

PORTAL

ASSET MANAGEMENT

ABC OF BLOCKCHAIN

A Primer for Those Looking to Invest in the
Cryptocurrency and Digital Asset Space

Abstract

Blockchain technology has the potential to disrupt various industries and redefine our understanding of transactions. As we continue to explore its potential, blockchain could very well become the standard for future transactions and data storage. However the extreme levels of price volatility in cryptocurrencies can be a deterrent to investors in the space. We would argue that understanding these factors can help investors make more informed decisions and potentially mitigate some of the risks associated with investing in cryptocurrencies.

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What is Money?

Introduction

Money, in its simplest form, is a medium of exchange that is widely accepted in transactions for goods and services. It serves as a store of value, a unit of account, and a standard of deferred payment. However, the concept of money and its functionality have evolved over time, leading to the emergence of various forms, including commodity money, representative money, and fiat money.

The Gold Standard

The gold standard, a type of representative money, was once the most prevalent form of monetary system. Under this system, the value of a country's currency or paper money had a direct and fixed relation to a certain amount of gold. Trading between countries was straightforward because the value of a country's currency was known in terms of gold.

However, the gold standard had its limitations. It did not provide sufficient flexibility to the money supply to support expanding economies. In times of economic downturn, the gold standard often led to deflation, exacerbating economic woes.

The Rise of Fiat Currency

Fiat currency emerged as an alternative to the gold standard. Unlike the gold standard, fiat money is not backed by a physical commodity. Instead, the value of fiat money is derived from the trust and confidence people have in the government issuing the money.

The transition from the gold standard to fiat currency provided governments with increased flexibility. They could now control the money supply, allowing them to manage economic conditions more effectively. For instance, during a recession, a government can increase the money supply to stimulate economic activity.

The Failings of Fiat Currency

Despite its advantages, fiat currency is not without its failings. One of the main criticisms is the potential for hyperinflation. Since there is no physical asset backing the currency, governments could theoretically print as much money as they want. If too much money is printed, it can lead to inflation or, in extreme cases, hyperinflation, where the prices of goods and services increase rapidly and uncontrollably, and the value of the currency plummets.

Another criticism of fiat money is that it can lead to economic instability. Without a physical asset backing the currency, economic crises can cause severe fluctuations in the value of the currency, leading to economic instability.

Conclusion

In conclusion, while money in the form of fiat currency has played a crucial role in modern economies, it is not without its failings. The challenge for policymakers is to manage these failings while leveraging the benefits that fiat currency provides.

What is Bitcoin?

Introduction

Bitcoin, the first decentralized cryptocurrency, was proposed by an anonymous person or group of people under the pseudonym Satoshi Nakamoto in 2008. It was introduced as a peer-to-peer electronic cash system that operates without the need for a central authority.

The Birth of Bitcoin

The birth of Bitcoin was in response to the 2008 global financial crisis. The crisis exposed the vulnerabilities of the traditional financial system, including the risks associated with centralized control and the potential for financial institutions to act against the interests of their customers. In the aftermath of the crisis, Bitcoin emerged as an alternative, offering a decentralized form of money that is not controlled by any government or financial institution.

What is Bitcoin?

Bitcoin is a digital currency that uses cryptography to secure transactions and control the creation of new units. Bitcoin transactions are verified by network nodes through cryptography and recorded on a public ledger called a blockchain. Bitcoin can be exchanged for other currencies, products, and services, and it is often used as a store of value or "digital gold".

Bitcoin as Sound Money

Sound money is a concept in economics that describes a currency that serves as a reliable store of value. Bitcoin exhibits several characteristics of sound money.

Firstly, Bitcoin has a predictable supply. The total number of bitcoins that will ever be created is capped at 21 million, and the rate at which new bitcoins are created is halved approximately every four years in an event known as a "halving". This predictable supply contrasts with fiat currencies, which can be printed in unlimited quantities by central banks.

Secondly, Bitcoin is decentralized and operates on a peer-to-peer network. This means that no single entity has control over the currency, making it resistant to censorship and immune to government control or manipulation.

Thirdly, Bitcoin is durable and cannot be destroyed or degraded over time. Unlike physical forms of money, Bitcoin exists as a digital asset on the blockchain, making it immune to physical damage or decay.

Lastly, Bitcoin is divisible, fungible, and portable. A single bitcoin can be divided into 100 million smaller units called satoshis, making it suitable for micro-transactions. All bitcoins are identical and interchangeable, and they can be sent anywhere in the world instantly.

With the spectacular launch of the BTC ETFs, Bitcoin has arguably crossed the rubicon into an institutional-grade store of value. Bitcoin has carved out its spot in the crypto space as "digital gold."

Conclusion

In conclusion, Bitcoin represents a significant innovation in the field of monetary systems. As a form of sound money, it offers several benefits over traditional fiat currencies, including a predictable supply, decentralization, durability, and divisibility. However, it also comes with its own set of challenges and risks, including price volatility and regulatory uncertainty.

What is Blockchain?

Introduction

Blockchain is a revolutionary technology that has the potential to disrupt many traditional industries. It is a decentralized, distributed ledger that records transactions across multiple computers in such a way that the registered transactions cannot be altered retroactively.

Understanding Blockchain

At its core, a blockchain is made up of a series of blocks, each containing data. This data can represent various types of transactions. Each block contains a cryptographic hash of the previous block, a timestamp, and transaction data. This makes every block inherently resistant to modification of the data.

Once recorded, the data in any given block cannot be altered retroactively without alteration of all subsequent blocks, which requires consensus of the network majority. This immutability makes blockchains secure by design.

How Does Blockchain Work?

When a block stores new data, it is added to the blockchain. However, before this can happen, four things must occur:

1. A transaction must occur.
2. The transaction must be verified.
3. The transaction must be stored in a block.
4. The block must be given a hash.

Once all of these steps have been completed, the block can be added to the blockchain. As new blocks are added, they hold a record of the previous blocks, hence the term "blockchain."

Centralized Database vs. Blockchain

The primary difference between a centralized database and a blockchain is the way the data is structured and controlled. In a centralized database, all the data is stored in one central point, and there is one central authority. This central authority has the power to perform any operations on the data.

