbished) in-season goods.

Lithium & Electric Vehicles (EV)

Sustainable Vehicle Market Undeterred by Economic Crises

Lithium producers and EV manufacturers continued to find a sweet spot amid rising demand for electrified transport. On the lithium side, Albemarle reported a revenue surge of 152% YoY to $2.1 billion and reaffirmed guidance suggesting full-year earnings before interest, taxes, depreciation and amortization (EBITDA) growth of 500–550% for its lithium division.[16] Albemarle said rising lithium prices could provide upside for Q4, though lower volume growth due to supply chain concerns could weigh on results. Livent reported revenue growth of 124% to $231.6 million.[17] Among EV manufacturers, Stellantis reported net revenues of 42.1 billion euros, up 29% YoY.[18] The company attributed this growth to higher volumes, strong net pricing, and favorable foreign exchange translation effects. Global battery EV sales for Stellantis increased 41% YoY.[19]

Genomics

BioMarin Zeros in on Hemophilia Gene Therapy

The U.S. Food and Drug Administration (FDA) plans to review Roctavian, Biomarin's late-stage gene therapy for hemophilia. The company resubmitted Roctavian for approval in September. The timeline is somewhat uncertain, but BioMarin expects a decision by the end of March 2023. Roctavian is designed to treat hemophilia type A, the disease's most common form. The treatment involves using a specified virus to deliver a modified copy of the gene, which creates a blood-clotting protein that patients suffering from the disease lack. Despite presenting positive results from late-stage trials, the FDA required further monitoring for at least two years. Biomarin remains hopeful that it will receive approval, given continued positive results from patients. Earlier this year, Roctavian was approved in Europe as the first hemophilia type A gene therapy.

Pacific Bioscience Upgrades DNA Sequencing

Pacific Bioscience is ramping up production of DNA sequences with its first short-read device and upgrading its preexisting long-read hardware. The upgrade, named the Revio system, will be capable of sifting through long strings of genetic code with capacity for more than three human genomes per day at a cost of less than $1,000 per piece.[20] Revio will help with cancer and agricultural genomics research and development (R&D). It will be PacBio's first sequencer using Nvidia GPUs to bring a 20-fold increase to computing power.[21]

Internet of Things

U.S. Semiconductor Sanctions on China Escalates Trade Tensions

In October, the Biden Administration implemented what is considered to be the most significant sanction on technology exports to China in decades. By imposing a limit on sales of advanced semiconductor chips, the administration wants to cut off critical technology to contain China's technology and military ambitions. Under the rules, U.S. companies must obtain a license to sell equipment to Chinese chipmakers that intend to produce advanced chips. China is a primary consumer of semiconductors, yet only produces about 15%

