



Horizon Kinetics Blockchain Development ETF (BCDF)

2025 Annual Letter

The major factor that has limited entities from entering the blockchain and digital asset space has been regulatory clarity. 2025 marked a major shift, as new legislation and associated guidance have provided answers to many of the overhanging questions that were roadblocks to integration. The continuance of the removal of impediments should support the continued growth of digital assets, especially as it relates to our preferred exposures within the portfolio.

The Horizon Kinetics Blockchain Development ETF (Ticker: BCDF) is the nexus of two areas of our firm's expertise, grounded in decades of research and study.

Our first and primary focus—as the fund's name indicates—is the profound technological and economic capability of blockchains. Financial assets and information are typically siloed on separate private ledgers, requiring significant effort to reconcile accounts when doing business with other parties. Complexity increases with the number of intermediaries and participants, increasing costs, slowing trade, and limiting overall activity. Aside from the efficiency losses, there is quite a bit that can go wrong during this process, meaning that transactions can (and do) fail even after expending all of that time and effort.

Blockchains allow for all assets and information to operate on the same distributed ledger, reducing the time and cost to complete a transfer. Without getting too granular, different types of blockchains can limit the level of transparency to related parties and validators (if privacy is a focus), while some operate with extreme transparency and openness. Blockchain technology seems complex at first glance, but the goal is to simplify accounting, reconciliation, and transfer. And it does so in a trustless structure (distributed ledger), meaning that neither party needs to trust a central third party to verify balances to enforce agreements, that is ripe for innovation, automation, and programmability.

The total addressable market is, realistically, nearly every asset class or system of information maintained on traditional ledgers. We've dedicated 10 years of research to the subject of cryptocurrencies and the underlying blockchain technology that allows them to exist.

The second focus of the fund is the croupier business model, one that monetizes the financial and transactional activity of others through fees without taking commensurate financial risk. Put differently, croupiers allow other parties to make investments, to trade, to acquire or dispose of assets and transfer risk. A croupier is paid for offering the platform or service that allows this to take place—without being a true counterparty to the activity.

Think of a real estate broker, one that connects buyers and sellers in the housing market, but doesn't actually keep an inventory of housing on hand to fulfill orders directly. While real estate brokerage might



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be a weaker application of the croupier model, it still presents an example of a business that collects fees on other parties' exposure to capital risk.

The real upside of croupiers can be captured when incorporating some level of scalability, secular growth trends, and/or a competitive moat that allows the business to compound over time. They are a relatively rare business sector, sparse within the broad indexes, not labelled as such, and are index outliers if measured on profit margins or return on invested capital.

The best croupiers are sound business models, ones that typically exhibit high margins, high scalability, low reinvestment needs, and an asymmetric growth profile. Those margins, by the way, usually well exceed those of the familiar model of extraordinary profitability, like Microsoft. And, importantly, where costs do not scale with revenues in a linear fashion. Meaning that much of the cost of the business is fixed. Once the platform is built, the licenses secured, the technology established, then the marginal revenue generated may require very little in additional cost to support.

How Croupiers Can Benefit from Blockchain Technology:

We would be exceedingly interested in many of these croupier businesses even without the incorporation of blockchain's potential. But the new technology brings a level of optionality to these businesses that isn't widely available in markets.

The best example of this combination—and the most used within our portfolio allocations—has been through global securities and derivatives exchanges. These are the croupiers of the financial world. They are the toll booths of financial activity and capital markets, collecting fees on activity without taking on the financial risk of the trading they facilitate.

Exchanges collect transaction fees on assets traded on their platforms. They are paid for providing a listing venue for companies to raise capital and support a secondary market, and for the proprietary data they accumulate from trading. In some cases, they are vertically integrated with clearinghouses, so they capture clearing fees and fees associated with the collateral offsetting each trade.

They are long-lived businesses. Many have been around for hundreds of years, and they've been able to integrate nearly any new asset class or technology. Innovation does not eliminate the necessity of the marketplace. Combine that with a secular trend of increased trading and general market activity, and you have high-quality overlooked businesses that are ripe for technological innovation.



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An exchange can also serve as a referee of sorts. Regulations are different depending on jurisdiction, but at least in the United States, regulated exchanges and clearinghouses function as a self-regulatory organization. That means exchanges are required to monitor participants on their platforms so as to prevent illicit activity and manipulation—like front-running, wash trading, insider trading, spoofing, etc.

