

GLOBAL X

by Mirae Asset

Video Games & Esports



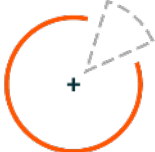





Video Games & Esports UCITS ETF (HERU)

Q2 2021

About Us

“Global X was founded on the principle of empowering our clients through innovative investment solutions. It’s a mission and responsibility that’s endured for more than a decade, and is one that we carry forward each day through...”

-Luis Berruga, CEO

Our Business	 <p>Exchanged-Traded Funds (ETFs)</p>	 <p>Research & Insights</p>	 <p>ETF Model Portfolios</p>	 <p>Practice Management Tools</p>
Our Team	 <p>A diverse collection of more than 60 financial professionals, representing more than five native languages and ten nationalities, bringing together hundreds of years of industry experience</p>			
Our Partners	 <p>Global Perspective & Reach</p>	 <p>World-renown Index Providers & Exchanges</p>		

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Global X Overview: ~\$28bn in AUM across 80 ETFs

AUM (\$M) by Fund Family (as of 4/1/2021)



Source: Bloomberg, Global X ETFs, 2021

Global X Thematic Growth ETF Suite

Global X has 27 ETFs designed to target companies that may benefit from disruptive structural changes in technology and innovation, people and demographics, and the availability of resources, as well as 2 multi-theme ETFs.

GLOBAL X'S 27 THEMATIC ETFs

Disruptive Technology

- Artificial Intelligence & Tech ETF (AIQ)
- Autonomous & Electric Vehicles ETF (DRIV)
- Cloud Computing ETF (CLOU)
- Cybersecurity ETF (BUG)
- Data Center REITs & Digital Infrastructure ETF (VPN)
- FinTech ETF (FINX)
- Internet of Things ETF (SNSR)
- Lithium & Battery Tech ETF (LIT)
- Robotics & Artificial Intelligence ETF (BOTZ)
- Social Media ETF (SOCL)
- Video Games & Esports ETF (HERO)

Multi-Theme

- China Innovation ETF (KEJI)
- Thematic Growth ETF (GXTG)

People & Demographics

- Aging Population ETF (AGNG)
- Cannabis ETF (POTX)
- China Biotech Innovation ETF (CHB)
- E-commerce ETF (EBIZ)
- Education ETF (EDUT)
- Emerging Markets Internet & E-commerce ETF (EWEB)
- Genomics & Biotechnology ETF (GNOM)
- Health & Wellness ETF (BFIT)
- Millennial Consumer ETF (MILN)
- Telemedicine & Digital Health ETF (EDOC)

Physical Environment

- CleanTech ETF (CTEC)
- Renewable Energy Producers ETF (RNRG)
- U.S. Infrastructure Development ETF (PAVE)
- Clean Water ETF (AQWA)

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Thematic Investing Overview



Two Competing Ideas for Portfolio Management

1. Learn from the Past

- Backward-looking
- “History repeats itself”
- Harvesting factor premias/smart beta
- Mean reversion

2. Anticipate the Future

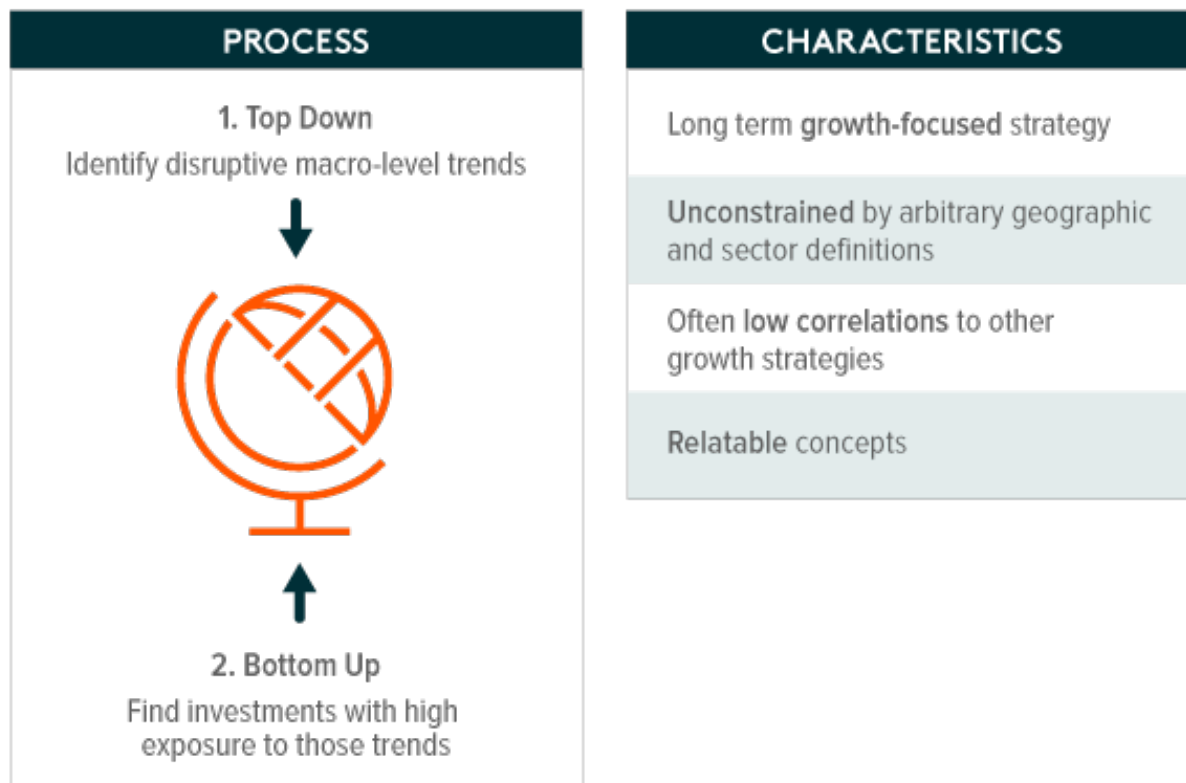
- Forward-looking
- “Next time will be different”
- Growth-oriented investment approaches

Thematic Investing

What is Thematic Investing?