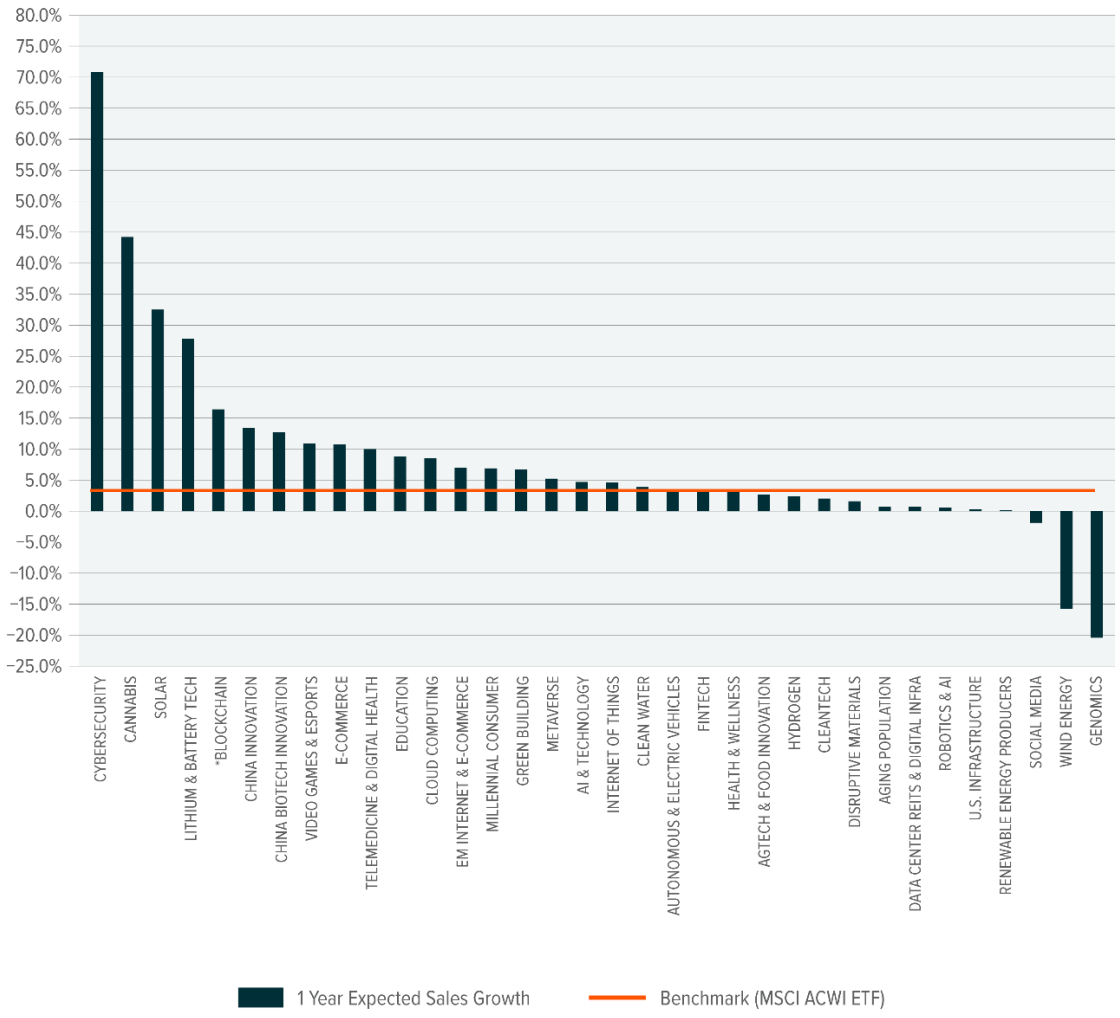
of the global output.[22] Thus far, the restrictions have been manageable for chipmakers such as Nvidia, Intel, and Taiwan Semiconductor Manufacturing Company.

THE NUMBERS

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

THEMATIC EXPECTED SALES GROWTH

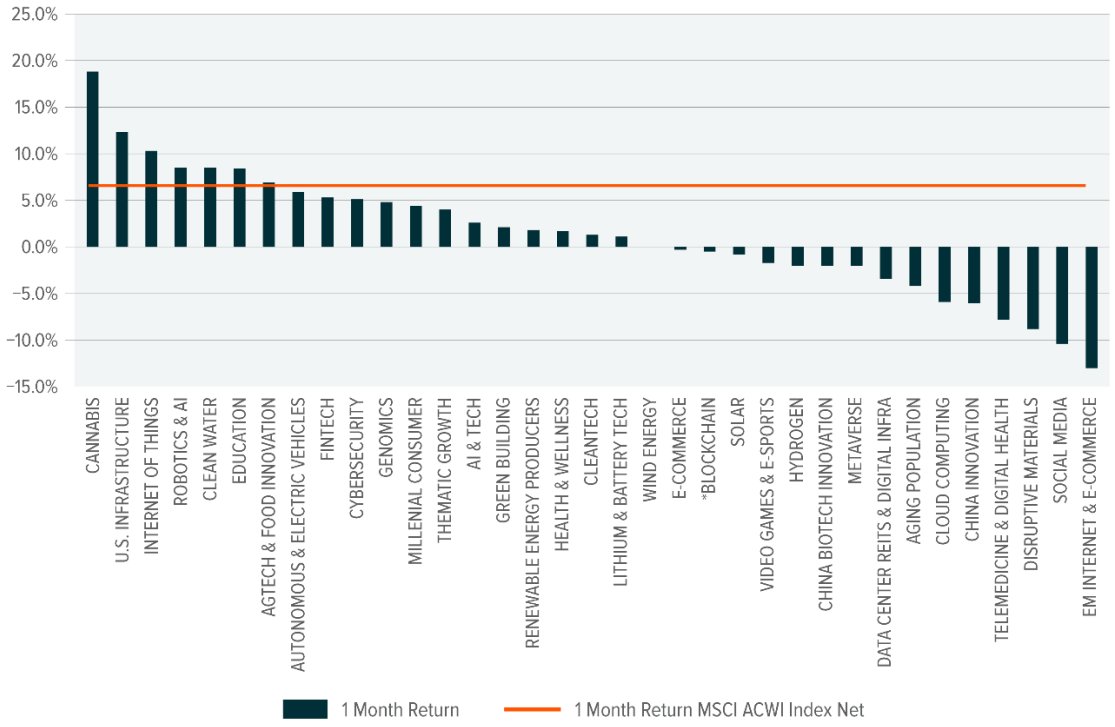
Source: Bloomberg, October 31, 2022, Global X ETFs.



