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Here's an Investment Theme: Be Wary of Investment Themes

A thematic ETF's investment thesis sounds compelling. It's an obvious growth story. And its name is so darn clever. Which means only one thing. Hold onto your wallet.

Pete Chiappinelli, CFA, CAIA, Partner & Chief Investment Officer

Thematic ETFs - Exchange Traded Funds, or baskets of stocks and companies focused on a narrow theme, trend, or concept - tap into our deep desire for spicy growth stories. Artificial intelligence. Trillions needed for rebuilding American infrastructure. Insatiable demand for lithium in a world of EV (Electric Vehicle) batteries. The "Graying of America" with companies positioned to benefit from the inexorable aging of baby boomers. Their narratives are compelling, dotted with the promise of unbridled growth or monstrous market size. These thematic ETFs are beautifully marketed with clever ticker symbols - memorable, catchy, and a signal that they were the first to identify this money-making mega trend: BOTZ. PAVE. LIT. BATT. AGNG. The investment management industry has launched literally hundreds of these things through the years, collecting hundreds of billions of dollars in assets and countless millions in fees.

Our advice: be wary. The themes paint a breathless picture of growth. Our research paints a very different picture.

We conducted a performance analysis of nineteen large thematic ETFs, not an exhaustive list but not a bad sampling, either. Each ETF was chosen because it was either the largest in its category or had the longest track record. These ETFs capture many of the popular opportunistic themes over the past decade, everything from cloud computing to online sports betting to robotics to genomics to the legalization and hyper-growth of recreational marijuana sales

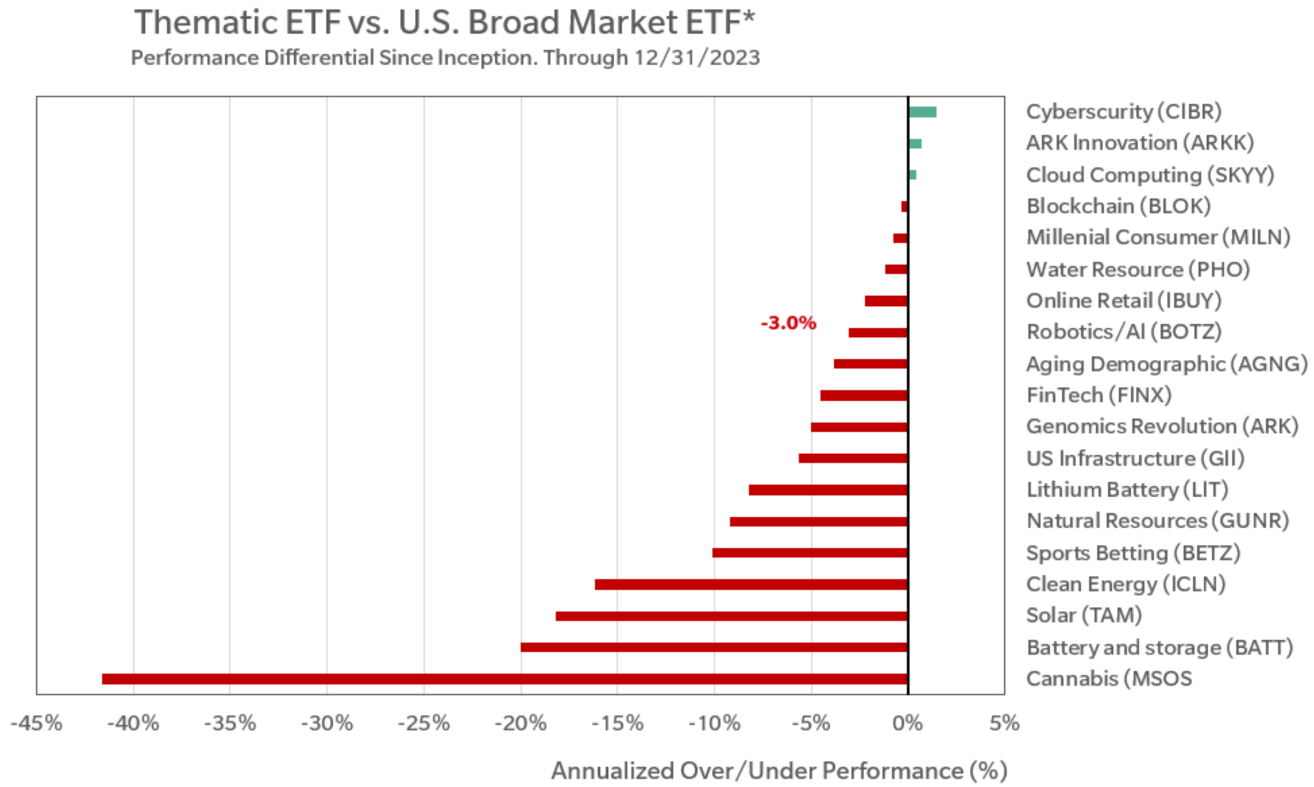
This analysis asks a question: are these thematic ETFs worth their costs, across a few dimensions?