On the other hand, a blockchain consists of a globally distributed set of computers (called nodes) working independently to verify all transactions and data stored on the chain. There is no central entity that can manipulate the data, as the same data is stored across multiple locations, and everyone in the network has an equal level of authority.

In a blockchain, trust is established through mass collaboration and clever code rather than through a powerful institution that does the authentication and the settlement.

As a result, although a database will almost always be faster and cheaper than a blockchain, a blockchain's distributed set of nodes provides additional security and resilience. No individual or central entity can control a globally distributed blockchain, which makes it an ideal ledger of record for valuable assets.

Blockchains and Cryptocurrencies

A common follow-up question since the birth of Bitcoin has been: why not pursue the benefits of "blockchain technology" without "crypto"? The reason is that both technologies are intrinsically interconnected.

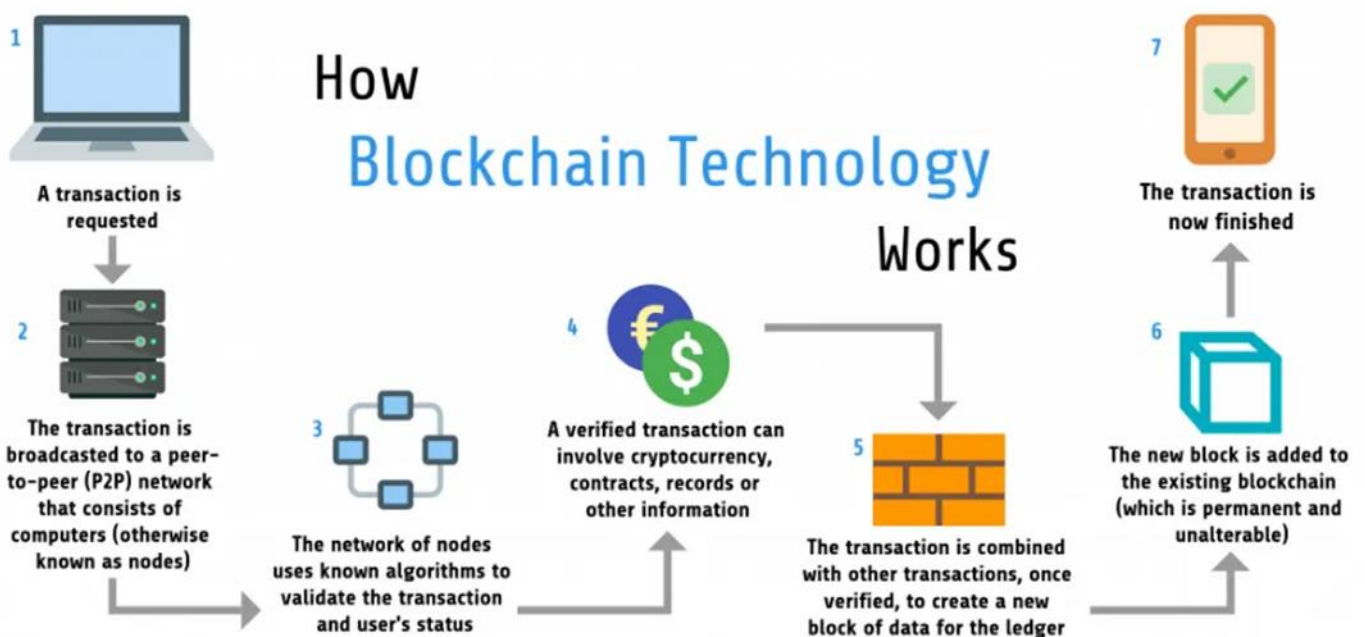
Blockchains, like all economic systems, rely on incentives. All of a blockchain's nodes (miners/validators) need to be incentivized to independently and honestly verify the blockchain's history and transactions. Therefore, every blockchain network requires a native crypto asset with its own monetary policy. This native crypto asset is issued programmatically by the blockchain to pay its miners/validators.

Without a native asset within a blockchain ecosystem to pay a distributed set of miners/validators, there is no incentive to validate a blockchain and the blockchain system would not be secure. In other words, if a blockchain does not have a strong underlying crypto asset, then a database will always be better.

The greater the value of a blockchain's native crypto asset, the more incentive there is for miners/validators to perform work and receive the underlying tokens. Most blockchain ecosystems have weak monetary policies, as they use high inflation of their crypto assets to pay validators, which depresses the underlying value of the token. However, there are some blockchain ecosystems with native crypto assets that have strong monetary policies.

Conclusion

In conclusion, blockchain technology offers a more transparent and secure way of conducting transactions, recording data, and establishing trust. Its decentralized nature stands in stark contrast to the centralized databases we are accustomed to. As we continue to explore its potential, blockchain could very well become the standard for future transactions and data storage.



How are Transactions on the Blockchain Validated?

Introduction

Blockchain technology has revolutionized the way transactions are conducted and recorded. One of the key aspects of blockchain technology is the way it validates and verifies transactions. This process involves complex algorithms and consensus mechanisms, the most common of which are Proof of Work (PoW) and Proof of Stake (PoS).

Transaction Validation in Blockchain

In a blockchain, new transactions are validated and recorded on the global ledger (blockchain) by miners (under Proof of Work) or validators (under Proof of Stake). These miners or validators are rewarded with cryptocurrency, in a process known as a blockchain consensus mechanism.

Proof of Work (PoW)

Proof of Work is a consensus mechanism that requires members of a blockchain network to perform a certain amount of computational work to validate transactions. This work involves solving complex mathematical problems that require significant computational resources.

Once the problem is solved, other network participants can easily verify the solution. The miner who solves the problem first adds the new block of transactions to the blockchain and is rewarded with a certain amount of cryptocurrency.

While PoW ensures high security and decentralization, it is criticized for its high energy consumption.

Proof of Stake (PoS)

Proof of Stake is another consensus mechanism that selects validators based on the number of coins they hold and are willing to 'stake' as collateral. In PoS, the creator of a new block is chosen in a deterministic way, depending on its wealth, also defined as stake.