Note: Forward looking based on data and analysis from 10/31/2022.
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

OCTOBER 2022 THEMATIC ETF RETURNS

Source: Bloomberg, October 31, 2022, 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 (10/31/22)				Avg. Annualized % Data as of quarter end (09/30/22)			
	Gross 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	8.43%	-12.03%	36.69%	-50.39%	-2.78%	-2.94%	-	3.90%
		Market Price	8.52%	-12.88%	36.28%	-50.45%	-3.08%	-3.04%	-	3.84%
		Index	8.52%	-11.88%	39.83%	-50.13%	-2.13%	-2.62%	-	4.28%
Fintech Inception Date 9/12/2016	0.68%	NAV	5.06%	-12.20%	50.17%	-55.30%	-9.30%	0.79%	-	6.08%
		Market Price	5.33%	-12.35%	50.02%	-55.40%	-9.43%	0.65%	-	6.02%
		Index	5.06%	-12.16%	55.40%	-55.19%	-8.87%	1.36%	-	6.68%
Internet Of Things Inception Date 9/12/2016	0.68%	NAV	10.49%	-5.24%	91.73%	-30.96%	7.50%	6.74%	-	9.53%
		Market Price	10.25%	-5.61%	91.17%	-31.13%	7.46%	6.70%	-	9.52%
		Index	10.56%	-5.16%	95.57%	-30.80%	7.84%	7.07%	-	9.88%
Cloud Computing Inception Date 4/12/2019	0.68%	NAV	4.33%	-4.32%	12.40%	-44.59%	3.42%	-	-	2.17%
		Market Price	4.26%	-4.26%	12.92%	-44.54%	3.51%	-	-	2.33%
		Index	4.34%	-4.20%	14.86%	-44.22%	4.08%	-	-	2.81%
Social Media Inception Date 11/14/2011	0.65%	NAV	-10.60%	-24.97%	71.57%	-54.29%	-4.49%	-2.02%	7.58%	6.17%
		Market Price	-10.38%	-24.92%	71.43%	-54.38%	-4.54%	-2.10%	7.58%	6.14%
		Index	-10.52%	-24.89%	81.53%	-54.20%	-4.06%	-1.53%	8.08%	6.71%
Artificial Intelligence & Technology Inception Date 5/11/2018	0.68%	NAV	2.56%	-12.48%	33.67%	-36.25%	6.81%	-	-	6.22%
		Market Price	2.61%	-12.58%	33.88%	-36.08%	6.76%	-	-	6.24%
		Index	2.62%	-12.38%	36.02%	-35.97%	7.27%	-	-	6.63%