- **Opportunity cost: outperformance vs. broad market.** Since their inception, did the thematic ETF outperform the default option of simply owning the entire market (represented by VTI[1])?
- **Expense ratios.** Did their performance overcome their expense ratios? Many thematic funds have expense ratios of 0.75% or higher, significantly more expensive than the Vanguard Total Stock Market Index ETF (VTI, only 0.03%). See the chart on expense ratios.
- **Volatility.** Given their narrow scope, these ETFs exhibited much higher volatility. Were investors compensated for that additional risk? See chart on volatility.
- **Tax.** Did their performance overcome the likely round-trip capital gains tax hurdle triggered by funding the ETF in the first place and the eventual sale. Both of these transactions create costly taxable gains.

[1]The Vanguard Total Market ETF.

Nothing scientific here, but let's say, for argument's sake, that we demand an *excess* return (over the broad market) in the 1.5% to 2% range. This seemed like reasonable compensation for all of the additional risks and costs.   See results below.

Here's an investment theme: be wary of investment themes



Source: Morningstar. *Each bar shows the since-inception performance of a thematic ETF vs. the Vanguard Total Stock Market Index Fund (VTI), a broad representative of U.S. stocks, over the same respective time period. Negative numbers indicate that the thematic ETF underperformed VTI, positive numbers indicate outperformance.

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So which of the ETFs were able to deliver? In a word, none. Zero for 19. Sixteen of them, the red bars, *underperformed* VTI since their creation. (We have theories as to why, and you can read those on your own, if interested[2]). The AI and Robotics ETF, for example, underperformed VTI by 3.0% annually since its inception seven and half years ago, even though Nvidia was its largest holding[3]. Three of them outperformed the broad market, but none of them crossed the excess performance threshold. And every fund but one had higher levels of volatility (risk). See chart below. The Innovation/Disruption ETF[4], for example, beat the broad market ETF by only 0.6% since inception, despite gut-wrenching volatility - essentially the same return, more than double the risk, and twenty-five times the expense ratio.   Hold on to your wallet.