Unlike PoW, PoS does not require massive amounts of computational power, making it more energy efficient. However, one of the potential downsides of PoS is that it can lead to centralization, as those who hold more currency have more chances of being chosen to validate transactions.

The Importance of Monetary Policy

Blockchain ecosystems rely on token inflation to pay miners (under Proof of Work) or validators (under Proof of Stake) to verify and secure the underlying blockchains. Issuance via inflation is a "necessary evil" to ensure that enough tokens can be produced to fairly compensate a blockchain's nodes for their work in keeping the blockchain secure.

The monetary policy of a blockchain network's crypto asset is critical to the long-term sustainability of the network. For example, Bitcoin addresses monetary policy via programmatic halvings. Every 210,000 blocks or approximately 4 years, the amount of BTC issued is reduced by 50%, resulting in decreasing inflation over time and an asymptotic climb toward a terminal max supply of 21 million BTC. BTC inflation dropped to ~0.85% in April 2024 and will drop again in another 4 years, giving Bitcoin a sound monetary policy.

With EIP-1559 (Ethereum Improvement Proposal #1559) and the transition to Proof of Stake, Ethereum's monetary policy has differentiated itself from that of Bitcoin. Ethereum, a chain which continues to have consistently high economic activity (and therefore, fee revenue), has ongoing organic deflationary pressure from the fee burn (instead of issuance halvings like for Bitcoin).

Adding in the efficiencies of Proof of Stake resulting in lower issuance, Ethereum's monetary policy is currently deflationary, and in most cases will continue to be lower than Bitcoin inflation, positioning ETH as a potentially superior

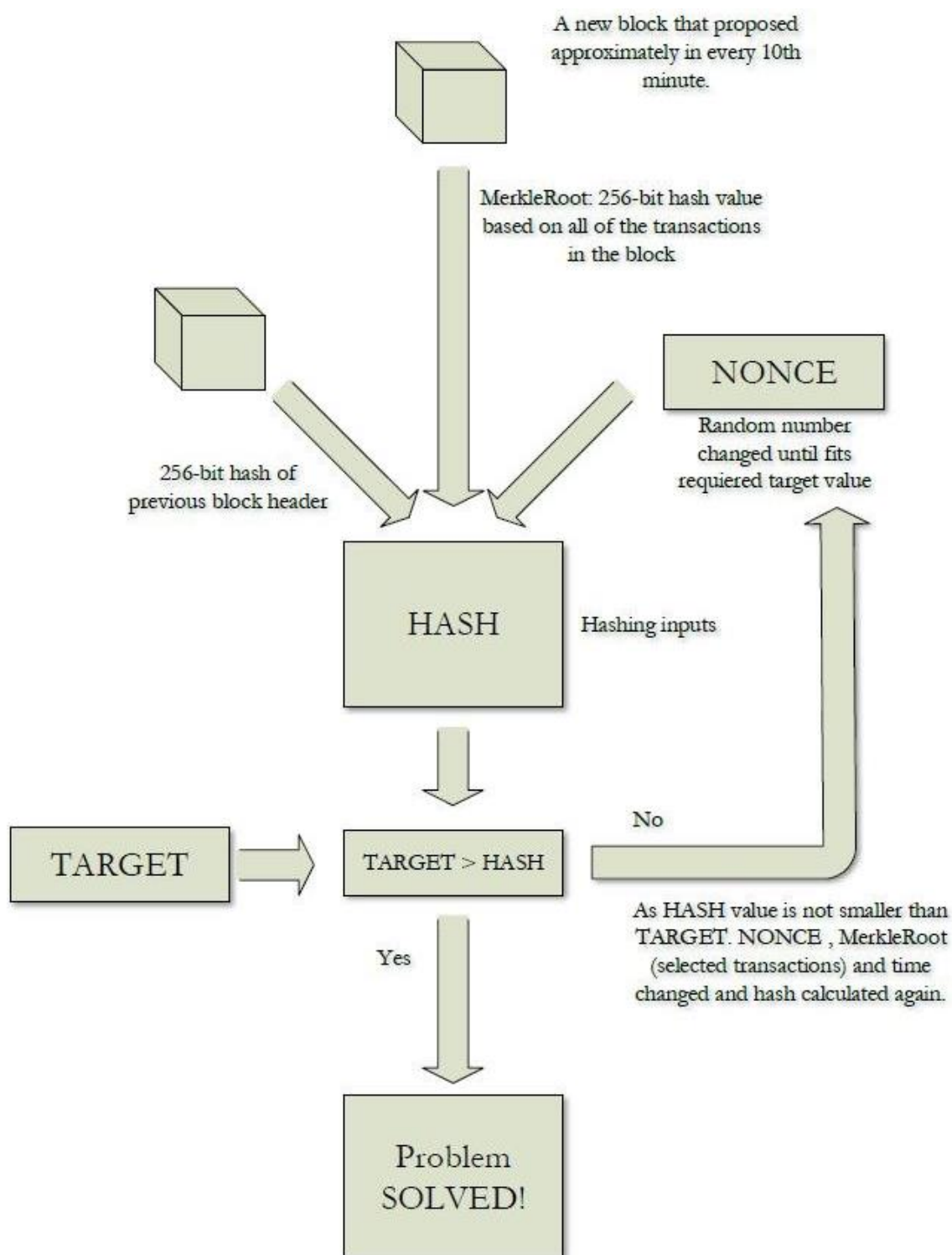
monetary asset and a contender for pristine store of value. This case is further bolstered by ETH's staking yield, a native source of cash flow from Proof of Stake.

Conclusion

In conclusion, transaction validation in blockchain is a complex process that ensures the integrity and security of the network.

Both Proof of Work and Proof of Stake have their advantages and disadvantages, and the choice between the two depends on the specific requirements of the blockchain network.

Bitcoin Mining using Proof of Work



What is Ethereum?

Introduction

Ethereum is an open-source, blockchain-based platform that enables developers to build and deploy decentralized applications (dApps). It was proposed in late 2013 by Vitalik Buterin, a cryptocurrency researcher and programmer.

What is Ethereum?

Unlike Bitcoin, which is primarily a digital currency, Ethereum focuses on running the programming code of any decentralized application. It enables the creation and execution of smart contracts without third parties.

How Does Ethereum Work?

