INVESTING IN TOMORROW

A WHITEPAPER ON THEMATIC INVESTING

Jay Jacobs, CFA
Director of Research

GLOBAL X

Beyond Ordinary ETFs™
INVESTING IN TOMORROW

ABOUT THE AUTHOR

Jay Jacobs, CFA
Director of Research

Mr. Jacobs leads the Global X research team, overseeing the firm's insights on the markets and ETFs, which can be found at www.globalxfunds.com/research. He is a frequent guest in the financial media, including Fox Business, CNBC, and Bloomberg. Prior to joining Global X, Jacobs was a business analyst at the NYSE in the ETF and Indexing Group, where he helped launch hundreds of new ETFs on the NYSE Arca trading platform. He is a CFA charterholder, holds a bachelor's degree from Emory University in international studies, and studied at The London School of Economics.

Follow Jay Jacobs on Twitter: @JayJacobsCFA

INTRODUCTION

Investors consistently face the question of whether history will repeat itself, or if this time will be different. Does one position their portfolio based on what they’ve learned from the past or make adjustments based on their expectations for a different future?

The recent proliferation of smart beta ETFs and related factor-based research has placed a substantial amount of attention on analyzing the past. The success of these strategies ultimately depends on information from historical stock patterns providing valuable clues to future stock movements. But equally as important should be preparing for a future that may look completely different to anything we are accustomed to.

This is where thematic investing comes in. It is a forward-looking investment approach that seeks to embrace the changes we anticipate happening in the world. When conducted properly, we believe thematic investing can help position a portfolio for an uncharted era of new technologies disrupting existing paradigms, demographics reshaping the needs of the world’s population, and shifting consumer behaviors forcing changes to existing business models.

In this whitepaper, we seek to help investors understand the intricacies of thematic investing and how to best approach the space.
TABLE OF CONTENTS

1. Why Your Portfolio Should Go Thematic
2. The Differences Between Cyclical and Structural Themes
3. What Does Thematic Growth Look Like?
4. Meet the Sector Disruptors
5. The Risk-based Argument for Thematic Investing
6. What Happens When Themes Converge?
7. Conclusion
INVESTING IN TOMORROW

WHAT IS THEMATIC INVESTING?

Thematic investing refers to the process of identifying powerful macro-level trends and the underlying investments that stand to benefit from the materialization of those trends. Many investors already apply principles of thematic investing, such as identifying investments that could benefit in a rising interest rate regime, in their portfolios. But thematic investing extends far beyond economic policies, and can potentially be most effective when used to identify opportunities in areas such as disruptive technologies, changing demographics, and evolving consumer behaviors.

“Thematic investing is about capitalizing on future trends. Its forward-looking nature stands in clear contrast to the more widely used market capitalization approach [which] assumes that past winners will continue to win out... Why is thematic investing a good idea? In a rapidly changing business environment, the winners will be those that anticipate trends and take advantage of new opportunities.”

– Towers Watson, “Thematic Investing”
Investors who apply a thematic investment approach are often returns-focused, either seeking to beat a relative benchmark (e.g., the S&P 500) or an absolute return benchmark over the long term. According to a recent report from UBS, “Investors who are willing to follow the insights of such long-term themes over multiple business cycles can benefit from potential mispricing created by the typically shorter-term focus of financial markets.”

Beyond serving merely as a growth play, themes can also be utilized to relate investing to an end-client, as some prefer making allocation decisions based on things they know and can observe. According to respondents in our 2017 Beyond Baby Boomers: The Investable Assets of Tomorrow survey, 83% of affluent US Millennials expressed that they are extremely interested or very interested in thematic investing as a part of their portfolios.

Some investors have also used thematic strategies as a form of hedging risk, such as a pension fund with high exposure to oil prices investing in companies in the renewable energy space, which could succeed at oil’s expense.

### Interest in Thematic Investing Trends

Q: “Which of the following categories of thematic investing interests you most?”

