GLOBAL X INSIGHTS

GLOBAL X

The Next Big Theme: July 2024

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The Next Big Theme

A Regular Pulse on Disruptive Trends by Global X ETFs



Artificial Intelligence & Technology

Edge AI to Boost to Consumer Devices, Notably Smartphones

Edge AI, which involves processing data locally on devices rather than in the cloud, is expected to have positive implications across a broad range of applications and consumer devices. In our view, AI offers smartphones, a \$500 billion annual market, the greatest nearterm monetization opportunity among consumer devices by accelerating replacement cycles and increasing AI-related premiums.¹ A prime example is Apple's recent introduction of Apple Intelligence, of a suite of AI-powered features available on new iPhones, iPads, and Macs.² Notable tools include an enhanced Siri that offers more accurate responses and tasks execution across iPhone apps, powered by in-house large language models (LLMs) and OpenAI's GPT-4o.³ We expect these generative AI integrations to reverse the downturn in smartphone sales and fuel the next major iPhone upgrade cycle, similar to the impact of 5G on iPhone 12 sales. Importantly, Apple Intelligence will be limited to devices with A17 Pro or M-series chips, representing just 5% of the current iPhone installed base. In other words, 95% of iPhone users will need to upgrade their devices to experience Apple Intelligence.⁴

Electric Vehicles (EVs)

New Energy Vehicle Sales Surged in China, Helped by Price Cuts

The Chinese EV market is heating up and becoming increasingly competitive for automakers. According to the China Passenger Car Association, Chinese new energy vehicle (NEV) sales, which include hybrids and battery EVs, increased 17% month-over-month (MoM) and 36% year-over-year (YoY) to 790,000 units in May.⁵ NEVs accounted for 46.88% of total sales, marking May the best month for NEV sales since December 2023.⁶ Year-to-date, NEVs account for 40.26% of total sales in China.⁷ This sales surge in sales is largely attributed to price cuts and the introduction of new models from companies like BYD and Nio, both of which reported strong growth in May. Additionally, SAIC and Volkswagen announced a new partnership to jointly develop three plug-in hybrid EVs and two battery EVs for the Chinese market.⁸ This collaboration builds on VW's "In China, for China" initiative, which focuses on deepening local partnerships to increase market share in the region. Better-than-expected sales in China helped Tesla report a Q2 deliveries beat. Currently, Tesla is offering zero-interest loans on various models to remain competitive in China.⁹

U.S. Infrastructure

Rail Transit Systems the Next to Benefit From New IIJA Funding

As the Infrastructure Investment and Jobs Act (IIJA) passes the halfway mark of its five year plan, funds continue to flow to various agencies, including the Department of Transportation (DOT), which recently received \$529.7 million in grants.¹⁰ The first batch of grants, totaling \$343 million, will go toward making rail transit systems in eight states more accessible.¹¹ Among the highlights is \$156.6 million to New York's Metropolitan Transportation Authority (MTA) for subway system improvements.¹² The remaining \$186.7 million will go towards 91 airport projects across 34 states.¹³ In total, the IIJA is set to provide \$25 billion towards airport project grants over its five-year lifespan.¹⁴ Construction starts in the U.S. also rose 10% in May to reach a total of \$1.24 trillion.¹⁵ The non-building construction

segment drove this strong growth, particularly two large-scale projects in the offshore wind and liquifying natural gas (LNG) industries.¹⁶ The residential and non-residential building segments registered small declines in total construction starts in May, however all three segments remain up year-to-date.¹⁷