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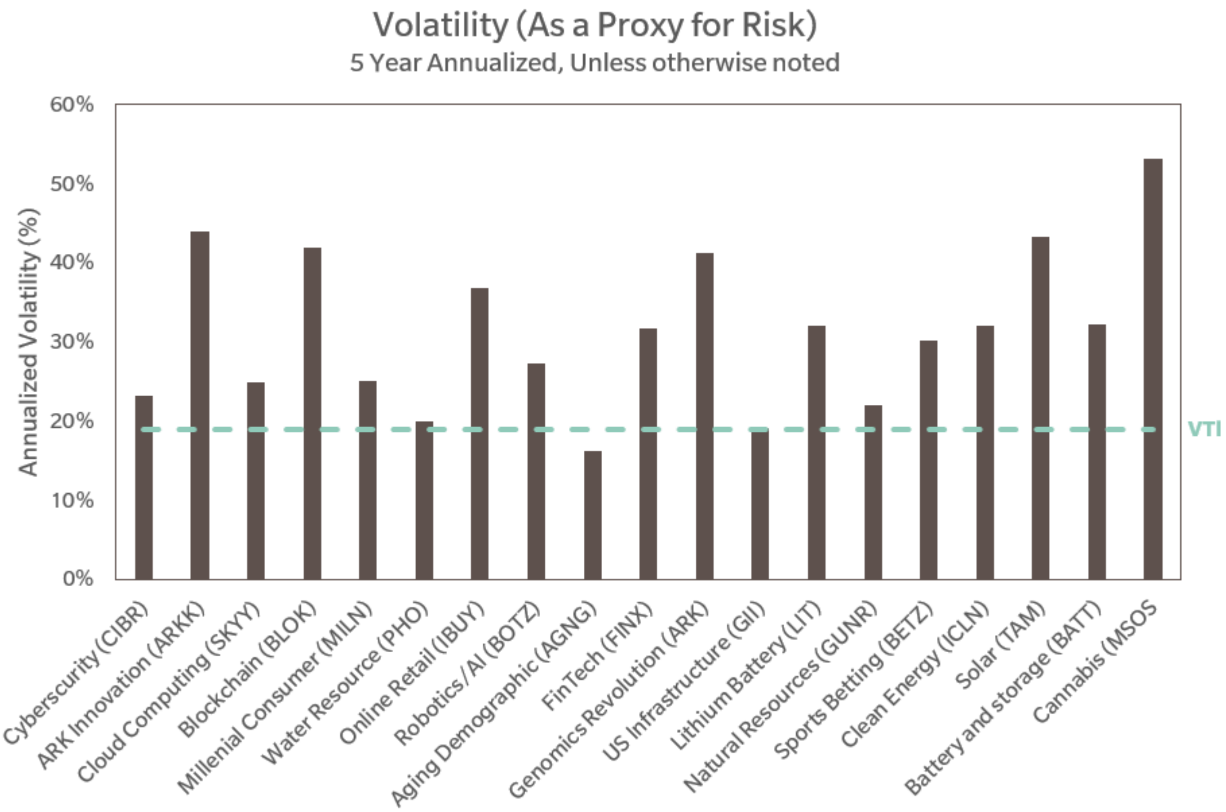
[2]First, all of these themes are exciting; that's why the marketing departments launched them! Investors typically have already bid up the price of "exciting" underlying stocks long before the ETF is launched. Second, the argument for buying the ETF is often: "these stocks are growing quickly." That's not a good investment rationale. For stocks to do well, the companies have to do <u>better</u> than expected, challenging given the already lofty expectations. Third, what does "fast growing" mean? Sales? Customers? Click-throughs? Solar panel sales, for example, were experiencing hockey stick growth during the first decade after the launch of the solar energy-themed TAN. Unfortunately, almost no company tied to this growth theme were making any profits. Fourth, it appears that thematic ETFs buy the stocks because they fit the theme, *regardless* of their valuation, a recipe for disappointment. Fifth, as discussed in the paper, high expense ratios.

[3]The performance analysis was through December 31, 2023. But as of this writing, in late February of 2024, BOTZ is still underperforming VTI, even with the dramatic run-up in Nvidia stock in January and February of this year.

[4]The Innovation/Disruption category is represented by ARKK, the Ark Innovation ETF.

Most thematic ETFs are more volatile than the broad market



Source: Morningstar, Ballentine Partners. *Indicates 3-year annualized volatility