<table>
<thead>
<tr>
<th>Category</th>
<th>% Extremely / Very Interested</th>
</tr>
</thead>
<tbody>
<tr>
<td>Long Term Demographic Trends</td>
<td>40%</td>
</tr>
<tr>
<td>Companies That Align With Your Personal Values</td>
<td>31%</td>
</tr>
<tr>
<td>Disruptive Technologies</td>
<td>29%</td>
</tr>
</tbody>
</table>

#### Results

- **Millennials**
  - Long Term Demographic Trends: 40%
  - Companies That Align With Your Personal Values: 31%
  - Disruptive Technologies: 29%

- **Gen X**
  - Long Term Demographic Trends: 28%
  - Companies That Align With Your Personal Values: 37%
  - Disruptive Technologies: 34%
“Looking forward, we believe that thematic investing can outperform in the brave, new, post-QE world; that early, contrarian theme adopters can benefit from its low frequency investment style; and that capital flows are increasingly theme driven.”

– Merrill Lynch, “The Thundering World”

KEYS TO SUCCESS

Successfully implementing a thematic investment strategy requires correctly identifying structural shifts, finding companies with high exposure to those shifts, and timing the theme so as to enter early enough that earnings and forecasts have not fully priced in the theme’s potential. In a report on the rising usage of thematic investing among institutional investors, McKinsey & Company recommended that “Investors should assess the high-level attractiveness of the theme and make sure there are... companies whose businesses are heavily exposed to the theme…”, and an investor must then monitor the theme “over time to find the right entry (and exit) points.”

In the table below, we list out what we believe are characteristics of better and worse approaches to thematic investing, based on conviction, investability, and time frame.

<table>
<thead>
<tr>
<th>BETTER APPROACH</th>
<th>WORSE APPROACH</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>CONVICTION</strong></td>
<td><strong>WORSE APPROACH</strong></td>
</tr>
<tr>
<td>High, due to observable structural changes in demographics, technology, behavior, or politics/regulations</td>
<td>Limited, due to conjecture and low likelihood of theme materializing</td>
</tr>
<tr>
<td><strong>INVESTABILITY</strong></td>
<td><strong>INVESTABILITY</strong></td>
</tr>
<tr>
<td>Broad group of publicly traded companies, with high liquidity, that provide targeted exposure to the theme</td>
<td>Narrow group of companies with low liquidity, and only tangential exposure to the theme</td>
</tr>
<tr>
<td><strong>TIME FRAME</strong></td>
<td><strong>TIME FRAME</strong></td>
</tr>
<tr>
<td>Medium to long term, making market timing less of a factor</td>
<td>Shorter term placing greater importance on timing</td>
</tr>
</tbody>
</table>
AN UNCONSTRAINED APPROACH

A thematic approach differs from traditional portfolio construction in that it breaks out from the grid-like method of asset allocation. According to a whitepaper from RBC, “Thematic investing ignores geographical boundaries, style biases and market capitalization, and it transects traditional sector classifications. This provides investors with a distinctive strategic advantage: The ability to look across all geographies to identify emergent and potentially rewarding investment trends.” Given thematic investing’s agnostic approach to geographies and sectors, it can have low correlations to other portfolio strategies, which can be particularly useful for investment managers seeking to diversify sources of growth.

ETFs & THEMATIC INVESTING

Many investors are already familiar with the inherent advantages of ETFs, including the typically lower costs of index-based investment strategies compared to actively managed funds, and the tax efficiency and transparency ETFs versus traditional Mutual Funds. Within the context of thematic investing these advantages still play a large role.

An additional key benefit to using thematic ETFs is the ability to access dozens of companies around the world with a single trade. Traditionally, thematic investing has been limited to more sophisticated institutional investors due to the research required to pinpoint companies with high exposure to a theme and the need to access a variety of international markets for themes that are global in nature. Thematic ETFs track indexes that take care of the security selection part of the process and can provide access to a broad set of companies around the world with exposure to a particular theme.
INVESTING IN TOMORROW

THE DIFFERENCE BETWEEN CYCLICAL AND STRUCTURAL THEMES

Thematic investing is often used quite broadly to describe a forward looking investment approach, but we believe it’s important to distinguish between two distinct types of themes given their different characteristics.

