

SO, YOU'RE THINKING ABOUT BUILDING A CYBERSECURITY STRATEGY?

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One of the biggest themes across megatrend investing—at least, in our opinion—is [cybersecurity](#). Every time a new technology is introduced, it simultaneously needs to be secured. This is true of autonomous vehicles, the metaverse, space, [artificial intelligence](#)...the list goes on.

It is hard to think of a theme that is equally “required” across the board, even if we must admit that we cannot necessarily take this logic all the way through to finding the strongest-performing companies. We know the concept is needed—we don’t know exactly which companies will execute the best for years to come.

WisdomTree’s Thematic Universe

WisdomTree is regularly tracking all of the different exchange-traded funds (ETFs) that it deems to be part of the “Thematic Universe.” The regular report is available [here](#). It affords us to pick topics—in this case, cybersecurity—and do comparisons to some of the biggest and most longstanding funds. While we recognize performance always ebbs and flows, and no single fund outperforms all others all of the time, it is our view that thematic topics run hot and cold.

If we have reason to believe a topic is hot, then that is the time to denote whether different funds aiming at exposure to the topic are capturing the performance.

Cybersecurity Got HOT in Late 2023

As with many investments, there is a constant push and pull between the company fundamentals and the overall macroeconomic backdrop. In late 2023, we had many firms reporting earnings for the third quarter of 2023, and then we had an overall view that maybe the [U.S. Federal Reserve](#) would have to consider lower policy rates at some point in 2024.

Downward-trending interest rates and strong revenue growth are a good recipe for cybersecurity companies—particularly newer companies that have entered the public markets more recently.

Figure 1a: Standardized Performance as of September 30, 2023

Fund Name	Fund Ticker	Fund Expense Ratio	Fund Inception Date	YTD	1-Year	3-Year	5-Year	Since Fund Inception
WisdomTree Cybersecurity Fund (NAV)	WCBR	0.45%	1/28/21	34.06%	20.42%	N/A	N/A	-5.93%
WisdomTree Cybersecurity Fund (MP)	WCBR	0.45%	1/28/21	34.27%	20.83%	N/A	N/A	-5.90%
ETFMG Prime Cyber Security ETF (NAV)	HACK	0.60%	11/11/14	17.11%	19.18%	3.70%	5.75%	8.98%
ETFMG Prime Cyber Security ETF (MP)	HACK	0.60%	11/11/14	17.23%	19.23%	3.72%	5.73%	8.93%
First Trust NASDAQ Cybersecurity ETF (NAV)	CIBR	0.60%	6/7/15	17.64%	18.30%	9.72%	10.49%	11.12%
First Trust NASDAQ Cybersecurity ETF (MP)	CIBR	0.60%	6/7/15	17.52%	18.43%	9.69%	10.46%	11.11%

Source: WisdomTree, specifically data is from the PATH Fund Comparison Tool, accessed as of 12/15/23. NAV denotes total return performance at net asset value. MP denotes market price performance. **Past performance is not indicative of future results. Investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data quoted.**

For the most recent month-end and standardized performance and to download the respective Fund prospectuses, click the relevant ticker: [WCBR](#), [HACK](#), [CIBR](#)

When we analyze ETFs focused on cybersecurity stocks, HACK and CIBR are the two largest on the basis of assets under management as of December 15, 2023. CIBR is not far from \$6 billion in assets.

[WCBR](#) is a newer entrant, launched in early 2021 as opposed to late 2014 (HACK) or mid-2015 (CIBR). 2023 offers an opportunity to review a period when we know the topic of cybersecurity got hot, when existing geopolitical threats are real (Russia, Iran) and, possibly, geopolitical threats are on the horizon (Taiwan).

How did these different funds respond?

- [WCBR](#) has tended toward a higher [volatility](#) than either HACK or CIBR, but when the topic got hot in November and half of December 2023, there was a clear acceleration in returns.
- HACK and CIBR also accelerated in terms of their performances, but they were very similar to each other and did not have the same upward-sloping trajectory as [WCBR](#).

We would note that this is merely one instance—it may not be the same in the future—and investors should always review many different performance periods when analyzing different ETFs.

Figure 1b: WCBR vs. HACK & CIBR in 2023 (December 31, 2022, to December 15, 2023)



Source: WisdomTree, specifically data is from the PATH Fund Comparison Tool, accessed as of 12/15/23. **Historical performance is not an indication of future performance, and any investments may go down in value. The performance data quoted represents past performance and is no guarantee of future results. Investment return and principal value of an investment will fluctuate so that an investor's shares, when redeemed, may be worth more or less than their original cost. Current performance may be lower or higher than the performance data quoted.**

For the most recent month-end and standardized performance and to download the respective fund prospectuses, click the respect ticker: [WCBR](#), [HACK](#), [CIBR](#)

How Close to Cutting-Edge Can You Get?

I have heard it said in terms of cybersecurity: the attackers only need to be right once, whereas the defenders need to defend against 100% of attacks. Think of generative AI—on the one hand, an incredible tool, but on the other, a new way for attackers to repurpose it into doing multitudes of more sophisticated attacks.