Clean and Renewable Energy

AI Energy Demand Creates Opportunity for Renewables

The explosive growth of generative AI has significantly increased data center energy consumptions, and, as a result, emissions. Google's emissions are 48% higher today than in 2019, and Microsoft's are nearly 30% higher since 2020.¹⁸ AI-powered services demand substantially more computing and electricity than typical online services. By 2030, electricity demand is expected to grow by roughly 20%, with AI-data centers alone adding 323 terawatt hours (TWh) of demand in the United States, seven times New York City's annual consumption.¹⁹ To address this environmental concern, support for clean energy sources like nuclear and solar to be the preferred power choice for data centers is gaining momentum. Nuclear and solar power, which are low-cost and capable of rapid deployment, align with Big Tech's climate ambitions, which include net-zero carbon emission goals. Among recent initiatives, Amazon, Google, and Microsoft partnered with Duke Energy to accelerate clean energy development in the Carolinas and lower the cost of investment through tariffs.²⁰

E-commerce

E-commerce Giants Enter Low-Priced Goods Categories to Fend Off Growing Competition

In recent years, low-cost international retailers like Shein and Temu have gained a significant foothold in the U.S. market by attracting American consumers with their inexpensive clothing and electronics, among other products. To counter this growing competition, Amazon plans to launch a new discount storefront on its site, dedicated to affordable fashion and lifestyle items.²¹ It will offer a variety of unbranded products from Chinese sellers, many priced under \$20, and deliver them directly from Chinese warehouses to customers' doorsteps within 11 days.²² This approach is a departure from Amazon's previous strategy, where Chinese sellers shipped goods to U.S. warehouses before dispatching them to customers. This new approach also contrasts with Amazon's existing focus on fast deliveries and a wide product range, highlighting the increasing importance of offering low-priced goods for e-commerce companies aiming to stay competitive.

Lithium & Battery Technology

Lithium Demand Remains Strong Despite Recent Supply Demand Imbalances

The International Energy Agency's (IEA) annual report on critical minerals emphasized that investments into key metals such as lithium, copper, cobalt, and nickel remain essential to avoid potential shortages as the energy transition gains pace.²³ For example, current lithium supplies are projected to meet only 50% of forecasted demand by 2035.²⁴ While supplies outweighed demand and dampened lithium prices over the past year, demand for lithium increased by a hefty 30%.²⁵ It was a similar story for many other metals. The National Energy Technology Lab published a study that states that lithium in fracking wastewater and water from natural formations in Pennsylvania could become a significant source. While still in the very early stages of exploration, the new discovery could potentially meet up to 40% of the U.S. lithium consumption.²⁶

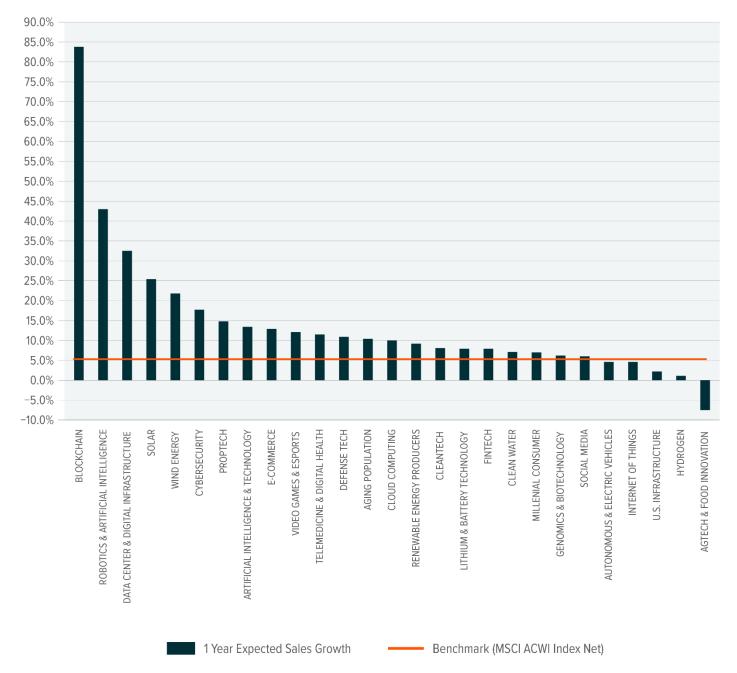
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THE NUMBERS

