

**GLOBAL X ETFs RESEARCH**

# The Next Big Theme: June 2021

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Date: Jun 9, 2021

Topic: Disruptive  
Technology, Physical  
Environment, People &  
Demographics**Related Posts**[Webinar Replay: Themes for the New Normal Economy](#)[Putting the Chip Shortage into the Context of Long-Term Trends](#)[China Innovation ETF \(KEJI\): Q1 2021 Commentary](#)[Key Themes for the New Normal Economy](#)

## Genomics

### *Surveilling Virus Variants*

Genomic surveillance is a key piece of defending against SARS-CoV-2 and its variants, including those detected in the UK, South Africa, Brazil, and India. The Pan American Health Organization established the COVID-19 Genomic Surveillance Regional Network for routine virus genomic sequencing. Currently, 22 countries worldwide participate.<sup>1</sup> Researchers can use genomic sequencing and related sciences to gain a better understanding of transmission by tracking mutations over time to determine variants' lineages. Information on mutation is also useful for determining whether a virus has evolved in ways that could impact interventions like vaccines and other therapeutics. Additionally, genomic information taken from humans could help determine who might be susceptible to increased infection and health risks, and which interventions are suitable for different individuals.

## Electric Vehicles

### *Clean Energy for America Act Puts a Charge in EVs*

The Senate Finance Committee advanced the Clean Energy for America Act, which now moves to the Senate for ratification. The bill's language around tax credits for electric vehicles (EVs) is particularly noteworthy. Under current law, consumers receive up to a \$7,500 federal tax credit for buying eligible EVs – however, this credit is limited to the first 200,000 EVs sold by each car company. Tesla and GM have already exceeded these sales limits, meaning their customers no longer receive this credit. The Clean Energy for America Act would extend the \$7,500 credit for as long as EVs represent less than 50% of total car sales in the U.S. Thereafter, the tax credit is phased out over three years. The bill also includes a \$2,500 tax credit for new qualified plug-in electric drive motor vehicles for which the final assembly is at a facility in the U.S. before 2026. Another \$2,500 is available if that vehicle is assembled at a facility whose production workers are members of a represented labor organization. In total, EVs would be eligible for a maximum tax credit of \$12,500. Should the bill pass, the sticker price for certain EVs could become significantly cheaper than similar internal combustion engine vehicles.



## Cybersecurity

### *DHS Moves to Secure Pipelines*

The Department of Homeland Security (DHS) is taking steps to mitigate the effects of the ransomware cyberattack on the Colonial Pipeline and to prevent future attacks on the country's energy infrastructure. The attack on Colonial resulted in an 11-day shutdown for the company and widespread gasoline shortages along the East Coast.<sup>2</sup> The Transportation Security Administration (TSA), which oversees pipeline security, will work with the Cybersecurity and Infrastructure Security Agency (CISA) to increase surveillance of the nation's pipelines. Cybersecurity staffing deficits will be addressed and previously voluntary cyberattack reports for pipeline companies will become mandatory. New rules may also require companies to appoint cyber officials who have around-the-clock contact with federal authorities.<sup>3</sup> The upward trajectory in the number of cyber threat events like Colonial's is expected to continue to boost global cybersecurity spending and refocus governments' attention on cyber defense for critical industries.

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## Internet of Things

### *Governments Deem Semiconductors Essential*

Semiconductors are critical components for connected devices, from cars, to TVs, and appliances. With a global chip shortage paralyzing certain industries from participating in the re-opening economic recovery, governments are getting uneasy. In some instances, they are investing billions of dollars into domestic manufacturing supply chains. South Korea recently committed a massive \$452 billion to its chip industry by 2030.<sup>4</sup> With the help of industry giant Samsung Electronics, the government's "K-Semiconductor Strategy" offers the semiconductor industry tax breaks, financing, and infrastructure. Prior to South Korea's announcement, the U.S. government proposed a \$50 billion plan to accelerate on-shore chipmaking and research, and China pledged approximately \$150 billion to its own semiconductor industry.<sup>5,6</sup> The European Union said that it wants 20% of the world's semiconductors to be manufactured in Europe by 2030 and directed \$160 billion for tech investment, including semiconductors.<sup>7</sup> In the 21st century a secure and domestic semiconductor supply chain is becoming akin to energy independence strategies of previous decades.