- CYCLICAL THEMES: occur at somewhat regular short- or medium-term intervals, typically based on changes in the business cycle. These cyclical trends can be mean-reverting, so that over a long period of time they tend to converge with some average level. Examples can include asset valuations, volatility, interest rates, and currency values.

- STRUCTURAL THEMES: occur as one-off shifts that change an existing paradigm. These structural changes tend to be longer-term in nature and are typically driven by powerful forces such as disruptive technologies or changing demographics and consumer behavior.
Some areas can be affected by both cyclical and structural trends. Employment levels, for example, can cyclically fluctuate with the economy, as employment typically suffers in recession and benefits from expansion. Structural trends in employment can also occur, such as declining workforce participation rates due to aging populations.

Technology firms can similarly be affected by both cyclical and structural trends. On the cyclical side, tech firms demonstrate sensitivity to economic growth, benefitting from increased personal and business spending. Tech can also participate in structural trends, such as driving advancements in robotics and artificial intelligence that are expected to have a far reaching impact on industrial manufacturing processes, transportation, health care, and other segments of the economy.

We believe long-term investors should prioritize identifying structural themes rather than cyclical ones. Given the longer-term nature of these themes and their disruptive nature, we have found that structural themes can be less dependent on timing entry and exit points and can be significantly more powerful in magnitude.
A THEORY ABOUT DISRUPTIVE TECHNOLOGY

The Diffusion of Innovation Theory, developed by E.M. Rogers, holds that disruptive technologies, products, and ideas tend to follow an ‘S’ shaped adoption curve with five stages.

1. Adoption starts slowly, as only a small group of Innovators take a flier on a new technology before it is proven or widely accepted. Consider this group the buyers of the first Apple Watch, the original Tesla Roadster, or in a failed scenario, Google Glass.

2. The next stage is for the slightly larger group of Early Adopters to come in, who accelerate the technology’s growth and evangelize its value via word of mouth. This is often considered the tipping point in a technology’s acceptance, as the Early Adopters must convince the bulk of the population that a particularly technology is worthwhile. Currently, 4k TVs fall in this bucket, with approximately 16% adoption.7

3. Moving to the Early Majority, we reach the part of the Adoption S-curve where the slope is the steepest, and hence the rate of adoption is at its fastest. In this phase, sales growth tends to explode. At a 36% adoption rate, wireless headphones are likely in this category.8

4. Adoption continues growing at a solid pace as the Late Majority are convinced to participate, and the technology appears seemingly almost everywhere. With 81% adoption, social media is likely somewhere in the Late Majority stage.9

5. Finally, the Laggards, or the holdouts, begrudgingly acquiesce and accept/adopt a technology. We might remember this group as the Blackberry keyboard truthers who eventually caved and bought a full screen smart phone. By this point, however, sales growth has cooled off and virtually all of the potential market for a product has been captured.
In practice, the ‘S’ curve prediction has held up fairly accurately. Not all products or new technologies follow the same ‘S’ shape, but by and large, historical adoption patterns for disruptive technologies and products have followed a general ‘S’ shape, as demonstrated in the chart below.

The shape of this ‘S’ can be influenced by a variety of factors, including the speed of technological advancements, cost curves, regulations, competition, or even social norms. Some may never experience an ‘S’ at all, as technologies often fail to make it past the Innovators or Early Adopters stages, even if it is a superior product (apologies to Betamax fans).

**WHAT DOES THIS MEAN FOR INVESTORS?**

The relationship between an adoption curve and stock prices is not always a direct one. Many factors can come into play that introduce differences, such as companies taking losses to build market share, intense competition, or unproven business models. In social media, for instance, firms tend to prioritize building their user base before inundating users with ads. Therefore, the adoption curve tends to noticeably precede revenue growth. Earnings can lag even further behind, as many high growth companies look to plow their cash flows back into their businesses.