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

THEMATIC EXPECTED SALES GROWTH

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

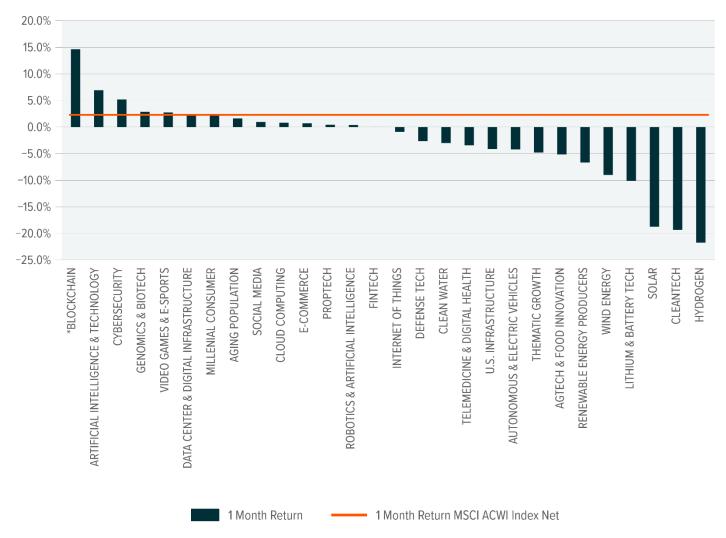


Note: Forward looking based on index data and analysis from 6/30/2024.