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## FinTech

### *PayPal Sheds Light on QR Code and BNPL Growth Potential*

PayPal reported that 1 million merchants now use the QR code payments feature that it launched in May 2020.<sup>8</sup> In Q1 2021, PayPal processed \$6.4 billion from QR codes and card payments in-store.<sup>9</sup> PayPal also reported that the Buy Now, Pay Later (BNPL) feature it launched last September processed \$1 billion in Q1, up 36% quarter-over-quarter (QoQ).<sup>10</sup> As of Q1, 330,000 merchants accepted BNPL, up 33% QoQ.<sup>11</sup> PayPal counted 3.3 million BNPL unique active users, a 19% QoQ increase.<sup>12</sup> Notably, BNPL has a high repeat rate: 50% of BNPL users use it again within three months and 70% use it again within six months.<sup>13</sup> With early adoption numbers like these, QR code and BNPL growth rates could eventually prove to be some of the fastest growing segments within the FinTech ecosystem.

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## Social Media

### *Platforms Hop on the Monetization Train*

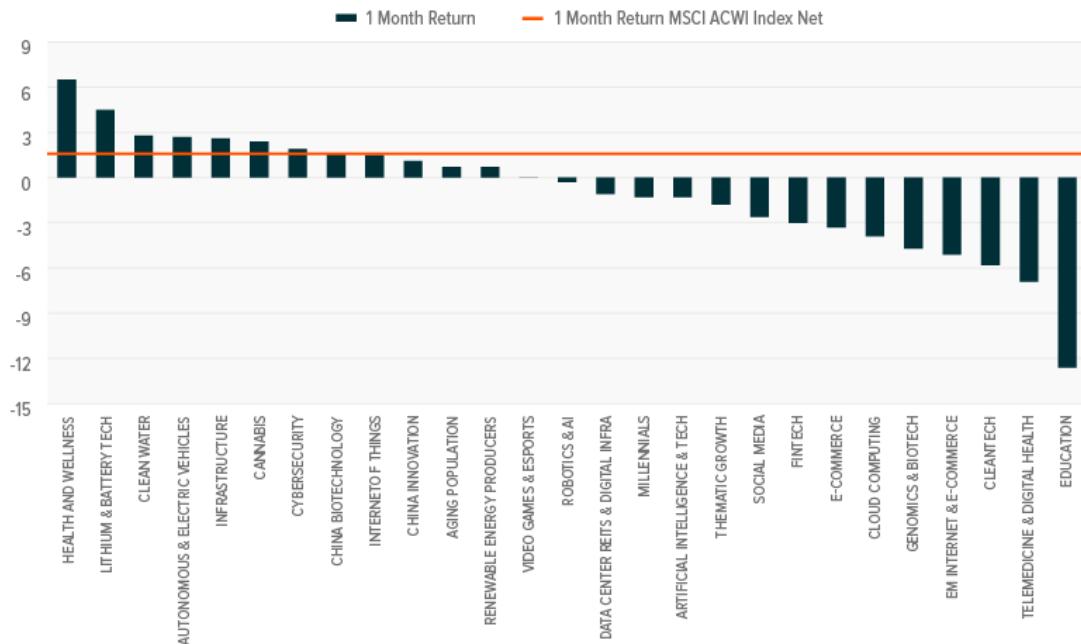
Social media platforms are increasingly blending elements of e-commerce, streaming, gaming, and fintech, all of which increase user engagement and monetization opportunities. But key to platforms' success, particularly in these new features, is properly incentivizing content creators. Snapchat announced that it will permit users to tip high-profile creators with "gifts" via chat, which they can cash out. Twitter released its Tip Jar feature for users to send money to their favorite creators through Bandcamp, Cash App, Patreon, PayPal, or Venmo. Twitter will also offer a "Super Follows" feature that let users pay to see exclusive tweets.<sup>14</sup> Facebook recently curated a pay-per-view streaming platform for sports, where 17,000 fans spent \$2.99 each for a virtual ticket.<sup>15</sup> And Instagram introduced a marketplace to link brands with targeted users and Creator Shops, which act as virtual stores for creators to sell their products.<sup>16</sup> Such monetization initiatives incentivize engaging content and diversify social media revenues away from advertising.