There is a premium on accessing the newest companies pursuing the most current defenses.

[WCBR](#), HACK and CIBR are all tracking the returns of indexes, so the primary question regards how close these indexes can get to the newest technologies. We can learn a lot by looking at the top 10 positions.

In figure 2, we see:

- [WCBR](#), CIBR and HACK all have a similar weight in the top 10 holdings—45% to 50%, roughly speaking.
- As part of the process behind the [WisdomTree Team8 Cybersecurity Index](#) (tracked by [WCBR](#)), Team8, with its cybersecurity expertise, rates what each company is doing in cybersecurity against what they believe are the eight most important critical functional areas of the discipline. The focus is on the future of what will be needed in cybersecurity, and a broad focus is telling us that the company is doing at least three things that Team8 views as critical to the future of cybersecurity.
- The [Nasdaq CTA Cybersecurity Index](#) (tracked by CIBR) is focused on cybersecurity within the Technology and Industrials sectors. It looks to see that the companies are engaged in the building, implementation and management of security protocols applied to private and public networks. When we look at figure 2 and see #N/A, this is telling us that Team8 did not give the company a rating that fit within one of its eight distinct focal points on the future of cybersecurity.
- The [Prime Cyber Defense Index](#) (tracked by HACK) is focused on cybersecurity within hardware, software and services. Again, the #N/A is telling us that those companies did not meet Team8's standard of being involved in one of their eight critical cybersecurity areas.

We recognize that there is no true benchmark of the performance of any thematic equity strategy, and in many cases, the largest strategies were around for the longest periods. Strategies can evolve with the times—we try to design ours with this in mind—but we also recognize how difficult that is. Working with Team8, which has among its professionals people who have been dealing with cyber activities in Israel's military and the U.S.'s National Security Agency, is the way in

which we ensure that the focus of the companies on cybersecurity is in fact evolving with as much speed as possible within the Index.

Figure 2: Top 10 Company Exposures within WCBR, CIBR and HACK (Average Weights from December 31, 2022, to November 30, 2023)

Company Name	Fund Average Weight (%)	Team8 Classification	Company Name	Fund Average Weight (%)	Team8 Classification	Company Name	Fund Average Weight (%)	Team8 Classification
DATADOG INC - CLASS A	5.49	Broad Focus & Growing Fast	BROADCOM INC	6.34	#N/A	BAE SYSTEMS PLC	4.67	#N/A
FORTINET INC	5.26	Broad Focus & Growing Fast	PALO ALTO NETWORKS INC	6.20	Broad Focus & Growing Fast	SPLUNK INC	4.62	Narrow Focus & Growing
PALO ALTO NETWORKS INC	5.25	Broad Focus & Growing Fast	FORTINET INC	6.09	Broad Focus & Growing Fast	CROWDSTRIKE HOLDINGS INC - A	4.54	Broad Focus & Growing Fast
CLOUDFLARE INC - CLASS A	5.15	Broad Focus & Growing Fast	CISCO SYSTEMS INC	5.94	#N/A	BOOZ ALLEN HAMILTON HOLDINGS	4.53	#N/A
CROWDSTRIKE HOLDINGS INC - A	5.03	Broad Focus & Growing Fast	INFOSYS LTD-SP ADR	5.80	#N/A	PALO ALTO NETWORKS INC	4.53	Broad Focus & Growing Fast
ELASTIC NV	4.95	Broad Focus & Growing Fast	SPLUNK INC	3.26	Narrow Focus & Growing	VERISIGN INC	4.48	#N/A
OKTA INC	4.91	Broad Focus & Growing Fast	OKTA INC	3.11	Broad Focus & Growing Fast	AKAMAI TECHNOLOGIES INC	4.47	#N/A
RAPID7 INC	4.84	Broad Focus & Growing Fast	THALES SA	3.11	#N/A	FORTINET INC	4.47	Broad Focus & Growing Fast
TENABLE HOLDINGS INC	4.76	Broad Focus & Growing Fast	CROWDSTRIKE HOLDINGS INC - A	3.10	Broad Focus & Growing Fast	CHECK POINT SOFTWARE TECH	4.41	#N/A
SENTINELONE INC - CLASS A	4.73	Broad Focus & Growing Fast	BOOZ ALLEN HAMILTON HOLDINGS	3.07	#N/A	CISCO SYSTEMS INC	4.40	#N/A
Total	50.39		Total	46.03		Total	45.12	

Source: Bloomberg. Fund holdings subject to change.

Conclusion: Will a Necessary Thematic Get an Interest Rate Tailwind in 2024?

Pure-play cybersecurity companies have been volatile—in 2021, this volatility was in the upward direction, whereas in 2022, it was in the downward direction. Part of the reason for this is that we saw interest rates going from basically the record lows of easy-money policy to some of the highest levels we have seen in nearly 20 years. If 2024 has more of a downward than an upward trend in rates, this could create a tailwind behind these stocks at a time when the world is constantly thinking about protection amidst increasing geopolitical risks.