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.*

JUNE 2024 THEMATIC ETF RETURNS

Source: Bloomberg, June 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 (06/30/24)			Avg. Annualized % Data as of quarter end (06/30/24)					
	Expense Ratio		1 Month	3 Month	Since Inception	1 Year	3 Year	5 Year	10 Year	Since Inception	
ROBOTICS & ARTIFICIAL		NAV	0.37%	-2.98%	114.80%	7.74%	-3.93%	8.52%	-	10.29%	
INTELLIGENCE Inception Date 9/12/2016	0.68%	Market Price	0.37%	-2.88%	115.02%	7.51%	-3.89%	8.50%	-	10.31%	
		Index	0.39%	-2.79%	121.10%	8.20%	-3.40%	9.13%	-	10.70%	
		NAV	0.11%	-9.27%	78.05%	14.54%	-17.53%	-1.91%	-	7.67%	
FINTECH	0.68%	Market Price	-0.01%	-9.48%	77.55%	14.28%	-17.57%	-1.99%	-	7.63%	
Inception Date 9/12/2016	0.0070	Index	0.17%	-9.13%	85.47%	15.22%	-17.25%	-1.45%	_	8.24%	
		NAV	-0.90%	-0.79%	154.87%	4.99%	0.94%	13.39%	_	12.74%	
INTERNET OF THINGS	0.68%	Market Price	-0.90%	-0.71%	154.24%	4.46%	0.92%	13.34%	_	12.70%	
Inception Date 9/12/2016	0.0070	Index	-0.85%	-0.71%	162.07%	5.67%	1.36%	13.82%	_	13.14%	
		NAV	0.87%	-9.68%	33.09%	-0.76%	-11.14%	4.81%	_	5.63%	
CLOUD COMPUTING	0.68%	Market Price	0.82%	-9.61%	33.41%	-0.91%	-11.14%	4.77%		5.68%	
Inception Date 4/12/2019		Index	0.92%	-9.56%	37.50%	-0.11%	-10.56%			6.29%	
SOCIAL MEDIA		NAV	1.22%	5.46%	195.50%		-15.97%	5.91%	8.35%	8.95%	
	0.65%	Market Price	0.94%	5.10%	193.84%		-16.09%		8.30%	8.90%	
Inception Date 11/14/2011		Index	1.19%	5.47%	215.32%		-15.62%		8.89%	9.51%	
ARTIFICIAL INTELLIGENCE &	0.68%	NAV	6.97%	4.96%	143.53%	27.80%	5.56%	17.38%	-	15.59%	
TECHNOLOGY		Market Price	6.93%	5.04%	143.88%	27.66%	5.63%	17.38%	-	15.62%	
Inception Date 5/11/2018		Index	7.02%	4.96%	150.43%	28.71%	6.16%	17.97%	-	16.12%	
	0.68%										
AUTONOMOUS & ELECTRIC		NAV	-4.04%	-4.27%	70.48%	-8.09%	-4.80%	13.07%	-	8.96%	
VEHICLES		Market Price		-4.16%	70.28%	-8.27%	-4.87%	13.02%	-	8.94%	
Inception Date 4/13/2018		Index	-4.05%	-4.36%	72.11%	-7.99%	-4.63%	13.29%	-	9.12%	
LITHIUM AND BATTERY TECH	0.75%	NAV	-10.04%	-13.63%	51.12%		-18.02%		5.07%	3.00%	
Inception Date 7/22/2010		Market Price		-13.76%	50.59%		-18.03%		5.10%	2.98%	
		Index	-10.05%	-13.79%	60.99%		-17.62%	9.67%	5.30%	3.47%	
GENOMICS AND	0 500/	NAV	2.85%	-7.92%	-31.43%		-25.06%		-	-6.95%	
BIOTECHNOLOGY	0.50%	Market Price	2.86%	-8.26%	-30.28%	-13.86%		-7.11%	-	-6.65%	
Inception Date 4/5/2019		Index	2.84%	-7.83%	-29.60%		-24.70%		-	-6.48%	
MILLENNIAL CONSUMER	0.50%	NAV	2.14%	-1.52%	165.52%	21.12%	-3.57%	9.51%	-	12.71%	
Inception Date 5/4/2016		Market Price	2.16%	-1.52%	164.57%	21.24%	-3.61%	9.49%	-	12.66%	
		Index	2.18%	-1.39%	175.85%	21.70%	-3.13%	10.05%	-	13.24%	
AGING POPULATION	0.500/	NAV	1.77%	0.68%	110.18%	8.93%	0.35%	7.90%	-	9.54%	
Inception Date 5/09/2016	0.50%	Market Price	1.60%	0.25%	114.76%	9.04%	0.31%	7.91%	-	9.83%	
•		Index	1.77%	0.72%	114.65%	9.26%	0.56%	8.14%	-	9.83%	
E-COMMERCE	0 5 0 0 /	NAV	1.00%	-0.39%	61.58%	28.91%		5.83%	-	8.96%	
Inception Date 11/27/2018	0.50%	Market Price	0.70%	-0.35%	61.31%		-11.34%	5.76%	-	8.92%	
-	RE 0.47%	Index	1.01%	-0.29%	65.57%		-10.91%	6.27%	-	9.43%	
US INFRASTUCTURE		NAV	-4.16%	-6.81%	158.79%	18.61%	13.70%	18.49%	-	13.86%	
DEVELOPMENT		Market Price	-4.13%	-6.81%	158.79%	18.57%	13.67%	18.51%	-	13.86%	
Inception Date 3/6/2017		Index	-4.15%	-6.71%	169.23%	19.50%	14.39%	19.18%	-	14.48%	
VIDEO GAMES & ESPORTS		NAV	3.08%	3.33%	46.78%	5.68%	-12.34%	-	-	8.54%	
Inception Date 10/25/2019	11511%	Market Price	2.74%	3.63%	46.81%	5.32%	-12.28%	-	-	8.54%	
		Index	3.12%	3.47%	49.94%	6.13%	-11.96%	-	-	9.03%	