## THE NUMBERS

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

### MAY 2021 THEMATIC ETF RETURNS

Source: Bloomberg, May 31, 2021, Global X ETFs.

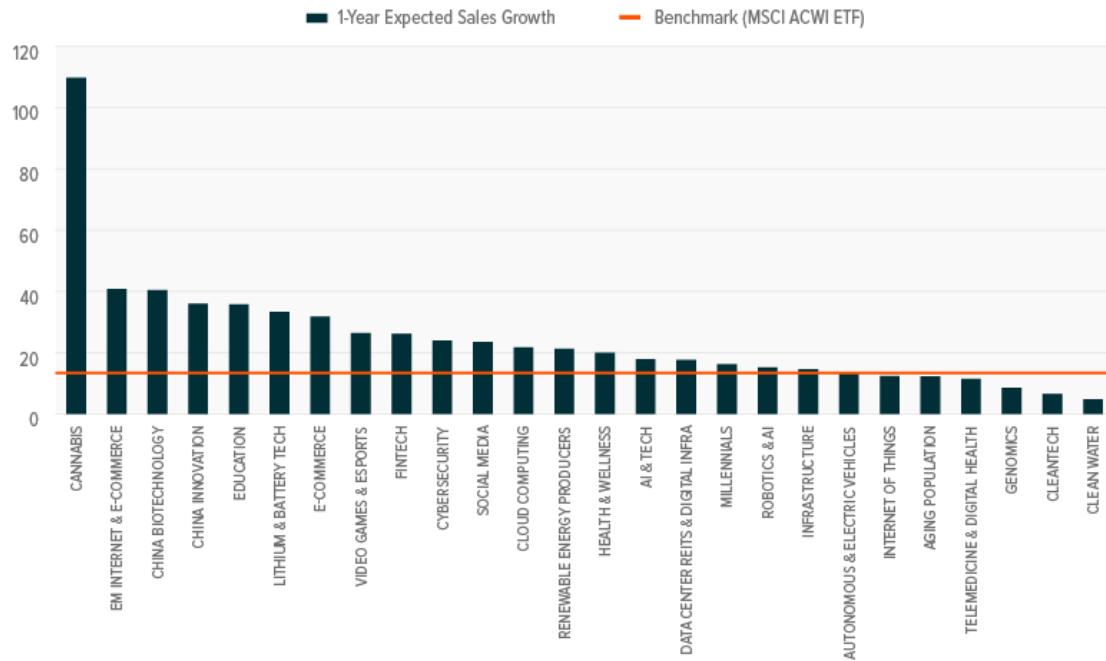


Note: The performance data quoted represents past performance and does not guarantee future results.



## THEMATIC SALES GROWTH

Source: Bloomberg, May 31, 2021, Global X ETFs.



Note: Forward looking based on data and analysis from 05/31/2021.

1 year annualized forward sales growth is the consensus analyst expectations for total sales growth in the next 12 months.