Autonomous & Electric Vehicles Inception Date 4/13/2018	0.68%	NAV	5.54%	-11.23%	50.05%	-25.74%	16.15%	-	-	8.19%
		Market Price	5.86%	-11.54%	49.77%	-26.16%	15.90%	-	-	8.07%
		Index	5.59%	-11.16%	51.37%	-25.57%	16.51%	-	-	8.39%
Lithium and Battery Tech Inception Date 7/22/2010	0.75%	NAV	1.17%	-9.35%	154.20%	-19.12%	40.40%	14.22%	9.48%	7.84%
		Market Price	1.10%	-10.18%	152.83%	-19.15%	40.32%	13.99%	9.49%	7.80%
		Index	1.33%	-9.13%	169.33%	-18.62%	40.75%	14.35%	9.97%	8.34%
Genomics and Biotechnology Inception Date 4/5/2019	0.50%	NAV	4.95%	-7.59%	-13.86%	-43.51%	0.30%	-	-	-5.50%
		Market Price	4.78%	-7.65%	-12.19%	-43.60%	0.32%	-	-	-4.94%
		Index	4.98%	-7.50%	-12.37%	-43.28%	0.76%	-	-	-5.04%
Millennial Consumer Inception Date 5/4/2016	0.50%	NAV	4.01%	-8.65%	83.16%	-40.14%	1.37%	7.70%	-	9.23%
		Market Price	4.37%	-8.58%	82.82%	-40.32%	1.29%	7.65%	-	9.14%
		Index	4.06%	-8.58%	88.75%	-39.90%	1.87%	8.25%	-	9.73%
Aging Population Inception Date 5/09/2016	0.50%	NAV	6.12%	-4.59%	72.09%	-18.65%	4.21%	4.99%	-	7.85%
		Market Price	6.00%	-5.18%	75.30%	-18.17%	3.90%	4.84%	-	8.18%
		Index	6.14%	-4.54%	74.94%	-18.52%	4.42%	5.20%	-	8.12%
Health and Wellness Inception Date 5/9/2016	0.50%	NAV	1.42%	-12.54%	30.28%	-35.92%	-2.51%	3.89%	-	3.99%
		Market Price	1.65%	-13.23%	30.47%	-36.31%	-2.95%	3.66%	-	3.98%
		Index	1.44%	-12.48%	33.67%	-35.73%	-2.17%	4.26%	-	4.41%
E-Commerce Inception Date 11/27/2018	0.50%	NAV	-0.66%	-14.61%	2.53%	-49.22%	-3.34%	-	-	0.83%
		Market Price	-0.26%	-14.62%	2.47%	-49.25%	-3.54%	-	-	0.70%
		Index	-0.64%	-14.52%	4.30%	-49.03%	-2.95%	-	-	1.27%
Us Infrastucture Development Inception Date 3/6/2017	0.47%	NAV	12.23%	-1.60%	78.31%	-8.57%	13.14%	9.15%	-	8.66%
		Market Price	12.32%	-1.48%	78.45%	-8.61%	13.14%	9.10%	-	8.66%
		Index	12.34%	-1.49%	83.53%	-8.07%	13.74%	9.70%	-	9.21%
Cannabis Inception Date 9/17/2019	0.50%	NAV	18.18%	-5.79%	-87.59%	-73.35%	-50.16%	-	-	-52.38%
		Market Price	18.83%	-4.74%	-87.79%	-73.29%	-50.31%	-	-	-52.71%
		Index	18.05%	-6.26%	-89.33%	-74.19%	-52.59%	-	-	-54.66%
Video Games & Esports Inception Date 10/25/2019	0.50%	NAV	-1.68%	-19.88%	19.15%	-36.13%	-	-	-	6.77%
		Market Price	-1.74%	-20.02%	18.87%	-35.86%	-	-	-	6.70%
		Index	-1.63%	-19.80%	20.87%	-35.89%	-	-	-	7.27%
Cybersecurity Inception Date 10/25/2019	0.50%	NAV	5.29%	-1.67%	68.10%	-20.63%	-	-	-	17.29%
		Market Price	5.12%	-1.83%	71.05%	-20.69%	-	-	-	18.05%
		Index	5.31%	-1.60%	70.01%	-20.36%	-	-	-	17.73%
Thematic Growth Inception Date 10/25/2019	0.50%	NAV	3.19%	-13.48%	8.92%	-47.04%	-	-	-	1.86%
		Market Price	4.01%	-12.95%	10.45%	-46.98%	-	-	-	2.07%
		Index	3.17%	-13.47%	8.03%	-47.20%	-	-	-	1.58%
Education Inception Date 7/10/2020	0.50%	NAV	7.74%	-6.44%	-56.81%	-44.70%	-	-	-	-33.69%
		Market Price	8.40%	-5.46%	-56.54%	-44.39%	-	-	-	-33.69%
		Index	7.74%	-6.26%	-56.29%	-44.38%	-	-	-	-33.34%
Telemedicine & Digital Health Inception Date 7/29/2020	0.68%	NAV	3.36%	-8.16%	-23.15%	-36.19%	-	-	-	-12.75%
		Market Price	3.36%	-8.10%	-23.28%	-36.23%	-	-	-	-12.82%
		Index	3.83%	-8.03%	-22.19%	-36.19%	-	-	-	-12.44%
China Biotech Innovation Inception Date 9/22/2020	0.65%	NAV	-2.82%	-20.92%	-45.03%	-47.35%	-	-	-	-24.56%
		Market Price	-2.03%	-20.81%	-45.43%	-47.76%	-	-	-	-25.13%
		Index	-2.76%	-20.77%	-44.24%	-46.97%	-	-	-	-24.04%
Cleantech Inception Date 10/27/2020	0.50%	NAV	0.79%	-12.59%	-6.06%	-25.25%	-	-	-	-3.58%
		Market Price	1.29%	-12.86%	-6.06%	-25.11%	-	-	-	-3.84%
		Index	0.87%	-12.49%	-7.79%	-24.95%	-	-	-	-4.55%
Data Center Reits & Digital Infrastructure Inception Date 10/27/2020	0.50%	NAV	-3.42%	-23.83%	-19.11%	-25.35%	-	-	-	-8.79%
		Market Price	-3.42%	-23.48%	-19.11%	-26.19%	-	-	-	-8.80%
		Index	-3.41%	-23.86%	-19.09%	-25.35%	-	-	-	-8.79%
Emerging Markets Internet & E-Commerce Inception Date 11/09/2020	0.65%	NAV	-13.47%	-23.31%	-62.95%	-46.15%	-	-	-	-36.15%
		Market Price	-13.00%	-22.68%	-62.75%	-46.20%	-	-	-	-36.15%
		Index	-13.36%	-23.11%	-62.56%	-45.99%	-	-	-	-35.85%
Renewable Energy Producers Inception Date 05/27/2015	0.65%	NAV	1.32%	-14.54%	11.98%	-16.86%	-0.06%	3.63%	-	1.37%
		Market Price	1.79%	-14.86%	11.97%	-16.97%	-0.32%	3.45%	-	1.30%
		Index	1.35%	-14.32%	15.19%	-16.56%	0.33%	4.12%	-	1.76%
China Innovation Inception Date 02/22/2021	0.75%	NAV	-6.83%	-25.69%	-57.91%	-39.53%	-	-	-	-39.09%
		Market Price	-6.02%	-26.18%	-58.07%	-40.12%	-	-	-	-39.56%
		Index	-	-	-	-	-	-	-	-
Clean Water Inception Date 04/08/2021	0.50%	NAV	8.55%	-6.79%	-8.86%	-21.38%	-	-	-	-11.14%
		Market Price	8.51%	-6.89%	-8.45%	-21.73%	-	-	-	-10.85%
		Index	8.55%	-6.76%	-8.43%	-21.14%	-	-	-	-10.86%
Agtech and Food Innovation ETF Inception Date 07/12/2021	0.50%	NAV	6.87%	-10.87%	-39.18%	-33.79%	-	-	-	-37.02%
		Market Price	6.94%	-10.51%	-38.54%	-33.51%	-	-	-	-36.51%
		Index	6.93%	-10.74%	-38.85%	-33.52%	-	-	-	-36.77%