At its simplest, Ethereum works by utilizing a blockchain to store and manage a cryptocurrency called Ether. This blockchain is maintained by nodes, computers participating in the Ethereum network.

Each node stores a copy of the entire blockchain and competes to validate transactions and add them to the blockchain. These transactions can involve the transfer of Ether between accounts, or the computation carried out by a smart contract.

Smart Contracts

One of the key innovations of Ethereum is the concept of a smart contract. Smart contracts are self-executing contracts with the terms of the agreement directly written into code. They automatically execute transactions when their conditions are met.

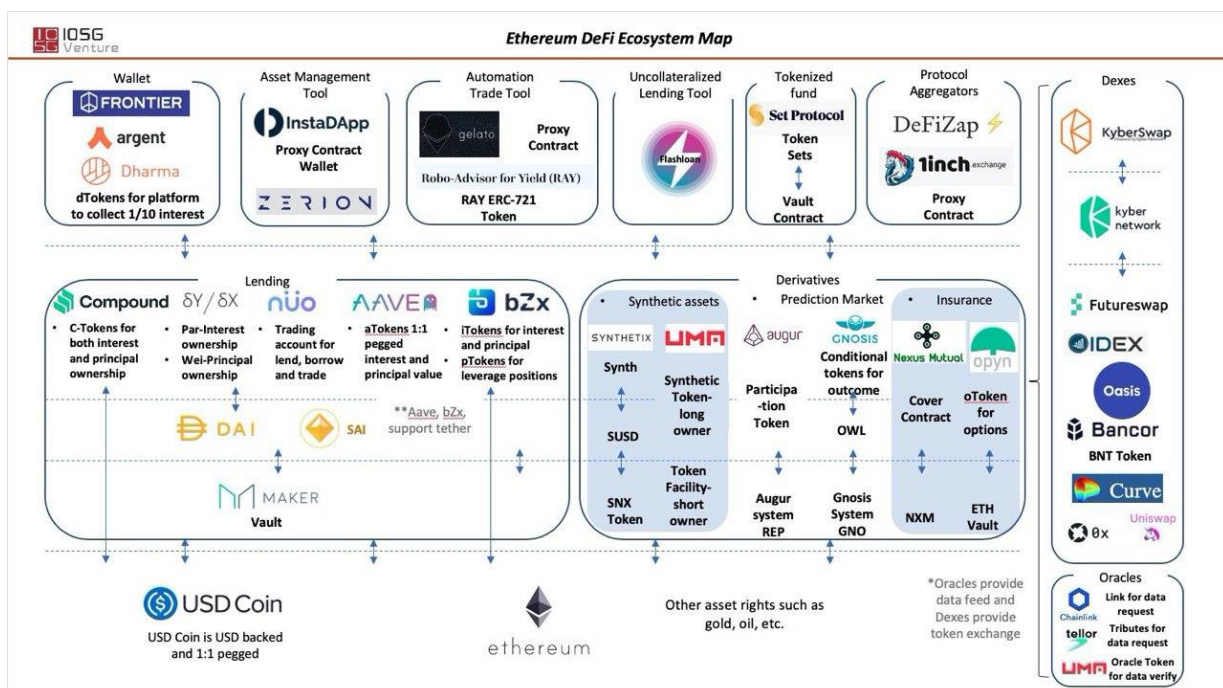
Smart contracts run on the Ethereum Virtual Machine (EVM), which is essentially a global, decentralized computer made up of individual nodes in the Ethereum network. The EVM executes a contract with whatever rules the developer initially programmed.

Applications of Ethereum

The implementation of smart contracts has opened a wide range of possibilities for decentralized applications on the Ethereum platform. These include decentralized finance (DeFi) applications, Non-Fungible Tokens (NFTs) and more.

Conclusion

In conclusion, Ethereum is a powerful platform that has revolutionized the blockchain space by enabling the creation of decentralized applications through the use of smart contracts. Its potential applications are vast and continue to grow as more developers begin to leverage its capabilities.



What are Smart Contracts?

Introduction

Smart contracts are essentially self-executing contracts with the terms of the agreement directly written into lines of code. They exist on a blockchain network and automatically execute when predetermined terms and conditions are met.

How do they work?

Here's a simplified explanation of how smart contracts work:

Agreement of Terms: The process begins when the parties involved in the transaction agree on the terms and conditions.

Smart Contract Creation: The agreed terms and conditions are then written into code and deployed onto the blockchain.

Condition Monitoring: The smart contract continuously monitors to see if the agreed conditions have been met.

Execution: Once the conditions are met, the smart contract automatically executes the agreement. This could involve transferring funds, registering a vehicle, sending notifications, or issuing a ticket.

Smart Contracts have enabled DeFi

Smart contracts play a crucial role in enabling Decentralized Finance (DeFi) and other applications on the blockchain. Here's how:

Automation: Smart contracts introduce automation to the DeFi ecosystem. They are self-executing contracts with the terms of the agreement directly written into lines of code. When predefined conditions are met, the smart contract automatically executes the agreement.

Transparency: Blockchain's core features such as transparency are leveraged by DeFi's technical primitives. Every transaction is visible to all network participants, fostering trust and collaboration.

Security: Smart contracts add a layer of security to the DeFi ecosystem. They are built on blockchain technology, making them resistant to censorship and immune to control by any government or organization.

Interoperability: Smart contracts allow DeFi protocols to interact and build on top of each other. This composability enables the creation of complex financial products and services.

Elimination of Intermediaries: Smart contracts eliminate the need for intermediaries, enabling direct peer-to-peer transactions. This is a game-changer for financial inclusion, opening up financial services to individuals who are excluded from traditional banking systems.

Smart Contract Risks

Smart contracts, while offering many benefits, also come with a set of risks and challenges:

Coding Vulnerabilities: Smart contracts are only as good as the code they're written in. Mistakes or oversights in the code can lead to unintended outcomes or security vulnerabilities.

Weak or Unclear Regulation: There are no consistent rules or standards for smart contracts across different jurisdictions or platforms.

Immutability: Once deployed, smart contracts cannot be changed or corrected, even if they contain errors or flaws.