IDENTIFYING DISRUPTIVE MACRO-LEVEL TRENDS

Thematic investing refers to the process of identifying disruptive macro-level trends and the underlying investments that stand to benefit from the materialization of those trends.

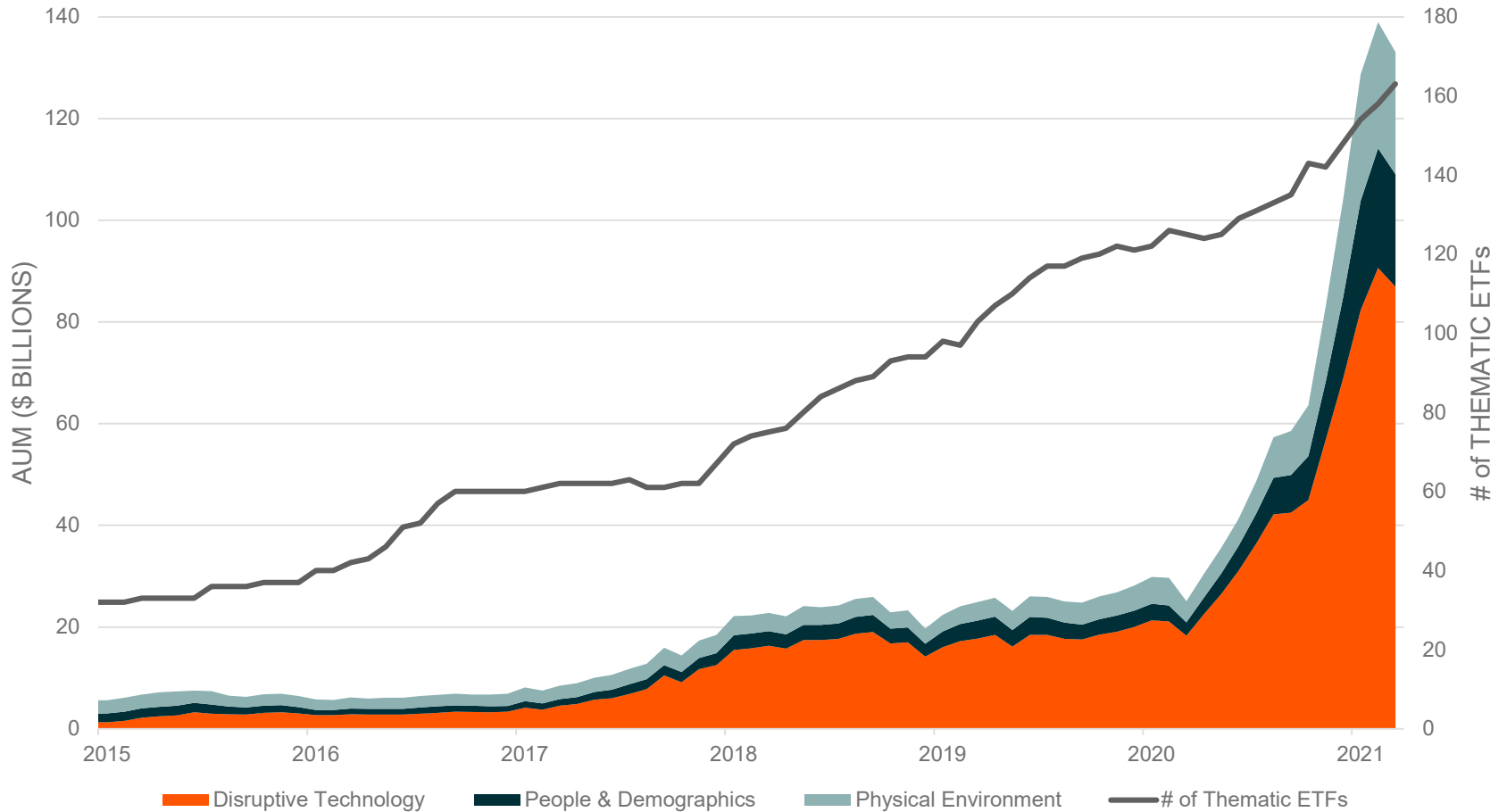


Thematic ETF Landscape

Category	Mega-Theme	Theme	Sub-Theme
Disruptive Technology	Big Data	Machine/Deep Learning	
		Cybersecurity	
		Quantum Computing	
	Mobility	Cloud/Edge Computing	Remote Work, MarTech
		Autonomous Vehicles	
		Electric Vehicles	Lithium/Batteries
	Digital Content	AR/VR	
		Video Games	E-sports
		Social Media	
		Streaming	
	FinTech	Mobile Payments	
		Peer-to-Peer Lending	
		Crowdfunding	
		Blockchain	
	Connectivity	Digital Infrastructure	
		5G/Next Gen Networking	
		Emerging Markets Internet	
		Internet of Things	Smart Devices, Smart Cities, IIoT
Space/Satellite Communications			
Robotics	AI/Automation		
	3D Printing		
	Drones		
People & Demographics	New Consumer	Millennials & Gen Z	
		Emerging Market Consumers	
		Urbanization	
		E-commerce	
		Education	
		Sharing/Gig Economy	
		Safety and Security	
		Cannabis	
		Sports Betting	
		Professional Sports	
	Health	Healthcare Innovation	Telemedicine & Digital Health, Genomics, Immunotherapy, Public Health
		Longevity	Senior Care, Senior Economy
		Health & Wellness	Obesity, Organics
		Emerging Markets Healthcare	
Physical Environment	Climate Change	CleanTech	
		Clean & Renewable Energy	Solar, Wind, Hydrogen
	Infrastructure Development	Resource Scarcity	Water, Waste/Recycling, Rare Earths, Sustainable Food

Thematic ETF Landscape: Q1 2021

At the end of Q1 2021, there were 163 thematic ETFs totaling \$133.1B in assets under management, up 28% from Q4 2020.