Yet while there may not be a direct relationship, investors can certainly take certain cues from the adoption curve. For example, knowing where a product or technology is in its adoption can help signal general risks and characteristics of an investment. For example, if a technology is still clearly in its Innovators stage, an investment may likely resemble more of a venture capital-like risk and return profile, given high potential returns, but also a high possibility of failure. At the other end of the spectrum, a technology that is nearly ubiquitous in the Late Majority or Laggards phase is very well established, but has less upside.

For growth-seeking investors, we believe finding tech that is somewhere between the Early Adopters and Early Majority stages could prove to be a “sweet spot.” In this range, growth potential is still high and accelerating, but the technology has undergone some level of vetting and has proven itself to a meaningful portion of the population.
At first glance, equity sectors appear to be relatively consistent over time. While the economy evolves, Consumer Discretionary companies are always there to help us spend our disposable income. Energy firms are always there to fuel our vehicles to get us from point A to point B. In fact, in recent history, there has only been one major change to the Global Industry Classification Standard (GICS). In 2016, Real Estate was broken out as a distinct sector from Financials. In 2018, the telecommunications sector will be overhauled and renamed “Communications.” The relative constancy of sectors over time can be valuable to investors looking to manage macro-level risks and correlations.

Yet within each sector, change is unending. As powerful structural themes emerge, one era gives way to the next, and former sector bellwethers are often left behind. The desktop computer giants of the 1990’s, like Dell and Compaq, were ultimately replaced by the mobile device makers and social media companies of the 2010’s, like Apple and Facebook. This is part of natural economic Darwinism. Comparing major sector indexes to their compositions 18 years ago shows just how much sectors can organically change over time. The 2016 composition of the sector indexes referenced in the following graph on the next page bear little resemblance to their 1998 iterations, with each sharing nearly half or less in overlap to their older selves.
While turnover at the sector level occurs naturally over time, we believe we are in the early stages of a major period of sector-level disruption, given rapid advancements in technology and changing consumer preferences. Falling computing costs, the rise of artificial intelligence, and greater connectivity are dramatically changing how companies operate, and the products that they sell. Similarly powerful themes are stemming from changing consumer habits, as a new generation of spenders reach peak earning years, yet spend their money differently than generations before them. As a result of these emerging themes, the sector bellwethers of today look increasingly at risk of being replaced by companies positioning for the next paradigm.
While many investors may be looking to potentially benefit from these paradigm shifts, we believe traditional sector funds are ill-equipped to help investors do so. The traditional sectors tend to favor the winners of the past, tilting exposure to the firms that have already successfully capitalized on a specific economic paradigm. As the powerful macro-level themes mentioned above begin to accelerate, a new set of companies are likely to eventually rise to the top of each sector. Rather than waiting for traditional sector funds to cycle out of the old guard of companies in favor of new leaders, we believe investors can potentially pre-empt these changes by targeting Sector Disruptors: thematic ETFs that invest in companies that are well-positioned to be a step ahead of the status quo in developing revolutionary technologies or catering to a rising consumer base.