Vulnerability to Hacks: Smart contracts may be hacked or exploited due to bugs, vulnerabilities, or oversights in the code, leading to unintended or malicious actions or losses.

Governance and Legal Issues: Smart contracts may face challenges in terms of dispute resolution, risk management, compliance, and enforcement. Unresolved legal and regulatory questions remain about the development and operation of smart contracts.

External Data Reliability: Smart contracts often use external data from third-party programs called oracles to perform their functions.

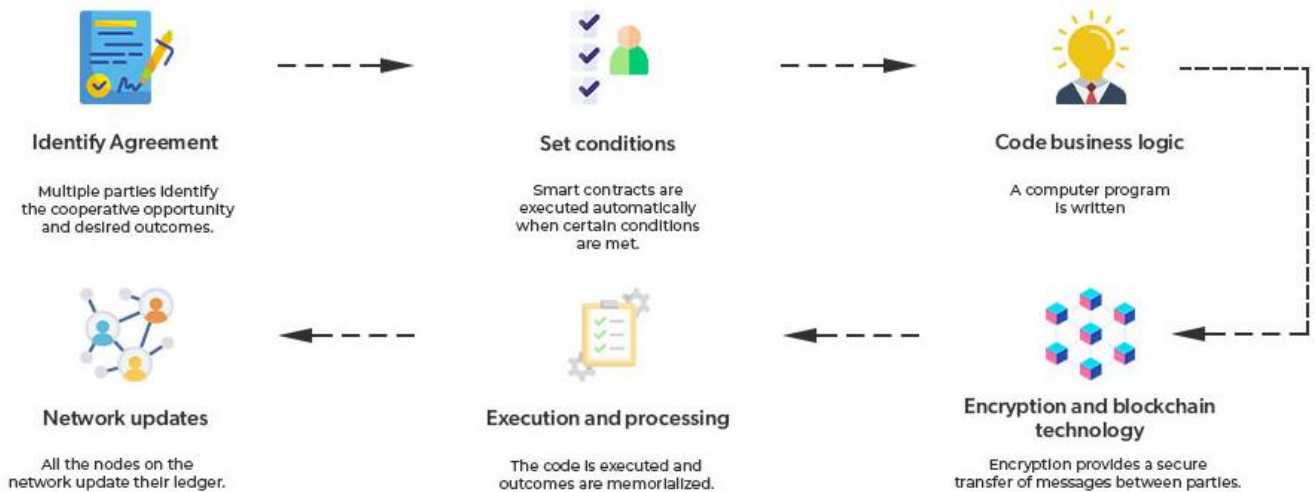
Conclusion

However, the dependence on oracles can introduce operational risks—what happens if the data source is corrupted?

High-Stakes Flaws: Flaws in smart contracts may result in costly errors and potentially the loss of users' assets.

Smart contracts leverage the benefits of blockchain technology, including efficiency, transparency, and security. They remove the need for a central authority or intermediary, and because they're on a blockchain, they're trackable and irreversible. They have revolutionized DeFi and other blockchain applications by introducing automation, enhancing transparency and security, enabling interoperability, and eliminating the need for intermediaries.

How does a Smart Contract Work?



Risks and Challenges for Cryptocurrencies

Introduction

Cryptocurrencies, led by Bitcoin, have gained significant attention due to their potential to revolutionize the financial industry. However, they also come with a set of risks and challenges that need to be understood and addressed.

Price Volatility

One of the most significant risks associated with cryptocurrencies is their extreme price volatility. Cryptocurrency prices can fluctuate wildly in very short periods, leading to potential financial loss for investors. This volatility can be attributed to several factors, including market speculation, regulatory news, technological advancements, and macroeconomic trends.

Price volatility also hampers the use of cryptocurrencies as a stable store of value. For a currency to be effective, it needs to have a relatively stable value. The extreme price swings of cryptocurrencies make them less suitable for everyday transactions.

Regulatory Uncertainty

Regulatory uncertainty is another major challenge for cryptocurrencies. Given the decentralized nature of cryptocurrencies, they often exist in a regulatory gray area. Different countries have different regulations regarding cryptocurrencies, ranging from outright bans to embracing them with open arms.

Regulatory uncertainty can lead to market instability as investors are unsure of how future regulations will impact their investments. It can also hinder the adoption of cryptocurrencies as businesses may be reluctant to accept a form of payment that could potentially be outlawed in the future.

Moreover, the lack of regulation can also lead to increased risk of fraud and scams. Without proper regulatory oversight, bad actors can take advantage of unsuspecting investors.

Other Risks and Challenges

Apart from price volatility and regulatory uncertainty, cryptocurrencies face several other risks and challenges. These include security issues, such as the risk of hacking and theft, technological risks, such as the risk of a failure in the underlying blockchain technology, and adoption risks, such as the risk that cryptocurrencies fail to gain widespread acceptance.

Conclusion

In conclusion, while cryptocurrencies offer many potential benefits, they also come with a set of significant risks and challenges. Investors and users of cryptocurrencies must be aware of these risks and take appropriate measures to mitigate them. As the cryptocurrency market matures, it is hoped that many of these challenges will be addressed, leading to a more stable and secure cryptocurrency environment.

Price Volatility: A Feature or a Bug?

Introduction

Volatility in financial markets refers to changes in the price of an asset. It can be healthy, with steady increases or decreases in price within a general range. It can also be extreme, with sudden price movements in either direction. Healthy volatility serves many purposes in a market, but it mainly creates opportunities for profit.

Most observers of cryptocurrency markets will agree that crypto volatility is in a different league to other asset classes. There are no indices to measure crypto price volatility, but you just need to glance through historical price charts to see that skyrocketing peaks and depressive troughs occur at a quicker and more extreme pace in crypto prices compared to prices of assets in mainstream markets.

Positives of Price Volatility

Price volatility in cryptocurrencies, while often seen as a risk, can also be viewed as a feature for several reasons:

Opportunity for Profit: High volatility can create opportunities for profit, especially for traders and investors who know how to leverage these price movements. They can buy when prices are low and sell when prices are high, potentially earning substantial returns.

Market Liquidity: Volatility can contribute to market liquidity. With price changes, more people are incentivized to trade, contributing to the overall liquidity of the market.