Standard Performance				Cumulative % Data as of month end 5/31/21				Avg. Annualized % Data as of quarter end 4/30/21				
	Gross Expense Ratio	Net 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%	0.68%	NAV	-0.23%	2.36%	137.16%	80.86%	12.27%	-	-	19.89%	
			Market Price	-0.26%	1.87%	136.96%	82.58%	12.02%	-	-	20.01%	
			Index	-0.47%	2.11%	139.41%	81.42%	12.20%	-	-	20.17%	
FinTech Inception Date 9/12/2016	0.68%	0.68%	NAV	-3.05%	-3.87%	200.29%	82.01%	23.64%	-	-	26.62%	
			Market Price	-2.97%	-4.08%	200.22%	82.05%	23.70%	-	-	26.70%	
			Index	-2.99%	-3.72%	209.57%	83.14%	24.45%	-	-	27.44%	
Internet of Things Inception Date 9/12/2016	0.68%	0.68%	NAV	1.70%	3.09%	140.11%	81.87%	19.57%	-	-	20.10%	
			Market Price	1.52%	2.79%	140.04%	82.82%	19.63%	-	-	20.18%	
			Index	1.91%	3.36%	144.15%	82.73%	19.91%	-	-	20.48%	
Cloud Computing Inception Date 4/12/2019	0.68%	0.68%	NAV	-3.75%	-3.25%	73.79%	75.94%	-	-	-	31.36%	
			Market Price	-3.89%	-3.25%	74.49%	76.06%	-	-	-	31.63%	
			Index	-3.64%	-3.02%	76.14%	76.94%	-	-	-	32.07%	
Social Media Inception Date 11/14/2011	0.65%	0.65%	NAV	-2.70%	-5.86%	362.36%	124.26%	24.33%	29.61%	-	17.57%	
			Market Price	-2.59%	-5.89%	362.49%	125.80%	24.42%	29.79%	-	17.63%	
			Index	-2.31%	-5.40%	388.85%	125.54%	25.13%	30.39%	-	18.20%	
Artificial Intelligence & Technology Inception Date 5/11/2018	0.68%	0.68%	NAV	-1.33%	1.40%	95.87%	81.94%	-	-	-	25.34%	
			Market Price	-1.30%	1.26%	96.14%	83.55%	-	-	-	25.55%	
			Index	-0.96%	1.87%	98.66%	82.76%	-	-	-	25.73%	
Autonomous & Electric Vehicles Inception Date 4/13/2018	0.68%	0.68%	NAV	2.71%	4.41%	93.01%	138.34%	-	-	-	22.96%	
			Market Price	2.67%	4.42%	92.94%	140.13%	-	-	-	23.08%	
			Index	2.73%	4.55%	93.77%	139.35%	-	-	-	23.07%	
Lithium & Battery Technology Inception Date 7/22/2010	0.75%	0.75%	NAV	3.88%	8.51%	149.23%	165.84%	22.73%	24.47%	4.44%	7.54%	
			Market Price	4.48%	9.35%	150.62%	171.03%	23.04%	24.82%	4.61%	7.68%	
			Index	6.22%	11.06%	167.22%	165.07%	22.48%	24.50%	4.82%	8.00%	