TELEMEDICINE & DIGITAL	0.50%	NAV Market Price Index	5.34% 5.19%	-0.57%	100.17%	22.13%	1.71%	_	-	15.97%
Inception Date 10/25/2019 THEMATIC GROWTH Inception Date 10/25/2019 TELEMEDICINE & DIGITAL		Index	5.19%							13.3170
THEMATIC GROWTH Inception Date 10/25/2019 TELEMEDICINE & DIGITAL	0.50%			-0.57%	103.55%	22.06%	1.64%	-	-	16.38%
Inception Date 10/25/2019 TELEMEDICINE & DIGITAL	0.50%		5.38%	-0.74%	104.29%	22.67%	2.12%	-	-	16.47%
Inception Date 10/25/2019 TELEMEDICINE & DIGITAL	0.50%	NAV	-4.88%	-5.95%	-4.96%	-13.72%	-22.89%	-	-	-1.08%
TELEMEDICINE & DIGITAL		Market Price	-4.78%	-6.39%	-4.34%	-13.94%	-22.97%	-	-	-0.94%
		Index	-4.93%	-6.03%	-6.06%	-13.96%	-23.10%	-	-	-1.33%
HEALTH		NAV	-2.98%	-7.85%	-42.20%	-24.53%	-23.02%	-	-	-13.04%
	0.68%	Market Price	-3.42%	-7.99%	-42.53%	-24.76%	-23.18%	-	-	-13.17%
Inception Date 7/29/2020		Index	-2.93%	-7.63%	-41.09%	-24.02%	-22.69%	-	-	-12.62%
CLEANTECH		NAV	-18.69%	-16.24%	-45.80%	-44.91%	-26.72%	-	-	-15.34%
CLEANTECH Inception Date 10/27/2020	0.50%	Market Price	-19.33%	-16.90%	-46.33%	-45.34%	-27.06%	-	-	-15.57%
		Index	-18.68%	-16.08%	-46.59%	-44.87%	-26.56%	-	-	-15.68%
DATA CENTER & DIGITAL		NAV	2.43%	-2.65%	6.44%	12.39%	-2.72%	-	-	1.71%
INFRASTRUCTURE	0.50%	Market Price	2.21%	-2.45%	6.81%	12.26%	-2.70%	-	-	1.81%
Inception Date 10/27/2020		Index	2.46%	-2.40%	6.82%	13.04%	-2.60%	-	-	1.81%
RENEWABLE ENERGY		NAV	-6.73%	1.88%	-12.19%	-15.89%	-13.94%	-4.01%	-	-1.42%
PRODUCERS	0.65%	Market Price	-6.66%	1.68%	-12.53%	-15.86%	-14.04%	-4.13%	-	-1.46%
Inception Date 05/27/2015		Index	-6.75%	1.96%	-9.06%	-15.52%	-13.60%	-3.63%	-	-1.04%
CLEAN WATER	0.50%	NAV	-3.23%	-2.78%	18.16%	11.15%	3.91%	-	-	5.30%
Inception Date 04/08/2021		Market Price	-3.00%	-2.61%	18.29%	11.43%	3.88%	-	-	5.34%
		Index	-3.23%	-2.69%	19.47%	11.68%	4.26%	-	-	5.66%
AGTECH AND FOOD		NAV	-5.62%	-9.61%	-59.27%	-18.23%	-	-	-	-26.10%
INNOVATION	0.51%	Market Price	-5.15%	-9.40%	-59.07%	-17.82%	-	-	-	-25.98%
Inception Date 07/12/2021		Index	-5.58%	-9.55%	-58.82%	-17.85%	-	-	-	-25.83%
		NAV	-21.65%	-6.03%	-79.09%	-42.55%	-	-	-	-40.95%
HYDROGEN	0.50%	Market Price	-21.74%	-7.30%	-79.11%	-43.17%	-	-	-	-40.98%
Inception Date 07/12/2021		Index	-21.58%	-5.95%	-78.75%	-42.24%	-	-	-	-40.64%
		NAV	14.38%	0.18%	-45.00%	69.73%	-	-	-	-18.24%
BLOCKCHAIN	0.50%	Market Price	14.63%	0.26%	-45.07%	68.53%	-	-	-	-18.27%
Inception Date 07/12/2021	0.00/0	Index	14.34%	0.09%	-46.99%	69.21%	-	-	-	-19.24%
		NAV	-18.11%	-17.55%	-59.98%	-47.53%	_	_	_	-27.80%
SOLAR	0.50%	Market Price	-18.74%	-18.18%	-60.18%	-48.00%	_	_	_	-27.94%
Inception Date 09/08/2021		Index	-18.10%	-17.47%	-59.41%	-47.36%	_	-	_	-27.44%
		NAV	-6.83%	1.42%	-49.63%	-23.02%	_	_	_	-21.65%
WIND ENERGY	0.51%	Market Price	-9.01%	0.09%	-50.20%	-23.66%	_	_	_	-21.97%
Inception date 09/08/2021		Index	-6.84%	1.51%	-49.03%	-22.76%	_	_	_	-21.32%
	() 6.1%	NAV	0.59%	-4.05%	25.44%	15.98%	-	-	_	20.38%
PROPTECH		Market Price	0.43%	-4.27%	25.32%	15.66%	-	-	_	20.28%
Inception date 04/11/23		Index	0.63%	-3.95%	26.09%	16.61%	-	-	-	20.89%
	1 5 1 %	NAV	-2.27%	0.12%	33.75%	-	-	-	-	-
DEFENSE TECH		Market Price	-2.64%	-0.03%	34.07%	-	-	-	-	-
Inception date 09/11/23		Index	-2.24%	0.24%	34.31%	-	-	-	-	-