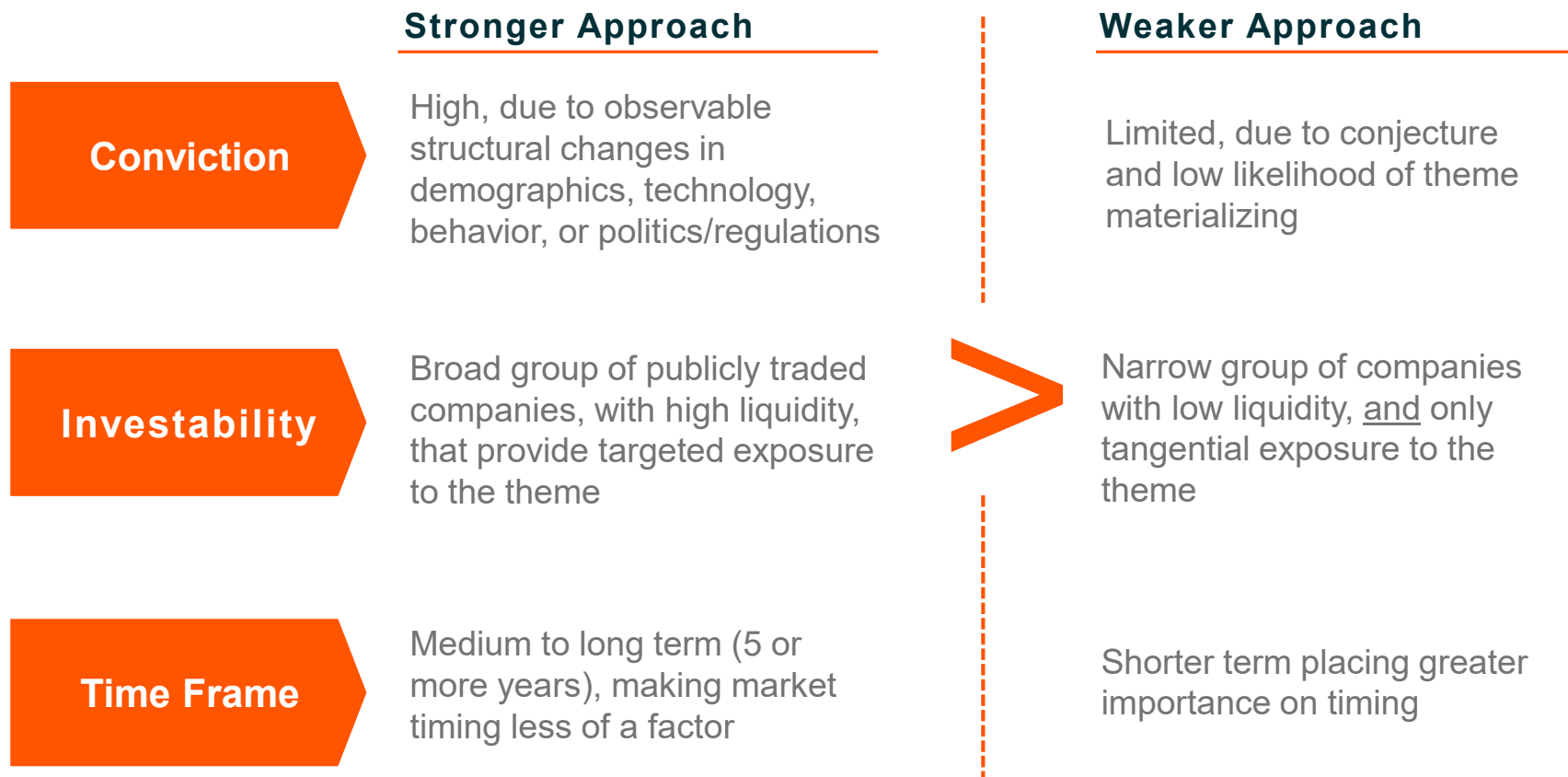


Source: Global X ETFs, Bloomberg. As of Mar 31, 2021.

Note: AUM includes assets of funds closed until the last month of trading activity.

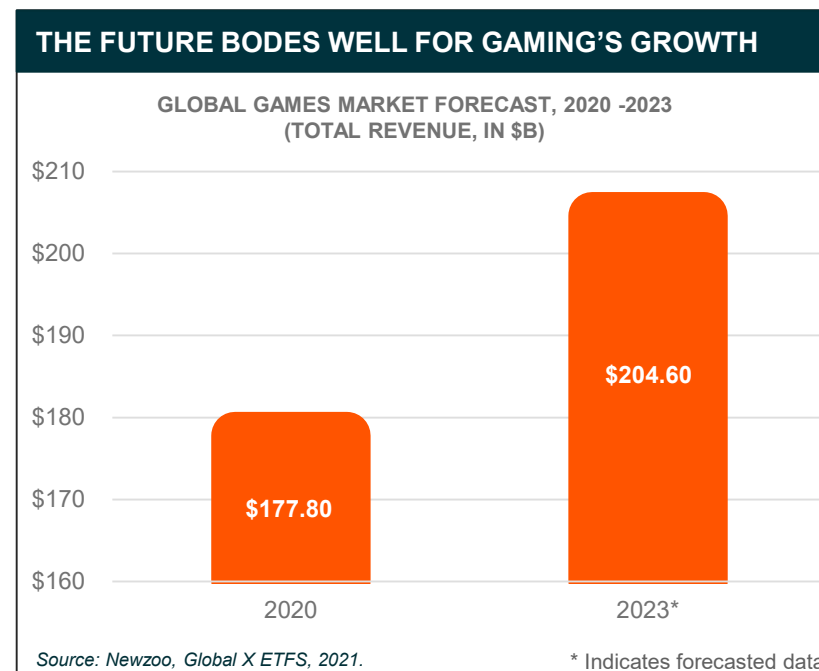
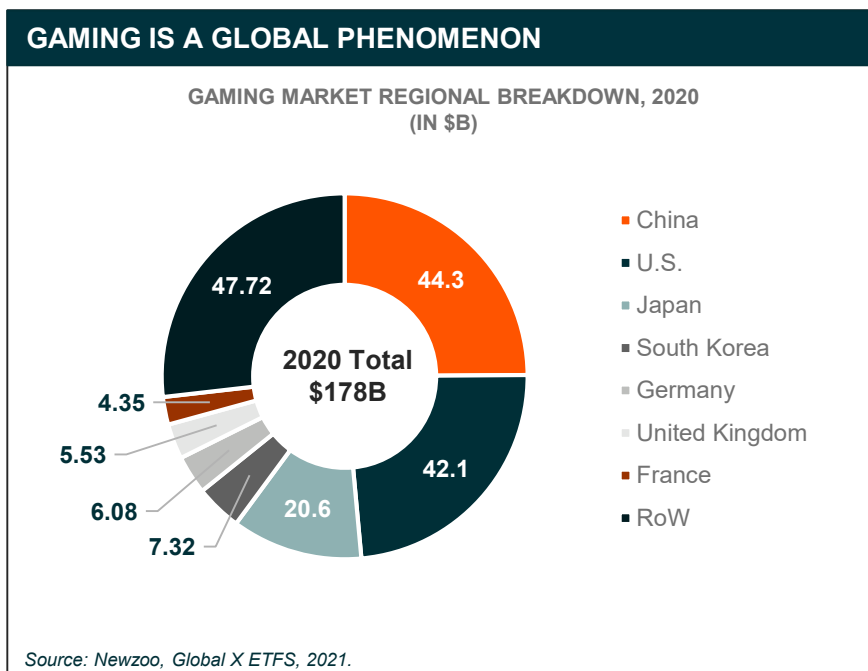
3 Steps for Choosing a Theme