<table>
<thead>
<tr>
<th>TRADITIONAL SECTOR</th>
<th>OLD PARADIGM</th>
<th>SECTOR DISRUPTOR</th>
<th>NEW PARADIGM</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer Discretionary</td>
<td>Consumer firms primarily target the spending preferences of baby boomers and Gen Xers, appealing to suburban lifestyles and material wants.</td>
<td>Millennials</td>
<td>Millennials are set to see their incomes rise and inherit trillions from the baby boomer generation. Their unique spending preferences, such as living in cities and favoring experiences, are expected to radically alter what types of products are sold and how they are bought.</td>
</tr>
<tr>
<td>Energy</td>
<td>The energy sector largely revolves around the extraction and sale of fossil fuels.</td>
<td>Lithium &amp; Battery Tech</td>
<td>Falling costs and rising production of Lithium-ion batteries is leading the shift to renewable energy and electric vehicles.</td>
</tr>
<tr>
<td>Financials</td>
<td>Financial firms primarily rely on employee skills to effectively allocate financial capital and provide services to customers.</td>
<td>FinTech</td>
<td>FinTech allows financial firms to leverage cutting edge technology to reduce costs, improve decision making and risk controls, remove middlemen, and enhance customer experiences.</td>
</tr>
<tr>
<td>Health Care</td>
<td>Health care systems are designed to treat symptoms or ailments once they occur.</td>
<td>Health &amp; Wellness</td>
<td>Increasing lifespans and rising health care costs are driving people to proactively improve their health, through physical activity, healthy eating, and greater mindfulness of their well-being.</td>
</tr>
<tr>
<td>Industrials</td>
<td>Manufacturers provide workers with tools and training to complete tasks in an efficient and consistent manner.</td>
<td>Robotics &amp; AI</td>
<td>Advancements in robotics &amp; AI are making machines smarter and more capable than ever before, allowing robots to take on increasingly sophisticated tasks for faster and more accurate production.</td>
</tr>
<tr>
<td>Information Technology</td>
<td>The technology ecosystem largely revolves around computers, servers, and mobile devices communicating with each other.</td>
<td>Internet of Things</td>
<td>Declining chip costs and improving connectivity allows for virtually any object to connect to internet-enabled networks, effectively turning anything into a connected device.</td>
</tr>
<tr>
<td>Telecommunications</td>
<td>People communicate or consume information primarily through traditional mediums like phone, TV, or radio.</td>
<td>Social Media</td>
<td>People around the world are communicating and sharing information at a rapidly growing pace via new channels such as mobile video, chat, photos, podcasts, and blogs.</td>
</tr>
</tbody>
</table>
Many consider thematic investing to be a growth-oriented strategy, seeking to benefit from the emergence of powerful structural trends. Yet investors may also view thematic investing through the lens of potential risk reduction— not necessarily through traditional financial risk metrics like volatility and drawdowns, but as a method for hedging against long term external risks.

To illustrate this point, consider a pension plan for employees of an oil company. The pension plan depends on annual contributions from its sponsor, the oil company, to fund its obligations. If oil prices fall meaningfully, the sponsor could face financial stress, and contributions risk being cut. Therefore the pension plan inherently has risks associated with oil prices. As a result, a fund may actively look for ways to hedge the risk of an oil decline.
One approach could be to take short positions in oil futures, which could mitigate the impact of a near-term oil price decline. But given the long time horizons of most pension funds, the plan may also want to hedge against a longer term, secular oil price decline. One possible solution is to invest thematically in emerging technologies or materials that pose an existential threat to oil, like the rise of renewable energy sources or lithium and battery technology. This is in fact a tactic employed by Norway’s sovereign wealth fund. Because it depends heavily on oil revenues, the fund’s managers announced that they would “roughly double its environmentally related investments... [including] companies active in renewable energy, energy efficiency, pollution control.” By investing in these themes, the fund managers hope to position the fund for an era where renewables could replace oil as the world’s premier energy source.

These same principles can apply to individual investors when one considers the question: “what are the risks to my future financial well-being?” While there are dozens of possible answers ranging from an economic downturn, to personal health issues, or natural disasters, few of these risks can be effectively mitigated over the long term. Yet there are certain risks that could be. For example, people who work in a job that is at high risk of automation face a potential threat to their future income because of advancements in robotics and artificial intelligence. Rather than allowing this risk to remain unaddressed, they could attempt to mitigate this risk by investing in companies that stand to benefit from the rise of these technologies.

From another perspective, a couple close to retirement could be concerned about longevity risk, or the risk of outliving their savings. This risk may be particularly acute given rapidly rising health care costs and uncertainty around potential changes in health care policy. In an effort to hedge this risk, the couple may consider investing in companies that should be well-positioned to benefit from the trend of people living longer around the world. This way, if health care costs rise and average lifespans continue to increase, the couple may realize some benefit through stock price appreciation of these longevity-related companies.