Hydrogen Inception Date 07/12/2021	0.50%	NAV	-2.60%	-24.67%	-56.56%	-48.71%	-	-	-	-48.44%
		Market Price	-1.97%	-24.60%	-56.28%	-48.97%	-	-	-	-48.44%
		Index	-2.52%	-24.57%	-56.43%	-48.62%	-	-	-	-48.34%
Blockchain Inception Date 07/12/2021	0.50%	NAV	-1.19%	-17.05%	-75.72%	-73.98%	-	-	-	-68.38%
		Market Price	-0.51%	-16.45%	-75.52%	-73.98%	-	-	-	-68.34%
		Index	-1.20%	-17.39%	-76.07%	-74.39%	-	-	-	-68.75%
Solar Inception Date 09/08/2021	0.50%	NAV	-0.74%	-18.38%	-16.64%	-13.48%	-	-	-	-15.18%
		Market Price	-0.84%	-18.91%	-16.85%	-14.01%	-	-	-	-15.30%
		Index	-0.72%	-18.27%	-16.11%	-12.99%	-	-	-	-14.69%
Wind Energy Inception Date 09/08/2021	0.50%	NAV	-0.61%	-20.84%	-34.13%	-33.89%	-	-	-	-32.16%
		Market Price	-0.01%	-21.28%	-34.21%	-34.53%	-	-	-	-32.63%
		Index	-0.60%	-20.77%	-33.79%	-33.58%	-	-	-	-31.83%
Disruptive Materials Inception Date 01/24/22	0.59%	NAV	0.61%	-9.70%	-22.98%	-	-	-	-	-
		Market Price	1.24%	-10.15%	-23.40%	-	-	-	-	-
		Index	0.71%	-9.58%	-22.72%	-	-	-	-	-
Green Building Inception Date 04/11/22	0.45%	NAV	1.83%	-15.56%	-24.99%	-	-	-	-	-
		Market Price	2.06%	-16.85%	-25.35%	-	-	-	-	-
		Index	1.91%	-15.35%	-25.16%	-	-	-	-	-
Metaverse Inception Date 04/26/22	0.50%	NAV	-2.04%	-18.00%	-24.74%	-	-	-	-	-
			-2.04%	-18.15%	-24.75%	-	-	-	-	-
		Index	-2.02%	-17.95%	-24.64%	-	-	-	-	-