Keys to approaching thematic investing: Look for high conviction themes, investments with high exposure to those themes, and a multi-year time frame.



Video Games & Esports: No Longer a Niche Industry

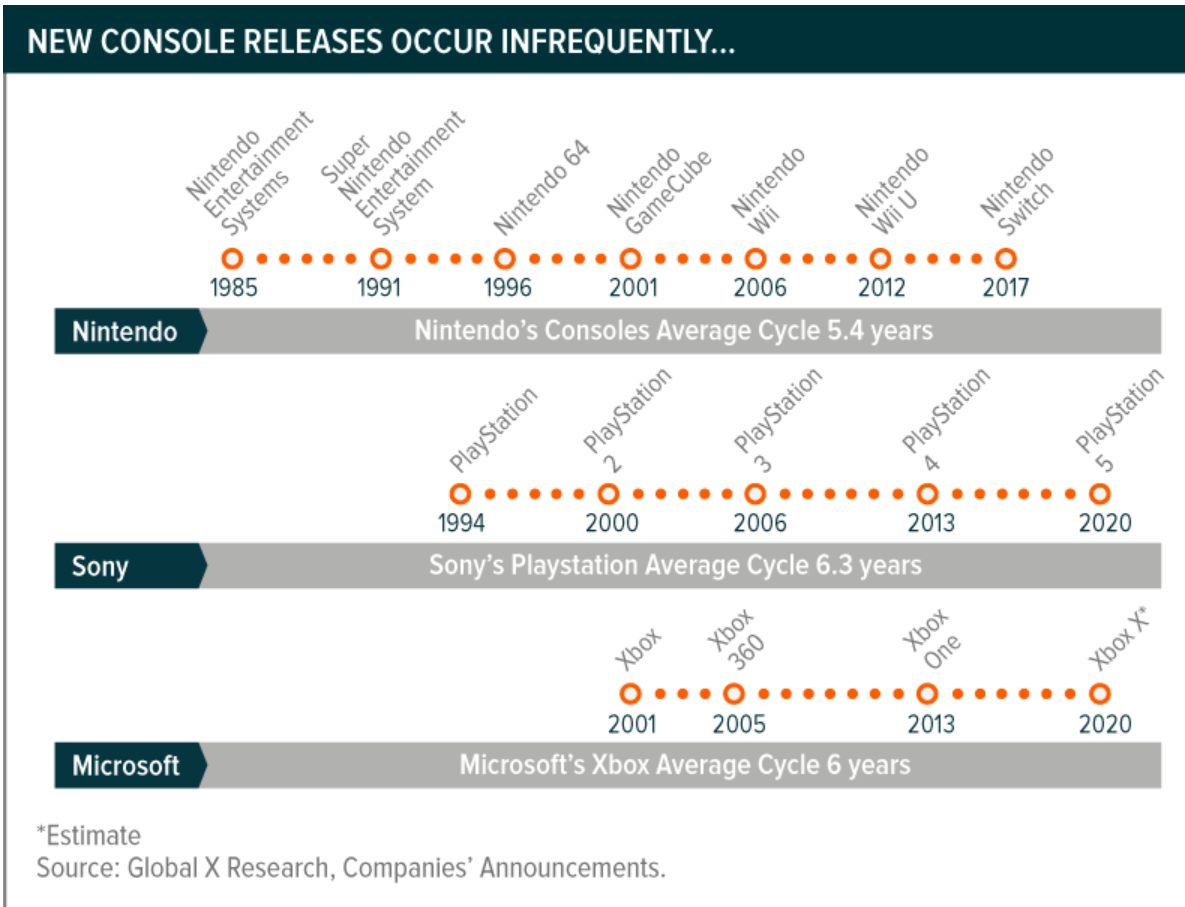
The last decade saw Video Games evolve from a niche industry to a global entertainment powerhouse.



1. The Hollywood Reporter, "2018 Box Office Revenue Soars to Record \$11.9B in the U.S., Hits \$42B Globally," Jan 2, 2019. 2. Howmuch.net, "Top Professional Sports Leagues by Revenue," Jul 1, 2016. 3. Market Watch, 2018. 4. Box Office Mojo, 2019.

Video Games & Esports: The Next Console Super-Cycle

Historically, the start of a new console generation has positive spillover effects that include increased game and accessory sales.