While thematic investing is not a perfect hedge, it may serve as a useful counterweight to some of the longer term risks certain investors face. Given the rapid rate of technological advances, uncertainty around government policy, and concern about the future availability of natural resources, we believe investors could be well-suited to consider thematic investing as a means for positioning a portfolio to potentially benefit from these rise of these disruptive themes.
It's important not to lose sight of the fact that effective themes rarely emerge in isolation. For example, it's no coincidence that consumers are becoming more focused on health and wellness, while at the same time people are living longer around the world. Nor is it happenstance that social media firms are reporting record revenues, just as Millennials are beginning to see their earnings and consumption power accelerate. As investors vet various themes for possible inclusion in a portfolio, they may be well served by targeting similarly interconnected ideas. Researchers from McKinsey & Company, for example, wrote: “In our experience, the most attractive opportunities are found when multiple themes converge and reinforce one another.”

Why do we believe in targeting interconnected themes? The most disruptive technologies and powerful trends often require multiple themes to emerge simultaneously. For example, the development of autonomous vehicles not only depends on advancements in robotics and artificial intelligence to operate vehicles, but also on the maturation of the internet of things so an array of sensors can analyze driving conditions and interact with other cars, not to mention improvements in lithium and battery technology for cars to be able to efficiently refuel themselves. The interdependence of these technologies has no doubt contributed to their synchronous advancement. For example, many believed a limiting factor in the emergence of driverless cars was the high cost of batteries required to travel long distances. In response, however, battery producers have begun to dramatically increase production to scale down per-unit costs.

In the following chart, we highlight the specific themes targeted by Global X’s Thematic Technology ETFs & People ETFs and demonstrate how various new technologies and trends are connecting these themes together.
LONGEVITY
Lifespan are increasing around the world and the senior population is growing rapidly

MEDICAL DEVICE IMPLANTS

HEALTH OPTIMIZATION

LITHIUM
Mobile devices and electric vehicles are creating massive demand for lithium and batteries

FITNESS TRACKERS

AUTONOMOUS VEHICLES

HEALTH & WELLNESS
Consumers are spending more money on eating healthy and exercising

LITHIUM
Mobile devices and electric vehicles are creating massive demand for lithium and batteries

HEALTH OPTIMIZATION

LIFESPANS
Lifespan are increasing around the world and the senior population is growing rapidly

FITNESS TRACKERS

INTERNET OF THINGS
A wide range of ordinary items are now connected to the internet to collect data and be controlled remotely

LONGEVITY
Lifespan are increasing around the world and the senior population is growing rapidly

SLOW-CASUAL RESTAURANTS & ACTIVE LIFESTYLE BRANDS

INTERNET OF THINGS
A wide range of ordinary items are now connected to the internet to collect data and be controlled remotely

FAST-CASUAL RESTAURANTS & ACTIVE LIFESTYLE BRANDS

LITHIUM
Mobile devices and electric vehicles are creating massive demand for lithium and batteries

HEALTH & WELLNESS
Consumers are spending more money on eating healthy and exercising

MILLENIALS
Largest U.S. generation has unique preferences and increasing spending power

HEALTH & WELLNESS
Consumers are spending more money on eating healthy and exercising

MILLENIALS
Largest U.S. generation has unique preferences and increasing spending power

FITNESS TRACKERS

SOCIAL MEDIA
Revolutionary platforms are changing how people communicate, share, and consume media around the world

AUTONOMOUS VEHICLES

ROBOTICS & ARTIFICIAL INTELLIGENCE
A variety of businesses are turning to robots and AI to improve efficiency or reduce costs

TELE-HEALTH

ROBOTICS & ARTIFICIAL INTELLIGENCE
A variety of businesses are turning to robots and AI to improve efficiency or reduce costs

FAST-CASUAL RESTAURANTS & ACTIVE LIFESTYLE BRANDS

INTERNET OF THINGS
A wide range of ordinary items are now connected to the internet to collect data and be controlled remotely

MOBILE PAYMENTS

FINTECH
New technology solutions are disrupting antiquated financial firms or improving their efficiency

MOBILE PAYMENTS

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MILLENNIALS
Largest U.S. generation has unique preferences and increasing spending power

CROWD-FUNDING

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Revolutionary platforms are changing how people communicate, share, and consume media around the world

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ROBO-ADVISORS

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ROBO-ADVISORS

FITNESS TRACKERS
‘Conclusion’ may be the wrong word for the end of a whitepaper on thematic investing. As the pace of change in the world appears to only be accelerating, there will be an ever-changing landscape of thematic opportunities as new themes emerge and older themes mature. Therefore ‘the book’ on thematic investing will never by truly finished. Yet our hope is that the analyses, examples, and frameworks provided above help equip investors to better capitalize on tomorrow’s trends.