Price Discovery: Volatility plays a crucial role in price discovery. It reflects the ongoing process of consensus where market participants, through their transactions, continually agree on the price of an asset.

Attracting Attention: The significant price fluctuations can attract attention to the crypto space, bringing in new participants and spreading awareness about cryptocurrencies.

Innovation and Evolution: The volatility of cryptocurrencies can drive innovation and evolution in the market. It encourages the development of new tools, platforms, and practices to manage and exploit volatility.

What Contributes to Price Volatility?

Several factors contribute to the price volatility in cryptocurrencies:

Supply and Demand: The volatility of cryptocurrencies can be influenced by how their supply changes as more people buy them and as the mining process continues to produce new coins.

Speculation and Hype: One of the main factors contributing to crypto price swings is speculation and hype. The crypto market is highly sensitive to news and public sentiment. Positive news often leads to quick price surges, while negative news regularly causes sudden price drops.

Regulatory News and Changes: Announcements related to government regulations often have a significant impact on crypto prices. Regulations can legitimize the use of cryptocurrencies in some regions, while restrictions or bans in others can lead to decreased confidence and price drops.

Market Liquidity: Cryptocurrencies with higher liquidity tend to be less volatile. When a market has a high volume of trade, buys and sells can be executed swiftly without significantly impacting the price. Conversely, in low liquidity markets, even small trades can cause large price changes.

Large Holders and Whales: Large cryptocurrency holders, often called "whales," can influence market prices through substantial trades. Their actions can lead to market manipulation, causing rapid price changes as other traders react to their moves.

Technological Changes and Innovations: Advances in blockchain technology or the introduction of new features and capabilities can

lead to shifts in investor interest and market dynamics, affecting cryptocurrency prices.

Market Adoption and Integration: The increasing adoption of cryptocurrencies by businesses and consumers can drive demand and reduce volatility. However, the market can also experience sudden movements based on the pace and nature of adoption across different sectors.

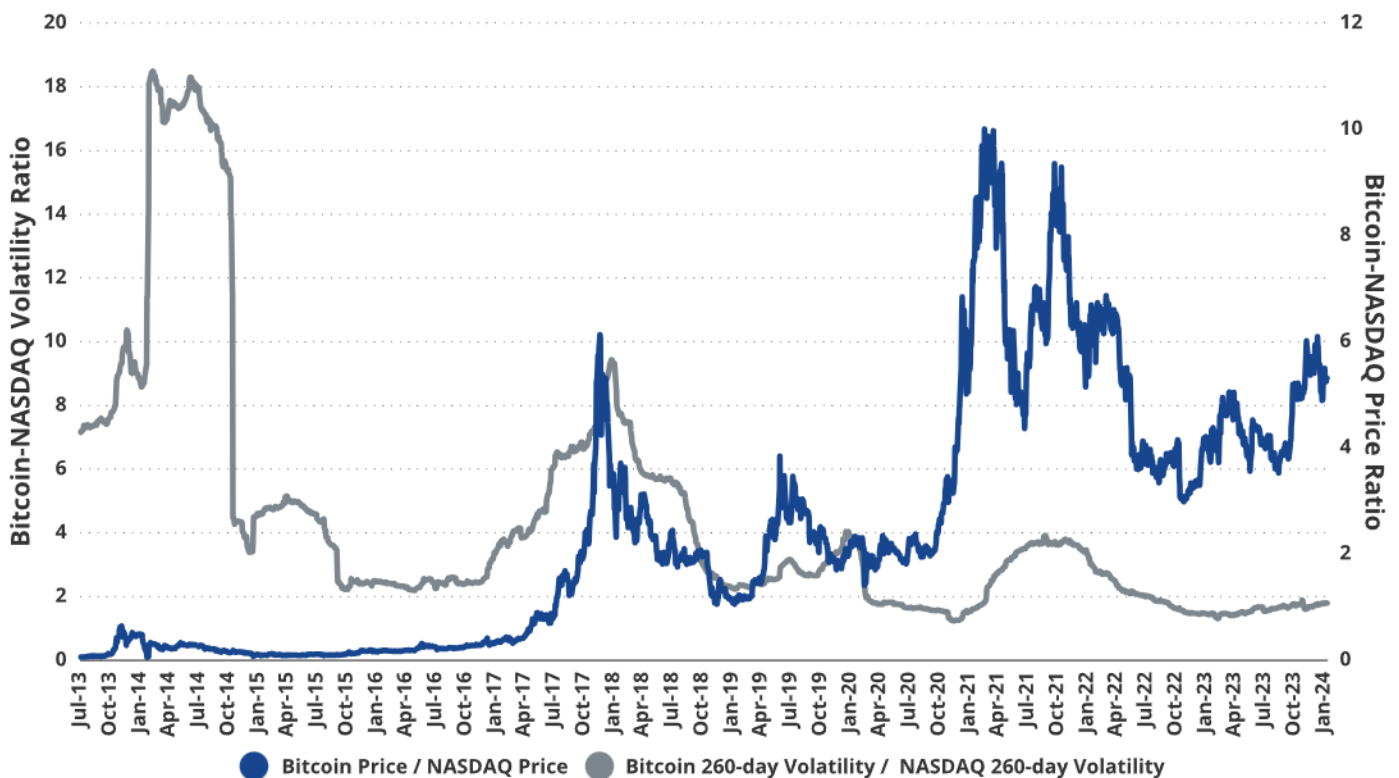
Economic Indicators and Global Events: Like traditional financial markets, cryptocurrencies are not immune to the effects of global economic indicators and events. Economic uncertainty, such as inflation rates or geopolitical tensions, can lead investors to view cryptocurrencies as either a safe haven or a risk, affecting prices accordingly.

Conclusion

In conclusion, the price volatility in cryptocurrencies can be attributed to a variety of factors, including market dynamics, technological developments, regulatory and macro-economic factors, and market sentiment. Understanding these factors can help investors make more informed decisions and potentially mitigate some of the risks associated with investing in cryptocurrencies.

Whether crypto volatility will eventually mimic volatility patterns present in mainstream assets is still to be determined. But, as the asset class continues to grow and develop, it will likely continue to regularly exhibit outsized volatility until it reaches full maturity at some point in the future.