Console Hardware Sales¹

(AS OF MAY 2021)

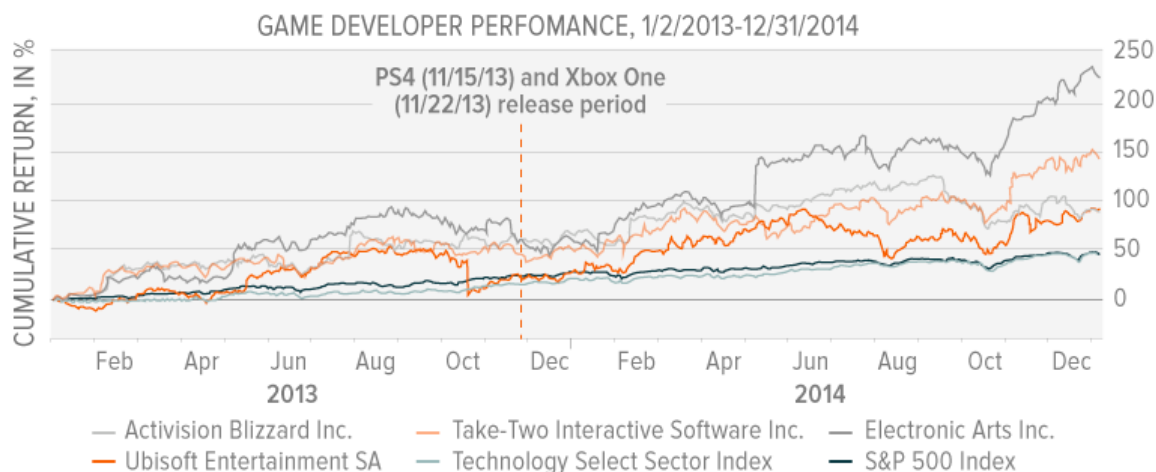
- Nintendo Switch: 86.11 million
- PlayStation 5: 8.64 million
- Xbox Series X/S: 5.12 million

1. VGChartz, 2021.

Video Games & Esports: The Next Console Super-Cycle (Cont.)

In 2020, the PlayStation 5 and Xbox Series X joined the Nintendo Switch for the 9th console generation, an event that could potentially accelerate industry revenues in the next years.

...BUT WHEN THEY DO OCCUR, THEY'VE COINCIDED WITH STRONG PERFORMANCE



Performance shown is past performance, based on the closing price of the securities and does not guarantee future results. The investment return and principal value of an investment will fluctuate so that an investor's shares, when sold, may be worth more or less than their original cost and current performance may be lower or higher than the performance quoted.

01/02/2013 - 12/31/2014			
Security	Price Change	Total Return	Annual Eq.
Activision Blizzard Inc. (ATVI)	84.1%	88.3%	37.3%
Take-Two Interactive Software Inc. (TTWO)	144.2%	144.2%	56.5%
Electronic Arts Inc. (EA)	223.2%	223.2%	80.1%
Ubisoft Entertainment SA (UBI)	91.0%	91.0%	38.3%
Technology Select Sector Index (IXT)	38.7%	44.4%	20.2%
S&P 500 Index (SPX)	40.8%	46.7%	21.2%

Source: Global X ETFs, Bloomberg, 2020.

Note: Annual Eq. stands for Annual Equivalent Rate is the rate of return on a annual basis after accounting for effects of compounding.

Video Games & Esports: Digital Distribution: Margin Profile Booster

In the early 2000s, buying a video game required gamers (or their parents) to go to the nearest retail distributor like a GameStop or Walmart. But that's changed. Today, approximately 83% of total video games sales are digital (excluding mobile revenues because those are virtually 100% digital).¹



Source: Global X ETFs, Newzoo.

Note: Distribution market share calculated based on consoles and PCs games. With mobile games, digital distribution would account for over 90% of total sales. Arrows indicate money flow.

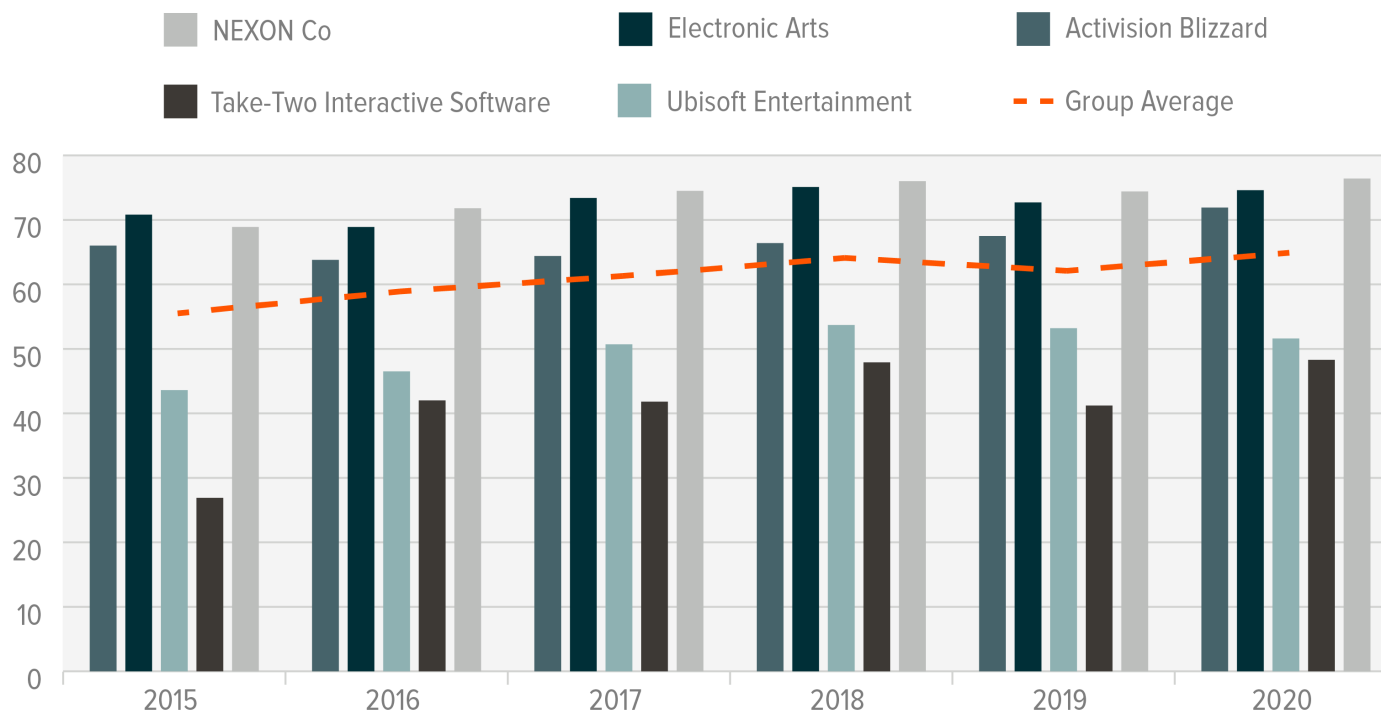
1. Newzoo, "Three Billion Players by 2023: Engagement and Revenues Continue to Thrive Across the Global Games Market," Jun 25, 2020.