To keep up to date with our latest research and insights on the thematic space, please visit our research blog at www.globalxfunds.com/research.

RELATED ETFs

<table>
<thead>
<tr>
<th>TICKER</th>
<th>FUND NAME</th>
<th>BRIEF DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>SOCL</td>
<td>Social Media ETF</td>
<td>Provides investors access to Social Media companies around the world.</td>
</tr>
<tr>
<td>FINX</td>
<td>FinTech ETF</td>
<td>Seeks to invest in companies on the leading edge of the emerging financial technology sector.</td>
</tr>
<tr>
<td>SNSR</td>
<td>Internet of Things ETF</td>
<td>Companies that stand to potentially benefit from the broader adoption of the Internet of Things.</td>
</tr>
<tr>
<td>BOTZ</td>
<td>Robotics &amp; A.I. ETF</td>
<td>Companies that potentially stand to benefit from increased adoption and utilization of robotics and artificial intelligence.</td>
</tr>
<tr>
<td>LIT</td>
<td>Lithium &amp; Battery Tech ETF</td>
<td>Invests in the full lithium cycle, from mining and refining the metal, through battery production.</td>
</tr>
<tr>
<td>PAVE</td>
<td>U.S. Infrastructure Development ETF</td>
<td>Invests in companies that stand to benefit from a potential increase in infrastructure activity in the United States.</td>
</tr>
<tr>
<td>MILN</td>
<td>Millennials Thematic ETF</td>
<td>Companies that have a high likelihood of benefiting from the rising spending power and unique preferences of the U.S. Millennial generation.</td>
</tr>
<tr>
<td>LNGR</td>
<td>Longevity Thematic ETF</td>
<td>Companies positioned to serve the world’s growing senior population through exposure to sectors that contribute to increasing lifespans and extending quality of life in advanced age.</td>
</tr>
<tr>
<td>BFIT</td>
<td>Health &amp; Wellness Thematic ETF</td>
<td>Seeks to harness the effects of changing consumer lifestyles by investing in companies geared toward promoting physical activity and well-being.</td>
</tr>
</tbody>
</table>
Investing involves risk, including the possible loss of principal. There is no guarantee the strategies discussed will be successful. International investments may involve risk of capital loss from unfavorable fluctuation in currency values, from differences in generally accepted accounting principles or from economic or political instability in other nations. Emerging markets involve heightened risks related to the same factors as well as increased volatility and lower trading volume. Narrowly focused investments may be subject to higher volatility.

There are additional risks associated with investing in lithium and the lithium mining industry.

Investments in infrastructure-related companies have greater exposure to the potential adverse economic, regulatory, political and other changes affecting such entities. Investment in infrastructure-related companies are subject to various risks including governmental regulations, high interest costs associated with capital construction programs, costs associated with compliance and changes in environmental regulation, economic slowdown and excess capacity, competition from other providers of services and other factors.

LNGR invests in securities of companies engaged in Healthcare, Pharmaceutical, Biotechnology and Medical Device sectors. These sectors can be affected by government regulations, expiring patents, rapid product obsolescence, and intense industry competition.

SOCL invests in securities of companies engaged in the social media industry. The risks related to investing in such companies include disruption in service caused by hardware or software failure; interruptions or delays in service by third-parties; security breaches involving certain private, sensitive, proprietary and confidential information managed and transmitted by social media companies; and privacy concerns and laws, evolving Internet regulation and other foreign or domestic regulations that may limit or otherwise affect the operations of such companies. The business models employed by the companies in the social media industry may not prove to be successful.

FINX, SNSR, BOTZ and MILN invest in securities of companies engaged in Information Technology which can be affected by rapid product obsolescence, and intense industry competition.

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