P/S AND EV/S

Source: Bloomberg, data is as of 10/31/22 and 9/30/22, Global X ETFs.

Ticker	Name	P/S		EV/S	
		10/31/22	9/30/22	10/31/22	9/30/22
BUG	Global X Cybersecurity ETF	7.20	6.91	7.32	7.00
GNOM	Global X Genomics & Biotechnology ETF	5.84	5.57	5.36	5.05
HYDR	Global X Hydrogen ETF	4.18	4.28	3.72	3.81
CLOU	Global X Cloud Computing ETF	4.10	3.95	4.54	4.37
AGNG	Global X Aging Population ETF	3.50	3.31	4.15	3.97
VR	Global X Metaverse ETF	3.44	3.51	3.27	3.37
CHB	Global X China Biotech Innovation ETF	3.32	3.37	3.19	3.25
BOTZ	Global X Robotics & Artifical Intelligence ETF	3.30	3.06	3.34	2.94
FINX	Global X FinTech ETF	2.92	2.78	3.75	3.59
EDOC	Global X Telemedicine & Digital Health ETF	2.84	2.72	2.90	2.86
VPN	Global X Data Center REITs & Digital Infrastructure ETF	2.80	2.90	4.40	5.10
HERO	Global X Video Games & Esports ETF	2.70	2.72	2.57	2.59
RNRG	Global X Renewable Energy Producers ETF	2.66	2.60	4.92	4.84
AIQ	Global X Artificial Intelligence & Technology ETF	2.60	2.53	2.68	2.60
SNSR	Global X Internet of Things ETF	2.32	2.13	2.62	2.43
KEJI	Global X China Innovation ETF	2.31	2.80	1.79	2.20
RAYS	Global X Solar ETF	2.29	2.45	2.91	3.18
SPX	S&P 500 Index	2.28	2.16	2.58	2.45
SOCL	Global X Social Media ETF	2.26	2.81	2.07	2.63
AQWA	Global X Clean Water ETF	2.17	2.00	3.10	2.95
POTX	Global X Cannabis ETF	2.00	1.55	2.29	2.22
MILN	Global X Millennial Consumer ETF	1.84	1.82	2.14	2.13
LIT	Global X Lithium and Battery Tech ETF	1.78	1.79	1.83	1.86
EWEB	Global X Emerging Markets Internet & E-commerce ETF	1.69	1.95	1.67	1.92
ACWI	MSCI ACWI Index	1.65	1.57	1.88	1.83
WNDY	Global X Wind Energy ETF	1.59	1.49	2.68	2.52
GRNR	Global X Green Building ETF	1.59	1.57	3.06	3.07
EDUT	Global X Education ETF	1.52	1.48	1.62	1.72
DMAT	Global X Disruptive Materials ETF	1.41	1.44	1.62	1.65
PAVE	Global X U.S. Infrastructure ETF	1.28	1.15	1.55	1.44
CTEC	Global X Cleantech ETF	1.21	1.23	1.50	1.52
KROP	Global X AgTech & Food Innovation ETF	1.20	1.12	1.39	1.32
BKCH	Global X Blockchain ETF	1.16	1.19	1.29	1.77
BFIT	Global X Health & Wellness ETF	1.06	1.05	1.25	1.23
EBIZ	Global X E-commerce ETF	0.94	0.94	0.85	0.85
DRIV	Global X Autonomous & Electric Vehicles ETF	0.83	0.79	0.89	0.86

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 10/31/22 and 9/30/22, Global X ETFs.