Video Games & Esports: Digital Distribution: Margin Profile Booster (Cont.)

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SELECTED VIDEO GAME PUBLISHERS GROSS MARGINS (IN %)

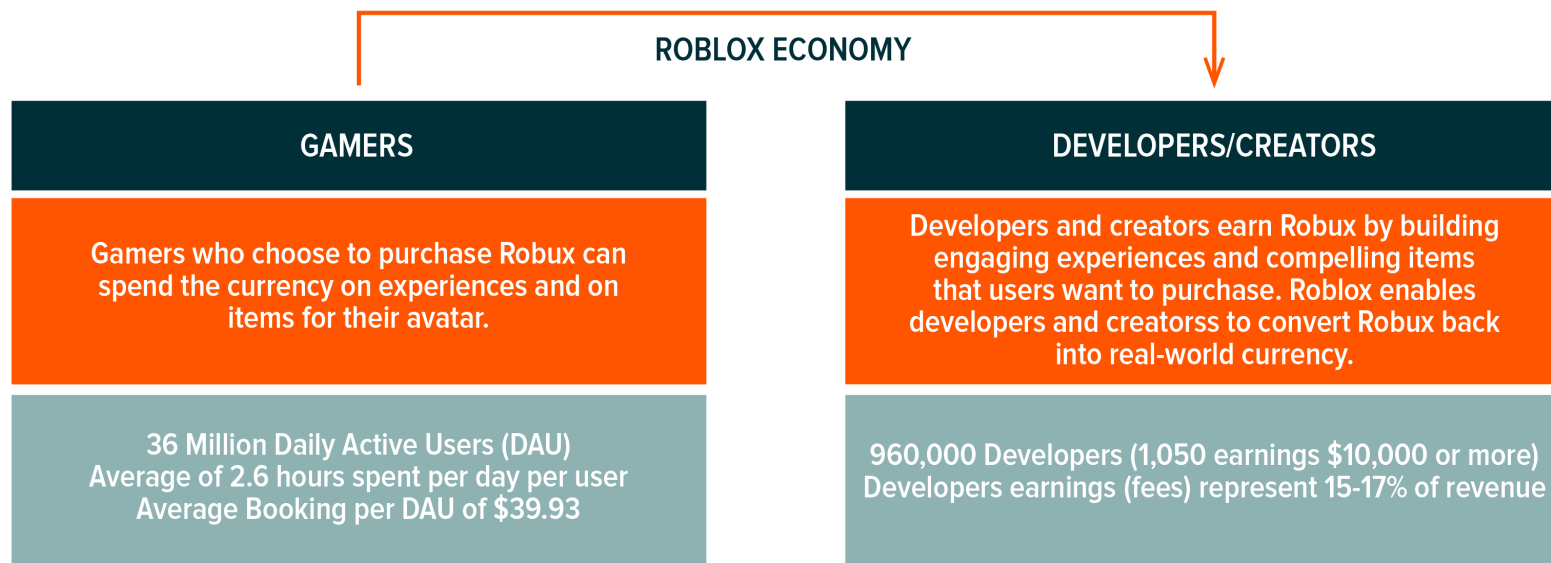
Source: Global X ETFs, FactSet. Based on Fiscal Years.



1. Newzoo, "Three Billion Players by 2023: Engagement and Revenues Continue to Thrive Across the Global Games Market," Jun 25, 2020.

Video Games & Esports: Social Gaming: Early Days of a Metaverse

As we look at the future of video games, enabling social experiences seems to be a core trait of successful titles. Video games are now effectively social media platforms that let gamers play and collaborate with one another. For companies, social gaming translates into greater engagement and greater monetization opportunities.



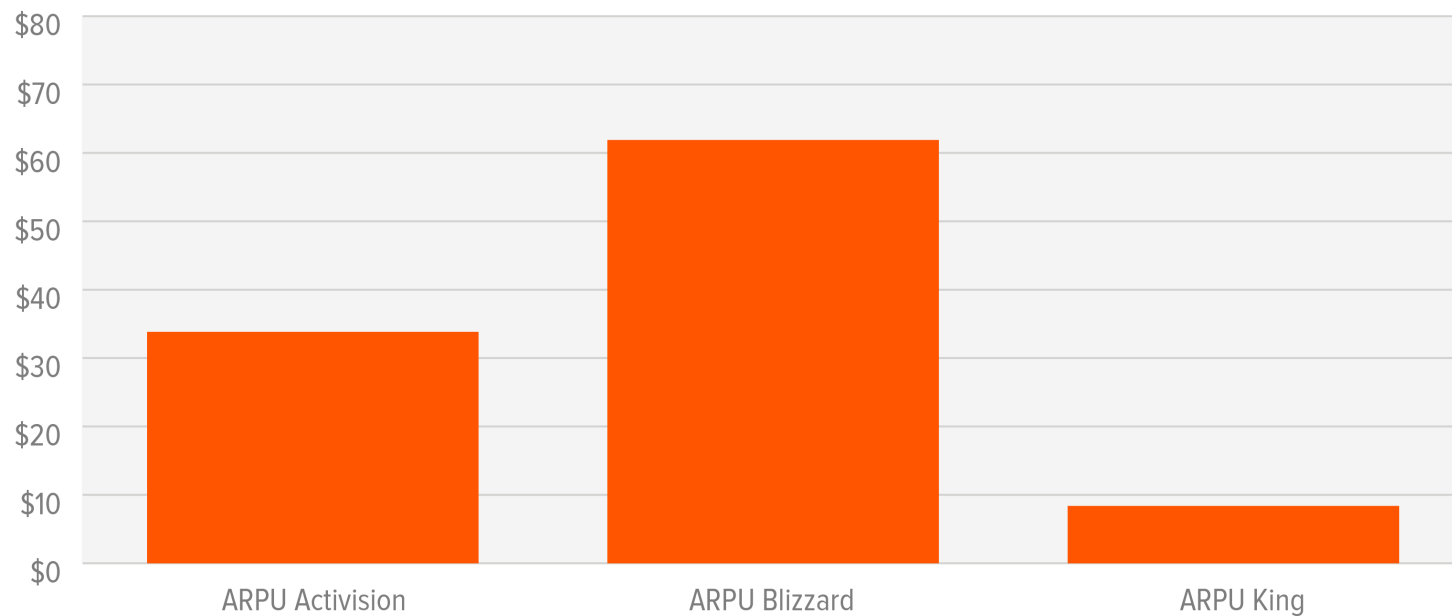
Source: Global X ETFs, Roblox. Data sourced from Roblox S-1 SEC Filing.