P/S AND EV/S

Source: Bloomberg, data is as of 5/31/24 and 4/30/24, Global X ETFs.

Ticker	Name	F	P/S	EV/S		
		6/30/24	5/31/24	6/30/24	5/31/24	
GNOM	Global X Genomics & Biotechnology ETF	7.10	6.51	6.05	5.55	
BUG	Global X Cybersecurity ETF	5.47	5.45	5.17	5.21	
BOTZ	Global X Robotics & Artificial Intelligence ETF	4.05	3.96	4.44	4.45	
CLOU	Global X Cloud Computing ETF	4.02	3.74	4.25	3.97	
AGNG	Global X Aging Population ETF	3.80	3.66	4.32	4.24	
AIQ	Global X Artificial Intelligence & Technology ETF	3.77	3.52	3.87	3.55	
DTCR	Global X Data Center & Digital Infrastructure ETF	3.60	3.39	6.32	5.90	
FINX	Global X Fintech ETF	3.30	3.36	3.37	3.87	
SNSR	Global X Internet of Things ETF	3.18	3.08	3.55	3.42	
SOCL	Global X Social Media ETF	3.05	3.06	3.02	2.95	
HERO	Global X Video Games & Esports ETF	2.90	2.68	3.28	3.05	
SPY	SPDR S&P 500 ETF TRUST	3.04	2.83	3.00	2.78	
AQWA	Global X Clean Water ETF	2.56	2.59	3.54	3.61	
BKCH	Global X Blockchain ETF	2.27	3.58	2.89	4.45	
MILN	Global X Millennial Consumer ETF	2.27	2.22	2.58	2.54	
PTEC	Global X PropTech ETF	2.10	1.97	2.44	2.30	
ACWI	MSCI ACWI ETF	2.16	2.06	3.68	3.44	
HYDR	Global X Hydrogen ETF	2.06	2.16	2.06	2.13	
EDOC	Global X Telemedicine & Digital Health ETF	1.98	1.99	2.08	1.99	
RNRG	Global X Renewable Energy Producers ETF	1.95	2.04	5.75	5.88	
SHLD	Global X Defense Tech ETF	1.70	1.70	1.95	1.93	
PAVE	Global X US Infrastructure ETF	1.70	1.72	2.00	2.02	
LIT	Global X Lithium & Battery Tech ETF	1.43	1.54	1.69	1.74	
WNDY	Global X Wind Energy ETF	1.33	1.54	4.07	2.76	
EBIZ	Global X E-Commerce ETF	1.28	1.23	1.43	1.15	
RAYS	Global X Solar ETF	1.13	1.33	1.88	1.99	
KROP	Global X Agtech & Food Innovation ETF	0.93	0.98	1.34	1.30	
DRIV	Global X Autonomous & Electric Vehicles ETF	0.84	0.82	0.96	0.94	
CTEC	Global X CleanTech ETF	0.73	0.77	1.12	1.17	

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

P/S is calculated by dividing the company's market capitalizations by their revenues over the most recent year. EV/S ratio compares a company's enterprise value to its annual sales.