Ticker	Name	F12M Sales (%)		PSG		EVSG	
		10/31/22	9/30/22	10/31/22	9/30/22	10/31/22	9/30/22
BUG	Global X Cybersecurity ETF	70.8%	28.4%	0.10	0.24	0.10	0.25
POTX	Global X Cannabis ETF	44.2%	48.4%	0.05	0.03	0.05	0.05
RAYS	Global X Solar ETF	32.5%	44.2%	0.07	0.06	0.09	0.07
LIT	Global X Lithium and Battery Tech ETF	27.8%	38.6%	0.06	0.05	0.07	0.05
BKCH	Global X Blockchain ETF	16.4%	18.9%	0.07	0.06	0.08	0.09
KEJI	Global X China Innovation ETF	13.4%	18.6%	0.17	0.15	0.13	0.12
CHB	Global X China Biotech Innovation ETF	12.7%	16.2%	0.26	0.21	0.25	0.20
HERO	Global X Video Games & Esports ETF	10.9%	11.0%	0.25	0.25	0.24	0.23
EBIZ	Global X E-commerce ETF	10.7%	15.0%	0.09	0.06	0.08	0.06
EDOC	Global X Telemedicine & Digital Health ETF	10.0%	11.2%	0.28	0.24	0.29	0.26
EDUT	Global X Education ETF	8.8%	8.2%	0.17	0.18	0.18	0.21
CLOU	Global X Cloud Computing ETF	8.5%	13.1%	0.48	0.30	0.53	0.33
EWEB	Global X Emerging Markets Internet & E-commerce ETF	7.0%	8.2%	0.24	0.24	0.24	0.23
MILN	Global X Millennial Consumer ETF	6.9%	9.2%	0.26	0.20	0.31	0.23
GRNR	Global X Green Building ETF	6.7%	8.4%	0.23	0.19	0.45	0.36
SPX	S&P 500 Index	5.6%	9.2%	0.41	0.23	0.46	0.27
VR	Global X Metaverse ETF	5.2%	8.7%	0.67	0.41	0.63	0.39
AIQ	Global X Artificial Intelligence & Technology ETF	4.7%	7.8%	0.55	0.32	0.57	0.33
SNSR	Global X Internet of Things ETF	4.6%	6.0%	0.50	0.35	0.57	0.40
ACWI	MSCI ACWI Index	4.1%	7.0%	0.40	0.22	0.46	0.26
AQWA	Global X Clean Water ETF	3.9%	4.5%	0.55	0.44	0.79	0.65
DRIV	Global X Autonomous & Electric Vehicles ETF	3.5%	6.6%	0.24	0.12	0.25	0.13
FINX	Global X FinTech ETF	3.4%	3.5%	0.86	0.79	1.10	1.02
BFIT	Global X Health & Wellness ETF	3.1%	3.1%	0.34	0.33	0.40	0.39
KROP	Global X AgTech & Food Innovation ETF	2.7%	-4.8%	0.44	-0.23	0.52	-0.27
HYDR	Global X Hydrogen ETF	2.4%	3.7%	1.74	1.15	1.55	1.03
CTEC	Global X Cleantech ETF	2.0%	1.5%	0.59	0.83	0.74	1.03
DMAT	Global X Disruptive Materials ETF	1.6%	5.5%	0.86	0.26	0.99	0.30
AGNG	Global X Aging Population ETF	0.7%	1.2%	4.69	2.67	5.56	3.20
VPN	Global X Data Center REITs & Digital Infrastructure ETF	0.7%	2.4%	3.79	1.20	5.95	2.10
BOTZ	Global X Robotics & Artificial Intelligence ETF	0.6%	2.4%	5.10	1.27	5.15	1.22
PAVE	Global X U.S. Infrastructure Development ETF	0.3%	2.2%	4.91	0.52	5.95	0.65
RNRG	Global X Renewable Energy Producers ETF	0.1%	0.7%	29.37	3.81	54.44	7.08
SOCL	Global X Social Media ETF	-1.9%	1.1%	-1.18	2.47	-1.08	2.31
WNDY	Global X Wind Energy ETF	-15.8%	-17.1%	-0.10	-0.09	-0.17	-0.15
GNOM	Global X Genomics & Biotechnology ETF	-20.4%	-19.0%	-0.29	-0.29	-0.26	-0.27

Note: F12 Sales Growth refers to the consensus analyst expectations for total sales growth in the next 12 months.
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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- **Multi-Theme:** Thematic Growth ETF (GXTG), China Innovation ETF (KEJI)

Footnotes

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