Genomics & Biotechnology Inception Date 4/5/2019	0.50%	0.50%	NAV	-4.44%	-9.73%	41.03%	77.53%	-	-	-	21.35%
			Market Price	-4.66%	-9.97%	43.52%	78.23%	-	-	-	22.68%
			Index	-4.37%	-9.61%	42.70%	78.46%	-	-	-	21.99%
Millennial Consumer Inception Date 5/4/2016	0.50%	0.50%	NAV	-1.10%	3.67%	182.40%	100.66%	26.66%	-	-	22.85%
			Market Price	-1.27%	3.54%	181.39%	100.76%	26.66%	-	-	22.78%
			Index	-1.06%	3.81%	189.22%	101.88%	27.32%	-	-	23.41%
Aging Population Inception Date 5/10/2016	0.50%	0.50%	NAV	0.76%	5.11%	98.99%	37.23%	12.81%	-	-	13.85%
			Market Price	0.72%	4.96%	103.19%	37.70%	12.79%	-	-	14.40%
			Index	0.99%	5.40%	102.34%	37.64%	13.07%	-	-	14.16%
Health & Wellness Inception Date 5/9/2016	0.50%	0.50%	NAV	6.46%	13.73%	103.74%	68.30%	15.45%	-	-	13.17%
			Market Price	6.54%	13.43%	106.59%	69.56%	15.40%	-	-	13.52%
			Index	6.42%	13.82%	108.08%	69.09%	15.86%	-	-	13.64%
E-Commerce Inception Date 11/27/2018	0.50%	0.50%	NAV	-3.06%	-4.25%	126.21%	127.75%	-	-	-	42.68%
			Market Price	-3.29%	-4.47%	125.87%	127.90%	-	-	-	42.84%
			Index	-3.03%	-4.14%	128.89%	128.38%	-	-	-	43.33%
US Infrastructure Development Inception Date 3/6/2017	0.47%	0.47%	NAV	2.64%	15.84%	80.82%	102.90%	16.74%	-	-	14.08%
			Market Price	2.59%	15.83%	80.96%	103.31%	16.74%	-	-	14.13%
			Index	2.67%	15.98%	84.64%	104.17%	17.32%	-	-	14.63%
Cannabis Inception Date 9/7/2019	0.51%	0.51%	NAV	3.59%	-7.94%	-32.93%	86.38%	-	-	-	-20.88%
			Market Price	2.41%	-7.62%	-34.72%	84.43%	-	-	-	-21.74%
			Index	3.50%	-8.24%	-39.82%	75.68%	-	-	-	-26.13%
Video Games & Esports Inception Date 10/25/2019	0.50%	0.50%	NAV	0.00%	-0.92%	117.80%	92.16%	-	-	-	68.09%
			Market Price	0.00%	-0.74%	117.98%	92.37%	-	-	-	68.57%
			Index	0.04%	-0.77%	119.54%	93.30%	-	-	-	68.94%
Cybersecurity Inception Date 10/25/2019	0.50%	0.50%	NAV	1.79%	3.48%	80.81%	68.73%	-	-	-	41.73%
			Market Price	1.89%	3.43%	84.53%	69.86%	-	-	-	43.91%
			Index	1.88%	3.64%	80.63%	69.51%	-	-	-	41.51%
Thematic Growth Inception Date 10/25/2019	0.50%	0.50%	NAV	-1.82%	-3.40%	94.12%	116.53%	-	-	-	57.16%
			Market Price	-1.84%	-3.57%	96.22%	118.02%	-	-	-	58.37%
			Index	-1.87%	-3.54%	93.45%	116.17%	-	-	-	56.89%
Education Inception Date 7/10/2020	0.50%	0.50%	NAV	-12.62%	-23.27%	-3.88%	-	-	-	-	-
			Market Price	-12.64%	-23.14%	-3.62%	-	-	-	-	-
			Index	-12.66%	-23.23%	-3.56%	-	-	-	-	-
Telemedicine & Digital Health Inception Date 7/29/2020	0.68%	0.68%	NAV	-6.78%	-8.54%	20.99%	-	-	-	-	-
			Market Price	-6.89%	-8.73%	20.79%	-	-	-	-	-
			Index	-6.60%	-8.26%	21.70%	-	-	-	-	-
China Biotech Inception Date 9/22/2020	0.67%	0.67%	NAV	1.23%	12.13%	25.58%	-	-	-	-	-
			Market Price	1.60%	11.53%	26.31%	-	-	-	-	-
			Index	1.28%	12.33%	26.18%	-	-	-	-	-
CleanTech Inception Date 10/27/2020	0.50%	0.50%	NAV	-5.82%	-18.70%	27.82%	-	-	-	-	-
			Market Price	-5.83%	-19.32%	27.49%	-	-	-	-	-
			Index	-8.83%	-21.03%	24.24%	-	-	-	-	-
Data Center REITs & Digital Infrastructure Inception Date 10/27/2020	0.50%	0.50%	NAV	-1.03%	6.91%	9.82%	-	-	-	-	-
			Market Price	-1.14%	6.21%	9.95%	-	-	-	-	-
			Index	-0.89%	6.99%	9.96%	-	-	-	-	-
Emerging Markets Internet & E-commerce Inception Date 11/9/2020	0.65%	0.65%	NAV	-5.13%	-16.42%	1.22%	-	-	-	-	-
			Market Price	-5.07%	-16.96%	1.28%	-	-	-	-	-
			Index	-5.09%	-16.30%	1.55%	-	-	-	-	-
Renewable Energy Producers Inception Date 5/27/2015	0.65%	0.65%	NAV	0.76%	-1.37%	34.06%	34.48%	14.73%	13.03%	-	5.11%
			Market Price	0.70%	-1.30%	34.11%	33.73%	14.69%	12.95%	-	5.13%
			Index	1.09%	-0.94%	37.50%	34.99%	15.20%	13.51%	-	5.49%
China Innovation Inception Date 2/22/2021	0.75%	0.75%	NAV	0.48%	-6.23%	-15.76%	-	-	-	-	-
			Market Price	1.10%	-6.52%	-15.68%	-	-	-	-	-
			Index	2.80%	-1.50%	-7.36%	-	-	-	-	-
Clean Water Inception Date 4/8/2021	0.50%	0.50%	NAV	2.58%	-	5.78%	-	-	-	-	-
			Market Price	2.77%	-	6.12%	-	-	-	-	-
			Index	2.57%	-	5.83%	-	-	-	-	-

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](http://www.globalxetfs.com). \*Net expense ratio reflects fees incurred by the Fund after waivers and reimbursements.