We think that WCBR represents a high sensitivity to both this megatrend and interest rates, but we have no doubt that investors may want to do their own analysis under the hood of these three Funds.

Figure 3: Further Information Supporting the Comparison of Different Funds

Fundamentals	WisdomTree Cybersecurity Fund	ETFMG Prime Cyber Security ETF	First Trust NASDAQ Cybersecurity ETF
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Objective	The WisdomTree Cybersecurity Fund is designed to track, before fees and expenses, the total return performance of the WisdomTree Team8 Cybersecurity Index. Team8 is a financial venture firm with expertise in cybersecurity meant to evaluate the cybersecurity focus of each constituent, and WisdomTree is applying its financial acumen from building indices for many years.	The ETFMG Prime Cyber Security ETF (HACK) is an exchange-traded fund (ETF) that tracks a portfolio of companies providing cyber security solutions that include hardware, software and services. The Prime Cyber Defense Index ("the Index") provides a benchmark for investors interested in tracking companies actively involved in providing cyber security technology and services. The Index uses a market capitalization-weighted allocation across the infrastructure provider and service provider categorizations as well as an equal-weighted allocation methodology for all components within each sector allocation.	The First Trust NASDAQ Cybersecurity ETF is designed to track the total return performance of the NASDAQ CTA Cybersecurity Index. This index is comprised of companies engaged in the cybersecurity segment of the technology and industrial sectors. It includes companies primarily involved in the building, implementation, and management of security protocols applied to private and public networks, computers, and mobile devices in order to provide protection of the integrity of data and network operations.
Price to Sales Ratio	7.36x	3.03x	3.61x
Price to Book Ratio	7.67x	5.51x	6.54x
Price to Cash Flow Ratio	51.68x	22.12x	21.64x
Est. Price to Earnings Ratio	71.88x	24.33x	23.83x
Est. Price to Earnings Ratio (excludes firms with negative earnings)	51.68x	23.04x	23.11x
% of Firms with Negative Earnings	73.19%	33.85%	
Total Expense Ratio	0.45%	0.60%	0.60%
Total Assets Under Management (USD, millions)	\$42.50	\$1,632/79	\$5,899.87

Sources: WisdomTree, specifically the Fund Compare Tool, with data quoted as the most recently available as of December 15, 2023. Due to certain complexities of fundamental aggregation, the Price to Sales, Price to Book, Price to Cash Flow, Est. Price to Earnings, Est. Price to Earnings (excludes firms with negative earnings) and % of Firms with Negative Earnings statistics are as of July 31, 2023, the most recently available in the Fund Compare tool as of this time. Total Expense Ratio and Total Assets Under Management are current as of December 15, 2023, with these measures taken from the specific fund websites.

If you're interested in diving more into the comparison of these Funds, please check out our [Fund Comparison Tool](#).

Important Risks Related to this Article

There are risks associated with investing, including the possible loss of principal. The Fund invests in cybersecurity companies, which generate a meaningful part of their revenue from security protocols that prevent intrusion and attacks on systems, networks, applications, computers and mobile devices. Cybersecurity companies are particularly vulnerable to rapid changes in technology, rapid obsolescence of products and services, the loss of patent, copyright and trademark protections, government regulation and competition, both domestically and internationally. Cybersecurity company stocks, especially those which are internet related, have experienced extreme price and volume fluctuations in the past that have often been unrelated to their operating performance. These companies may also be smaller and less experienced companies, with limited product or service lines, markets or financial resources and fewer experienced management or marketing personnel. The Fund invests in the securities included in, or representative of, its Index regardless of their investment merit, and the Fund does not attempt to outperform its Index or take defensive positions in declining markets. The composition of the Index is heavily dependent on quantitative and qualitative information and data from one or more third parties, and the Index may not perform as intended. Please read the Fund's prospectus for specific details regarding the Fund's risk profile.

For standardized performance and the most recent month-end performance click [here](#) NOTE, this material is intended for electronic use only. Individuals who intend to print and physically deliver to an investor must print the monthly performance report to accompany this blog.

Related Funds

+ [WisdomTree Cybersecurity Fund](#)

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U.S. investors only: Click [here](#) to obtain a WisdomTree ETF prospectus which contains investment objectives, risks, charges, expenses, and other information; read and consider carefully before investing.

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You cannot invest directly in an index.

DEFINITIONS

cybersecurity : Refers to the measures taken to protect devices, networks, and data from unauthorized access and criminal use

Artificial intelligence : machine analysis and decision-making.

Federal Reserve : The Federal Reserve System is the central banking system of the United States.

Volatility : A measure of the dispersion of actual returns around a particular average level. nbsp;.

Nasdaq CTA Cybersecurity Index : Designed to gauge the performance of cybersecurity companies within the technology and industrials sectors

Prime Cyber Defense Index : The Prime Cyber Defense Index is designed to measure the performance of companies engaged in the Cyber Defense industry that have satisfied the eligibility requirements as determined by Prime Indexes.

Monetary policy : Actions of a central bank or other regulatory committee that determine the size and rate of growth of the money supply, which in turn affects interest rates.