Bitcoin (\$BTC) price Volatility compared to the NASDAQ



The Portal Digital Fund

Introduction

The Portal Digital Fund (“the Fund”) is an actively managed Global Fund of Hedge Funds focused on the cryptocurrency and digital asset investment space. The Fund seeks to achieve medium to long-term growth through investing in a diversified portfolio of 8–10 specialist fund managers running uncorrelated investment/trading strategies. The Fund is focused on absolute returns and expects to generate outperformance with lower volatility versus the CCI30 Index, the benchmark for digital currencies. The fund targets 25%-30% p.a. net return with 15%-20% annualised volatility on a rolling 12-month basis.

Investment Strategy

Our core thesis is predicated on our firm belief that “everything is about to change” as digital assets become the fourth superclass of assets. As the digital currency market formalises and becomes regulated, it continues to represent a new frontier for accredited investors to seek superior risk-adjusted returns that are uncorrelated with traditional equity and debt markets. These markets are highly inefficient and represent substantial sources of alpha for skilled investment managers.

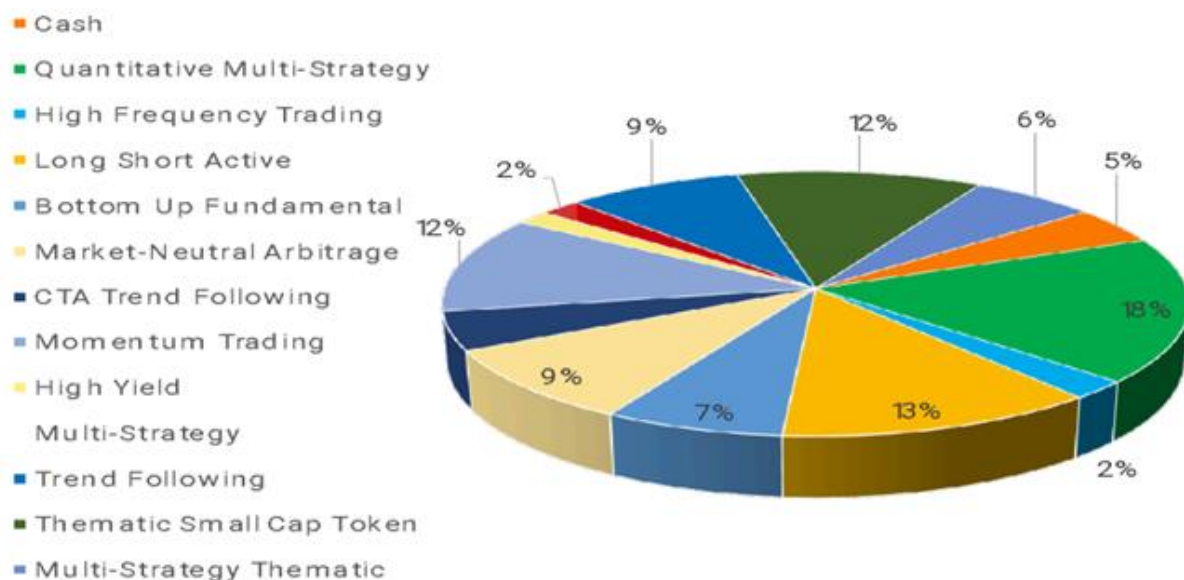
Investment Process

By diversifying across a range of investment strategies that are focused on different styles, sectors and durations, we provide access to the entire digital asset continuum. We follow a rigorous in-depth investment process that is applied consistently to source and analyse the best fund managers operating globally. This is combined with ongoing fund monitoring and dynamic portfolio construction with prudent risk management that ensures investors receive a professionally managed Fund to access the digital currency space.

Portfolio Construction

Our experienced team brings an institutional-grade investment approach combining both quantitative and qualitative investment analysis with prudent portfolio construction to provide access to this uncharted space. We aim to consistently deliver positive performance with reduced volatility via uncorrelated strategies that achieve upside as the sector grows and which preserve capital in down-markets via diversification across differing systematic investment/trading strategies.

Portal Digital Fund Strategy Allocation

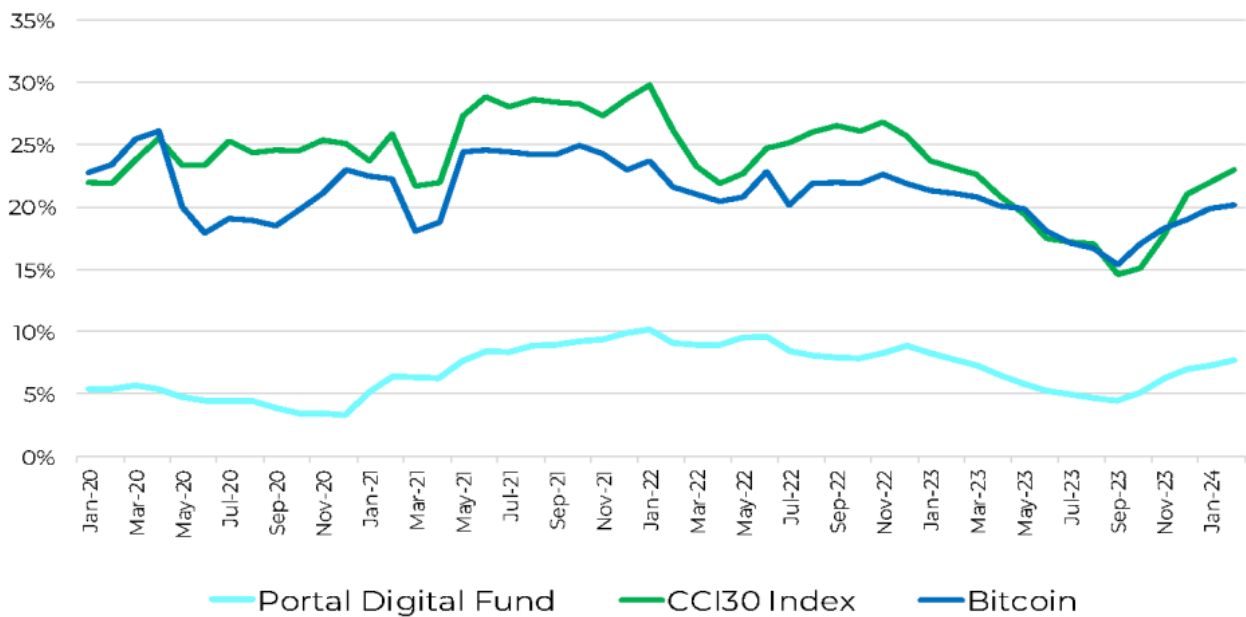


Risk Management

The Fund focuses on capital preservation and manages volatility in its returns via strategic portfolio construction and risk management practices based on underlying individual fund Value at Risk (VaR) assessment, duration and correlation factors.