## P/S AND EV/S

Source: Bloomberg, data is as of 5/31/21 and 4/30/21, Global X ETFs.

Ticker	Name	P/S		EV/S	
		5/31/21	4/30/21	5/31/21	4/30/21
GNOM	Global X Genomics & Biotechnology ETF	11.83	13.31	11.13	12.95
CLOU	Global X Cloud Computing ETF	9.46	9.71	9.94	10.28
CHB	Global X China Biotech Innovation ETF	9.32	9.67	9.94	10.19
BUG	Global X Cybersecurity ETF	9.08	8.94	9.03	8.82
POTX	Global X Cannabis ETF	7.99	7.54	16.65	12.29
FINX	Global X FinTech ETF	7.94	8.62	9.08	9.71
SOCL	Global X Social Media ETF	7.10	7.31	7.88	8.38
VPN	Global X Data Center REITs & Digital Infrastructure ETF	6.77	6.91	9.29	9.48
KEJI	Global X China Innovation ETF	5.38	5.04	5.63	5.70
HERO	Global X Video Games & Esports ETF	5.27	5.52	5.22	5.59
AGNG	Global X Aging Population ETF	5.00	4.96	5.73	5.73
EDOC	Global X Telemedicine & Digital Health ETF	4.76	5.44	5.20	5.88
EWEB	Global X Emerging Markets Internet & E-commerce ETF	4.26	4.77	4.29	4.64
AIQ	Global X Artificial Intelligence & Technology ETF	4.07	4.18	4.24	4.37
RNRG	Global X Renewable Energy Producers ETF	3.79	3.74	6.06	6.21
MILN	Global X Millennial Consumer ETF	3.57	3.69	4.07	4.26
EDUT	Global X Education ETF	3.55	3.87	3.74	4.12
BOTZ	Global X Robotics & Artificial Intelligence ETF	3.34	3.38	3.41	3.48
SPX	S&P 500 Index	3.04	3.07	3.39	3.44
SNSR	Global X Internet of Things ETF	3.01	2.94	3.59	3.60
AQWA	Global X Clean Water ETF	2.92	2.90	4.01	4.03
LIT	Global X Lithium and Battery Tech ETF	2.80	2.65	3.07	3.00
EBIZ	Global X E-commerce ETF	2.51	2.68	2.56	2.56
ACWI	ACWI Index	2.26	2.23	2.71	2.68
CTEC	Global X Cleantech ETF	1.91	2.01	2.40	2.70
PAVE	Global X U.S. Infrastructure Development ETF	1.84	1.80	2.20	2.15
BFIT	Global X Health & Wellness ETF	1.82	1.79	2.13	2.02
DRIV	Global X Autonomous & Electric Vehicles ETF	1.35	1.33	1.56	1.54

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



## F12 MONTH SALES GROWTH, PSG, AND EVSG

Source: Bloomberg, data is as of 5/31/21 and 4/30/21, Global X ETFs.