Video Games & Esports: Mobile Means One Download Away from Becoming a Gamer

Currently, mobile gaming monetization is much lower than for consoles and PCs. As the video game experience on mobile devices improves, video game publishers could benefit in two main ways. First, it could open the door for gamers to try games on consoles or PCs, where monetization is higher. And second, it could increase engagement, which often results in higher spending.

AVERAGE REVENUE PER USER (ARPU) BY SEGMENT

Source: Global X ETFs, Activision Blizzard's SEC Filings.

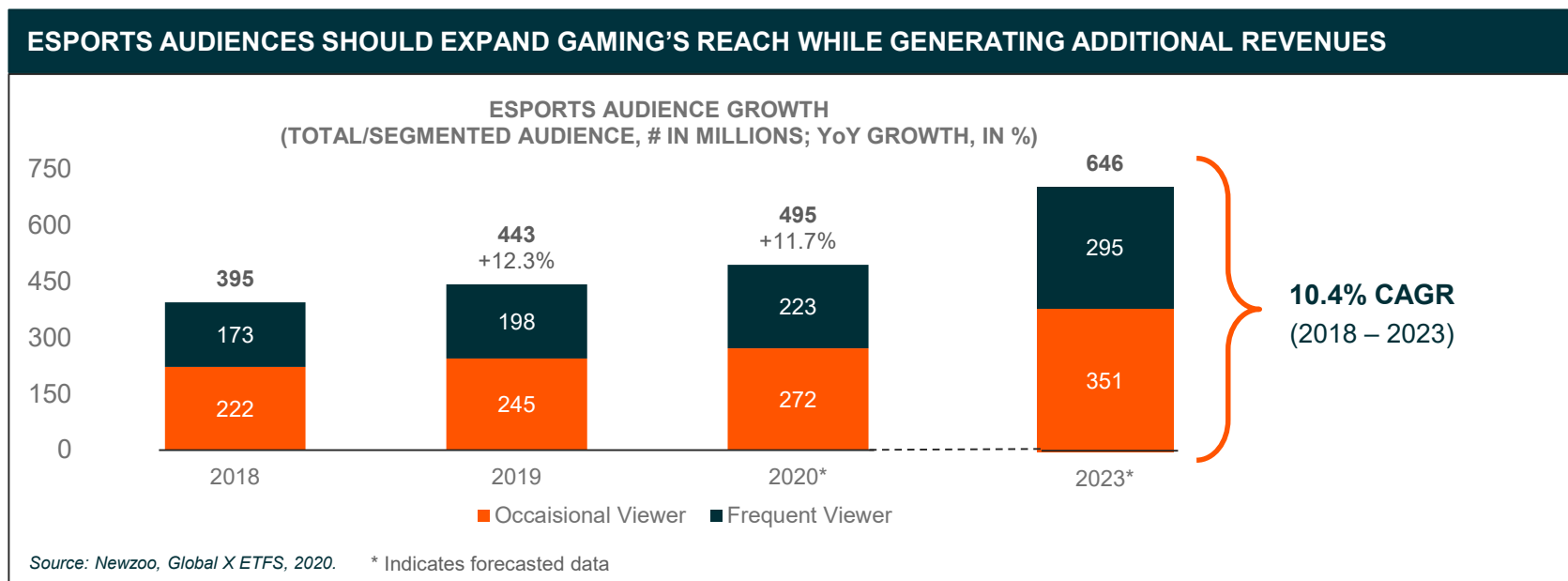


Video Games & Esports: A New Age of Entertainment

Esports (professional video gaming) drives gaming interest/engagement while also generating revenue.

Esports: Driver, Beneficiary, or Both?

- Revenue streams include those from sponsorships, media rights, tickets, publishing fees, and streaming
- Resilience to age-based performance concerns, well-suited for at-home economy
- Personalized viewing experience of viewers' favorite games
- Community engagement and integration with other technologies like social media



Global X Video Games & Esports UCITS ETF (HERU)

The Global X Video Games & Esports UCITS ETF (HERU) seeks to invest in companies that develop or publish video games, facilitate the streaming and distribution of video gaming or esports content, own and operate within competitive esports leagues, or produce hardware used in video games and esports, including augmented and virtual reality.



WHY HERU?



High Growth Potential

The ETF enables investors to access high growth potential through companies that are positioned to benefit from the increasing popularity of video games and esports.



ETF Efficiency

In a single trade, the ETF delivers access to dozens of companies with high exposure to the video game and esports theme.