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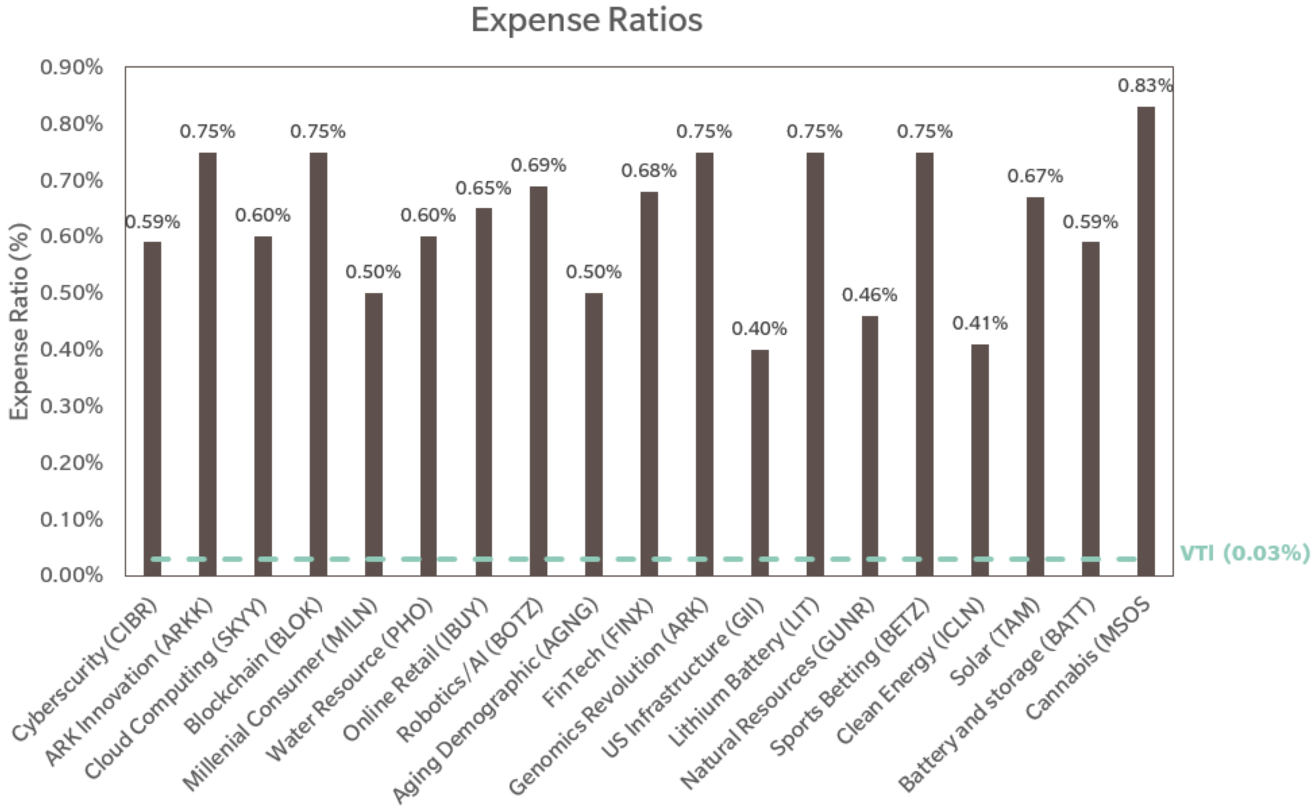
So what to do when a compelling thematic ETF is tantalizing you? Our advice is the same it's been since we started this business forty years ago. Look away. Focus on what matters. Keep costs low. Think about taxes…a lot. Don't get distracted by shiny new objects with beautiful packaging and slick marketing campaigns. In the short term, you may not be able to join in on cocktail chatter about "spicy" thematic plays. But in the long term, it's the most prudent way to grow and preserve your hard-earned wealth.

Expense ratios tend to run quite a bit higher



Source: Morningstar, Ballentine Partners.

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About Pete Chiappinelli, CFA, CAIA, Partner & Chief Investment Officer

Pete is a Partner and Chief Investment Officer at the firm. He is focused primarily on Asset Allocation in setting strategic direction for client portfolios. Pete has 30 years of experience in research, investment strategy, and thought leadership regarding the management of multi-asset class portfolios, inclusive of equities, fixed income, and alternatives. His work has been featured in leading financial publications such as *The Wall Street Journal*, *The New York Times*, *Barron's*, and others in Canada, Europe, and Asia. His market commentaries have been featured at major industry conferences, in TV documentaries on capital markets history, and on social media outlets. Prior to joining Ballentine Partners in 2022, he was a Senior Portfolio Strategist on GMO's Asset Allocation team. Prior to that, he was an Institutional Portfolio Manager at a specialized unit within Fidelity Investments and was the Managing Director of Institutional Investment Strategy & Research at Putnam Investments. He is a graduate of Carleton College and holds his MBA from The Wharton School at the University of Pennsylvania. Pete holds the Chartered Financial Analyst (CFA) designation, is a member of the CFA Institute and CFA Society Boston, and he holds the CFA Institute Certificate in ESG Investing. He also holds the Chartered Alternative Investment Analyst (CAIA) designation and was the founding President of CAIA Boston. Pete lives in Hingham, MA with his wife, Cheryl, and enjoys travel, cooking (definitely not a "foodie," but a "foodie wannabe"), sourdough breadmaking, and conjuring up ways to embarrass his three children.