Ticker	Name	F12M SALES (%)		PSG		EVSG	
		5/31/21	4/30/21	5/31/21	4/30/21	5/31/21	4/30/21
POTX	Global X Cannabis ETF	109.7%	66.7%	0.07	0.11	0.15	0.18
EWEB	Global X Emerging Markets Internet & E-commerce ETF	40.8%	49.3%	0.10	0.10	0.11	0.09
CHB	Global X China Biotech Innovation ETF	40.4%	40.7%	0.23	0.24	0.25	0.25
KEJI	Global X China Innovation ETF	36.0%	37.2%	0.15	0.14	0.16	0.15
EDUT	Global X Education ETF	35.8%	34.8%	0.10	0.11	0.10	0.12
LIT	Global X Lithium and Battery Tech ETF	33.3%	30.4%	0.08	0.09	0.09	0.10
EBIZ	Global X E-commerce ETF	31.8%	32.0%	0.08	0.08	0.08	0.08
HERO	Global X Video Games & Esports ETF	26.4%	31.9%	0.20	0.17	0.20	0.17
FINX	Global X FinTech ETF	26.2%	22.3%	0.30	0.39	0.35	0.44
BUG	Global X Cybersecurity ETF	24.0%	22.5%	0.38	0.40	0.38	0.39
SOCL	Global X Social Media ETF	23.5%	23.9%	0.30	0.31	0.34	0.35
CLOU	Global X Cloud Computing ETF	21.7%	20.7%	0.44	0.47	0.46	0.50
RNRG	Global X Renewable Energy Producers ETF	21.3%	17.1%	0.18	0.22	0.28	0.36
BFIT	Global X Health & Wellness ETF	20.0%	21.3%	0.09	0.08	0.11	0.10
AIQ	Global X Artificial Intelligence & Technology ETF	17.9%	17.3%	0.23	0.24	0.24	0.25
VPN	Global X Data Center REITs & Digital Infrastructure ETF	17.7%	16.8%	0.38	0.41	0.52	0.56
MILN	Global X Millennial Consumer ETF	16.3%	16.0%	0.22	0.23	0.25	0.27
BOTZ	Global X Robotics & Artificial Intelligence ETF	15.2%	16.7%	0.22	0.20	0.23	0.21
PAVE	Global X U.S. Infrastructure Development ETF	14.6%	12.7%	0.13	0.14	0.15	0.17
DRIV	Global X Autonomous & Electric Vehicles ETF	13.6%	13.7%	0.10	0.10	0.11	0.11
ACWI	ACWI Index	13.2%	13.6%	0.17	0.16	0.20	0.20
SNSR	Global X Internet of Things ETF	12.4%	11.9%	0.24	0.25	0.29	0.30
AGNG	Global X Aging Population ETF	12.3%	11.7%	0.40	0.42	0.46	0.49
SPX	S&P 500 Index	11.7%	12.3%	0.26	0.25	0.29	0.28
EDOC	Global X Telemedicine & Digital Health ETF	11.5%	13.6%	0.41	0.40	0.45	0.43
GNOM	Global X Genomics & Biotechnology ETF	8.5%	11.0%	1.40	1.21	1.31	1.18
CTEC	Global X Cleantech ETF	6.6%	3.6%	0.29	0.55	0.37	0.74
AQWA	Global X Clean Water ETF	4.8%	5.0%	0.61	0.58	0.84	0.80

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/A reflect a negative growth number in the denominator and similar to traditional PEG ratios aren't typically displayed as such (hence the N/A).

## INTRO TO THEMATIC INVESTING COURSE – ELIGIBLE FOR CE CREDIT

Global X has developed an interactive, self-guided [Intro to Thematic Investing course](#), that is designed to share the latest ideas and best practices for incorporating thematic investing into a portfolio.

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1. PAHO, "Virus variants are expected, but surveillance should continue to monitor possible changes in clinical patterns, experts say", May 14, 2021.
2. Washington Post, "DHS to issue first cybersecurity regulations for pipelines after Colonial hack", May 25, 2021.
3. Ibid.
4. CNBC, "Governments are deploying 'wartime-like' efforts to win the global semiconductor race", May 17, 2021.
5. Ibid.
6. CRS Reports, "China's New Semiconductor Policies," Apr 20, 2021.
7. The Verge, "EU aims to double chip manufacturing amid growing fears about digital sovereignty," Mar 10, 2021.
8. Payments Dive, "PayPal forecasts boom in QR-code payments, plans BNPL expansion," May 6, 2021.
9. Ibid.
10. Payments Dive, (n8).
11. Payments Dive, (n8).



12. Payments Dive, (n8).
13. Payments Dive, (n8).
14. CNBC, "Snapchat users will be able to tip popular creators later this year", May 20, 2021.
15. Yahoo, "Facebook Proving It Can Monetize Sports on Pay-Per-View Platform", May 25, 2021.
16. Entrepreneur, "Instagram Will Make It Easier for You to Monetize Your Content", Apr 29, 2021.

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