F12M SALES GROWTH, PSG, AND EVSG

Source: Bloomberg, data is as of 5/31/24 and 4/30/24, Global X ETFs.

Ticker	Name	F12M Sa	lles (%)	PSG		EVSG	
		6/30/24	5/31/24	6/30/24	5/31/24	6/30/24	5/31/24
BKCH	Global X Blockchain ETF	74.6%	83.8%	0.03	0.02	0.04	0.03
BOTZ	Global X Robotics & Artificial Intelligence ETF	48.0%	43.0%	0.08	0.09	0.09	0.11
DTCR	Global X Data Center & Digital Infrastructure ETF	36.3%	32.5%	0.10	0.11	0.17	0.19
RAYS	Global X Solar ETF	29.5%	25.4%	0.04	0.06	0.06	0.09
BUG	Global X Cybersecurity ETF	18.9%	17.7%	0.29	0.28	0.27	0.27
WNDY	Global X Wind EnergyETF	17.3%	21.8%	0.08	0.08	0.24	0.13
PTEC	Global X PropTech ETF	16.0%	14.8%	0.14	0.15	0.23	0.25
AIQ	Global X Artificial Intelligence & Technology ETF	15.0%	13.4%	0.25	0.27	0.26	0.28
EBIZ	Global X E-Commerce ETF	13.9%	12.9%	0.09	0.09	0.10	0.09
EDOC	Global X Telemedicine & Digital Health ETF	12.0%	11.5%	0.16	0.18	0.17	0.19
CLOU	Global X Cloud Computing ETF	11.4%	10.0%	0.35	0.40	0.37	0.42
AGNG	Global X Aging Population ETF	11.3%	10.4%	0.34	0.36	0.38	0.41
SHLD	Global X Defense Tech ETF	11.1%	10.9%	0.15	0.16	0.18	0.18
LIT	Global X Lithium & Battery Technology ETF	9.3%	7.9%	0.15	0.20	0.18	0.23
SOCL	Global X Social Media ETF	8.6%	6.0%	0.36	0.50	0.35	0.49
FINX	Global X FinTech ETF	8.3%	7.9%	0.40	0.42	0.40	0.48
MILN	Global X Millenial Consumer ETF	8.3%	7.0%	0.27	0.32	0.31	0.36
SPY	S&P 500 ETF	8.2%	6.5%	0.35	0.43	0.40	0.49
RNRG	Global X Renewable Energy Producers ETF	7.8%	9.2%	0.25	0.25	0.74	0.59
CTEC	Global X CleanTech ETF	7.6%	8.1%	0.10	0.11	0.15	0.16
HERO	Global X Video Games & Esports	7.5%	12.1%	0.41	0.25	0.40	0.25
GNOM	Global X Genomics & Biotechnology ETF	7.4%	6.2%	0.96	1.12	0.82	0.93
ACWI	MSCI ACWI ETF	7.3%	5.8%	0.29	0.36	0.33	0.41
DRIV	Global X Autonomous & Electric Vehicles ETF	6.5%	4.6%	0.13	0.19	0.15	0.21
AQWA	Global X Clean Water ETF	6.4%	7.1%	0.40	0.38	0.55	0.52
SNSR	Global X Internet of Things ETF	4.9%	4.6%	0.65	0.70	0.72	0.78
PAVE	Global X US Infrastructure Development ETF	2.3%	2.2%	0.75	0.81	0.88	0.94
HYDR	Global X Hydrogen ETF	1.7%	1.1%	1.24	2.60	1.24	2.62
KROP	Global X AgTech & Food Innovation ETF	-8.0%	-7.5%	-0.12	-0.13	-0.17	-0.18

Note: F12M Sales 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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- 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

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