As history shows, traders—at least without some level of surveillance—will try to game the system. It is why the self-regulatory structure exists, preceding even the SEC or CFTC’s creation in the U.S. Regulation improves fairness so people can participate without fear of fraud. It is one thing to make a bad decision in a trade. It is another to be manipulated. These businesses have a substantial responsibility to ensure fairness, so that more people participate and overall price discovery is more accurate. In fact, the biggest reason for regulator acceptance of crypto ETPs in the U.S. was the inclusion of surveillance-sharing agreements between spot markets and regulated exchanges, more or less as a condition for approval.

Increased participation deepens an exchange’s liquidity pool. That additional liquidity actually makes the exchange more valuable, as it enhances price discovery, tightens spreads, and limits the price impact of any one participant. Trading begets trading. Liquidity attracts liquidity. These companies can then incorporate a data feedback loop. More trading creates more proprietary data, which is monetized and sold back to participants. They use this data to enable new trading strategies, which ties right back into the loop.

Now consider the addition of blockchain and digital assets to these companies. Exchanges can service a brand new asset class, one that is still nascent and volatile, capturing activity regardless of the directional outcome of any specific digital asset. This is a space that would benefit greatly from the same level of liquidity and fairness in price discovery as the various asset classes already offered on regulated exchanges. And these companies have been involved in a multitude of ways.

The U.S. futures markets is a great example. Since the launch of regulated bitcoin futures in 2017, contract volume growth has vastly outpaced price growth of the underlying asset. It has also done so while limiting the potential downside risk of a direct bet on the asset. In 2025, when bitcoin experienced extreme volatility, it ultimately ended down only about 6.3% (a relatively innocuous year, in absolute terms). But futures contract volume was up 75% year-over-year, domestically.¹

This asymmetric profile means croupiers like financial exchanges may not just be the best companies to help legitimize the digital asset space—they can also profit from that same adoption. In late 2025, the

¹ Source: FIA.org



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CFTC and SEC provided a joint statement that “clarifies staff’s views that SEC- and CFTC-registered exchanges are not prohibited from facilitating the trading of certain spot commodity products.”

“Market participants should have the freedom to choose where they trade spot crypto assets,” the statement continued. “The SEC is committed to working with the CFTC to ensure that our regulatory frameworks support innovation and competition in these rapidly evolving markets.”

Bitnomial announced the launch of Spot- and leveraged-spot-crypto-trading offerings before the close of 2025.² Even these were predated by many spot or spot-like offerings on the exchanges that we hold.

CME’s spot-quoted bitcoin futures, which launched in mid-2025, achieved a record of 128,000 contracts (\$107 million-plus) on December 30.² CBOE announced the launch Continuous Futures for bitcoin and ether in late 2025—cash-settled products providing long term exposure benchmarked to real-time spot pricing.² These products could be viewed as borderline spot-alternatives, at least from the intention behind their launches.

On a different note, Intercontinental Exchange announced an investment of up to \$2 billion in Polymarket, a blockchain-based prediction market with funding mechanisms based in stablecoins.² Nasdaq and the NYSE have already announced initiatives to offer tokenized securities.²

The story is similar across our global exchange holdings. Deutsche Borse Group’s Clearstream launched D7 DLT—a new tokenized securities platform focused on integrating tokenized securities and digital currencies—in late 2025.² In September 2025, LSEG launched their Digital Markets Infrastructure platform covering token issuance to post-trade, which has already been successfully employed in the private fund space.² SGX Derivatives launched perpetual bitcoin and ether futures in November 2025.² It is still early, and additional regulation likely must be considered before significant offerings are launched in the spot market. But there have been big steps already.

Digital asset trading is just one avenue of growth for these companies that relates to blockchain. If you listen to the leaders of the regulated exchanges, it seems the biggest benefit of blockchain is collateral mobility. Stablecoins are the most straightforward example of tokenization. Instead of having your money at a bank, you send your cash to a stablecoin custodian, and they send you a token representing that asset at the bank.

² Company Press Release



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Once these tokens are minted, users are afforded the option to transfer underlying collateral outside the banking system's rails. Funding your brokerage account at 9PM on a Saturday is no longer an issue. Funding an account across borders is no longer an issue. You've reduced the number of intermediaries—and associated cost that each intermediary requires.