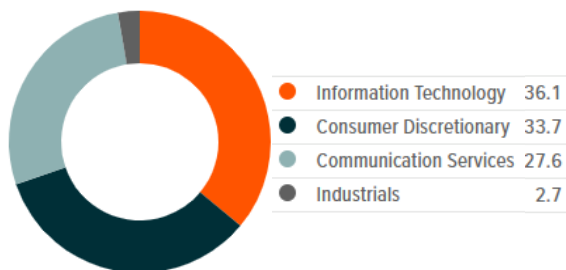
Unconstrained Approach

The ETF's composition transcends classic sector, industry, and geographic classifications by tracking an emerging theme.

KEY CHARACTERISTICS¹

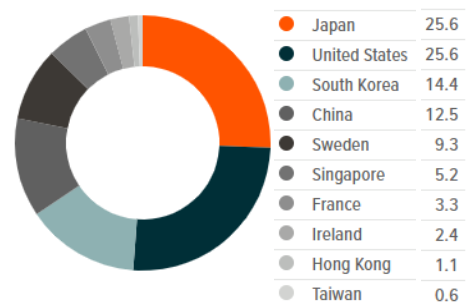
INDEX SUB-INDUSTRY BREAKDOWN¹

% OF NET ASSETS



INDEX COUNTRY BREAKDOWN¹

% OF NET ASSETS



TOP 10 INDEX HOLDINGS²

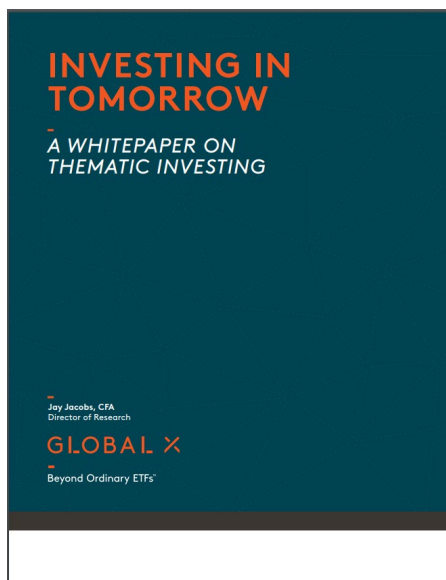
6.22	NVIDIA CORP
5.73	EMBRACER GROUP AB
5.20	SEA LTD-ADR
5.10	NETEASE INC-ADR
5.07	ZYNGA INC - CL A
4.93	ACTIVISION BLIZZARD INC
4.81	ELECTRONIC ARTS INC
4.69	KONAMI HOLDINGS CORP
4.59	NINTENDO CO LTD
4.27	TAKE-TWO INTERAC

1. Source: Altavista Research, As of May 31, 2021. 2. Holdings as of Jun 3, 2021.

Thank You!

Additional thematic research can be found online at:
globalxetfs.com/research, or on twitter:

- [@JayJacobsCFA](https://twitter.com/JayJacobsCFA)
- [@ALittle_gx](https://twitter.com/ALittle_gx)
- [@PPalandrani_gx](https://twitter.com/PPalandrani_gx)



What's Driving FinTech's Growth?

FinTech is emerging as a powerful theme in 2018, driven by the rapid adoption of cutting edge technologies across the financial services industry, such as digital payments and money transfers, financial software and automation, and alternative lending and funding platforms. In this piece, we look at the major trends that are propelling FinTech's growth, including:

- The digitalization of financial services
- The rising number of payment options at retailers
- Tapping into the emerging markets' middle class
- The expansion of FinTech beyond traditional financial services

Digitalization of Financial Services

Digitalization has changed how financial services firms interact with their customers and conduct their back-end operations. Historically, customers consolidated much of their financial needs at a single financial firm's local branch where they worked with the bank's staff to conduct deposits, loans, mortgages, and investments. With digitalization, customers now frequently access automated versions of these services online, allowing for more convenient and seamless experiences. According to a survey by PWC, 49% of consumers now conduct their banking primarily on their desktop or smartphone.¹ At the same time, the number of bank branches in the US has already shrunk by about 8% from their peak, and some analysts expect the number to fall by another 20% through 2027.²

Thematic ETF Report Q4 2019

Continuing the tradition of last quarter's inaugural Thematic ETF Report, the Global X research team is pleased to release the Q4 2019 edition. The report recaps Global X's classification system for disruptive themes and the thematic ETFs that track them. Further, the report provides industry-level analysis of the number of ETFs in the growing thematic space, new launches and closures, and trends in assets under management (AUM).

[Click here to download the Thematic ETF Report Q4 2019.](#)

Thematic ETF Landscape – Q4 Recap

As of the end of Q4 2019, thematic ETFs only represented 0.6% of the over \$4.4 trillion in AUM in the US ETF industry. Yet, it's proving to be a fast-growing space, with 121 thematic ETFs and \$278 billion in AUM in the aggregate. Thematic ETFs saw \$326.7 million in net inflows during the quarter and overall AUM for the space grew by \$2.7 billion (1%), boosted by performance. Dominant growth over value and a strong showing in the tech and health care sectors contributed to these gains.

During Q4, there were four single-theme ETF launches across four different themes: cybersecurity, gaming and esports, sustainable foods, and autonomous/electric vehicles. In addition, a multi-theme, fund of funds ETF launched with primary exposure to technology-related themes. From an AUM perspective, Disruptive Technology-related themes saw the most growth on an absolute basis (\$2.0B), followed by Physical Environment (\$0.6B) and People & Demographics (\$0.2B) related themes.

Introducing Global X's Thematic Classification System

Global X's research team established a thematic classification system that provides a consistent framework for identifying disruptive themes and categorizing the thematic ETF

Risk Information



The value of an investment in ETFs may go down as well as up and past performance is not a reliable indicator of future performance.

Trading in ETFs may not be suitable for all types of investors as they carry a high degree of risk. You may lose all of your initial investment. Only speculate with money you can afford to lose. Changes in exchange rates may also cause your investment to go up or down in value. Tax laws may be subject to change. Please ensure that you fully understand the risks involved. If in any doubt, please seek independent financial advice. Investors should refer to the section entitled “Risk Factors” in the relevant prospectus for further details of these and other risks associated with an investment in the securities offered by the Issuer.



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Thank you.