This removes an impediment to global liquidity. If your securities and cash are both tokenized, they are recognized on the same rails. Participants are no longer reliant on a siloed system of separate ledgers and reconciliation processes for different assets and participants. This brings asset mobility to the speed of your matching engine, at least in terms of potential. Modern matching engines are measured in microseconds.

In the U.S., there is a common clearinghouse (the DTCC) for equities that allows stocks to trade on multiple off-exchange venues. It is more or less a 50/50 breakdown, comparing on-exchange trading with off-exchange. If exchanges can implement tokenization, they will reap a technological advantage over their competitors.

When transactions are tokenized, users get faster settlements, lower default risk (thanks to the accuracy of blockchains), and easy redeployment to different platforms for other needs. They get programmability. If a trader posts margin, and that margin drops below a maintenance level, a smart contract can automatically enforce liquidation without human involvement. Or it can automatically release collateral from a lock-up if a position closes profitably.

On the other end, if competitors adopt that same technology, you have easy transfers and few impediments to arbitrage trading. The entire pie increases, regardless of the market share breakout. If market share stagnates, or even lessens, the increase in overall activity could realistically outweigh any downside. Our portfolio ended the year with nearly 70% exposure to positions that would classify under the exchange- and regulated-trading-platform universe—even more when considering croupiers more broadly. We focus on exchanges as our preferred example of the croupier structure, but also as the largest exposure of the entire portfolio by a significant margin.

This segment has remained the focus of BCDF, as digital assets have been legitimized by regulators in ways that allow capital market participants more avenues for continued development and execution. Many exchanges took a step forward this year to position themselves for markets in the process of adapting to the growing digital asset markets. Trading activity across many traditional asset classes was elevated, as many exchanges announced another record year.



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Traditional asset classes remain the core operational driver of business results for most exchanges, though continued execution within core business lines is welcomed as exchanges continue to integrate digital assets. We remain optimistic about our positioning, and await further developments at our portfolio companies in the blockchain space.

Important Risk Disclosures

Please consider carefully a fund's investment objectives, risks, charges and expenses. For this and other important information, obtain a statutory prospectus and summary prospectus by contacting 646-495-7333. Read it carefully before investing. *The 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 investor's 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. For the most recent month-end performance, please call 646-495-7333 or visit the Fund's website at <https://horizonkinetics.com/products/etf/bcdf/>.*

The Horizon Kinetics Blockchain Development ETF (Symbol: BCDF) is an exchange traded fund managed by Horizon Kinetics Asset Management LLC ("HKAM").

Investing involves risk, including the possible loss of principal. Shares of any ETF are bought and sold at market price (not NAV), may trade at a discount or premium to NAV and are not individually redeemed from the Fund. Brokerage commissions will reduce returns. The Fund's investments in securities linked to real assets involve significant risks, including financial, operating, and competitive risks. Investments in securities linked to real assets expose the Fund to potentially adverse macroeconomic conditions, such as a rise in interest rates or a downturn in the economy in which the asset is located.

The Fund is non-diversified, meaning it may concentrate its assets in fewer individual holdings than a diversified fund. Therefore, the Fund is more exposed to individual stock volatility than a diversified fund.

Fund holdings and sector allocations are subject to change at any time and should not be considered recommendations to buy or sell any security.

The Fund invests in foreign securities which involve greater volatility and political, economic and currency risks and differences in accounting methods. These risks are greater for investments in emerging markets.

The Fund may invest in the securities of smaller and mid-capitalization companies, which may be more volatile than funds that invest in larger, more established companies. The fund is actively managed and may be affected by the investment adviser's security selections.

Diversification does not assure a profit or protect against a loss in a declining market.

Fund holdings and sector allocations are subject to change at any time and should not be considered recommendations to buy or sell any security. Please see the schedule of investments for a complete list of holdings.



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Associated Risk of Investing in Blockchain Development Companies. The Fund will invest in Blockchain Development Companies. At times, Blockchain Development Companies may be out of favor and underperform other industries or groups of industries or the market as a whole. In such event, the value of the Shares may rise and fall more than the value of shares of a fund that invests in securities of companies in a broader range of industries.

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