Funds are analysed using a multi-factor approach that combines both qualitative and quantitative assessment. We conduct rigorous operational due diligence and continually monitor our active investments and communicate with fund managers. Overall fund volatility exposure is monitored and rebalanced actively by the Investment Committee.

Monthly Volatility of the PDF vs BTC and CCI30 Index



Performance Statistics

Monthly Returns

Year	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Total
2020	7.8	1.5	-0.9	8.1	3.7	-0.3	1.9	0.5	0.3	2.6	6.2	8.1	46.6
2021	17.8	17.7	11.8	5.9	-8.6	-7.8	4.2	16.4	-1.5	13.9	-0.15	-2.7	83.1
2022	-13.6	0.1	6.9	-10.6	-12.6	-8.9	7.4	-3.4	-5.1	0.3	-8.6	-3.4	-42.1
2023	10.5	-0.6	3.0	-0.6	-3.5	0.2	-1.5	-3.2	-1.0	7.7	11.8	20.8	49.3
2024	1.0*	2.0*											21.2

*The current month is an estimate based on the initial reporting of the various funds, subject to change once NAV is crystalised.

The Portal Radiance Multi-Strategy Fund

Introduction

The Portal Radiance Multi-Strategy Fund (“the Fund”) is an actively managed Multi-Strategy Hedge Fund focused on fundamental investing in the digital asset and cryptocurrency space globally. The Fund is uncorrelated with traditional asset classes such as equities, real estate, bonds and commodities and also with the cryptocurrency markets.

The Fund is constructed to outperform the overall crypto asset market net of fees per annum with volatility of 35%-50% annualised. It is benchmarked against the Bloomberg Galaxy Crypto Index (BGCI) which is a capped market capitalisation-weighted index designed to measure the performance of the largest digital assets traded in USD.

The Fund is fundamentally focused on long-term investment and whilst quantitative analysis is part of our investment process, the fund is not quantitatively driven, but rather based on fundamental analysis.

The Fund’s strategy mitigates risk and reduces volatility by investing in diversified tokens across the various layers of the Cryptocurrency, DeFi, Smart Contract and NFT stack.

Investment Strategy

We follow a multi-disciplinary approach that positions the Fund in a way that is favourable to both the dominant global digital asset and cryptocurrency themes as well as identifying the right tokens within those themes from a fundamental view. We invest in tokens expected to benefit by taking advantage of these themes and therefore seek out attractively valued tokens that are operationally secure, attracting developers and investors and experiencing a positive industry dynamic.

To monetise the opportunity created by the emerging crypto asset market, we will balance our investment approach to emphasize exposure to the macro trends evolving, while also maintaining an ability to make selective investments in key projects that show disproportionate opportunity for returns. This portion of our portfolio construction will have characteristics of venture capital-like returns.

Investment Process

Our investment process is an iterative, four-step process as follows:

1. Perform top-down macroeconomic thematic analysis assessing the global Cryptocurrency/Digital Asset environment over the next 6 - 12 months. This drives our overall asset allocation, industry outlook and sector positioning.

2. Utilise our algorithmic quantitative factor models to rank and identify investment opportunities on both the long and short side of our identified investment universe. The quantamental models scan for multiple factors under three broad factor categories across:

- 1) Quality,
- 2) Value, and
- 3) Momentum

FACTOR MODELS – FILTERING THE UNIVERSE DIRECTING FUNDAMENTAL RESEARCH EFFORTS

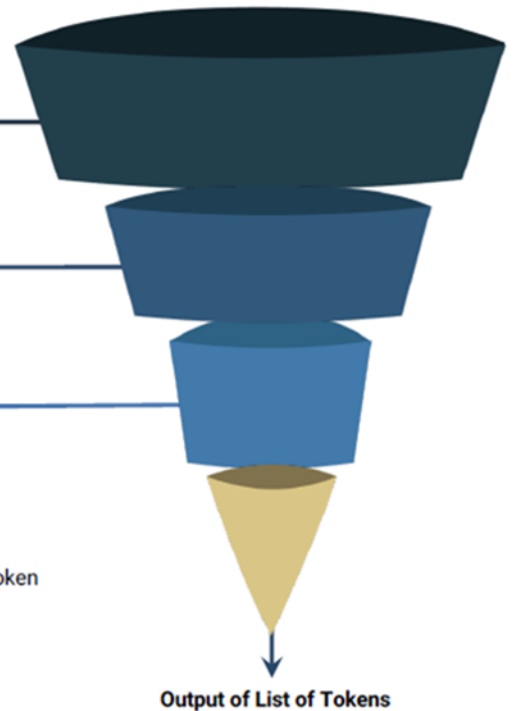
Value: Market Capitalisation, Price-to Sales Ratio (P/S), Token Trading Volume to Market Cap Ratio (VOL/MC), Total Value Locked (TVL)

Quality: Revenue / Earnings Momentum, Stability of User Base, Gross Merchandising Volume (GMV), Total Fees Paid %, Take Rate, Liquidity Turnover Ratio, ROI.

Momentum: RSI, MACD, 12 Month Relative Return Rank, MA's (50, 100, 200 dma), Bollingers, Donchian, Fibonacci Retracements, Volumes

Output:

- Unique token characteristics persistently produced **economic returns** over time
- **Rank the opportunities** as described above from the factor-model output based on token fundamental valuation and quality factors
- Optimization of the Funds holdings through **fundamental multi-factor models**

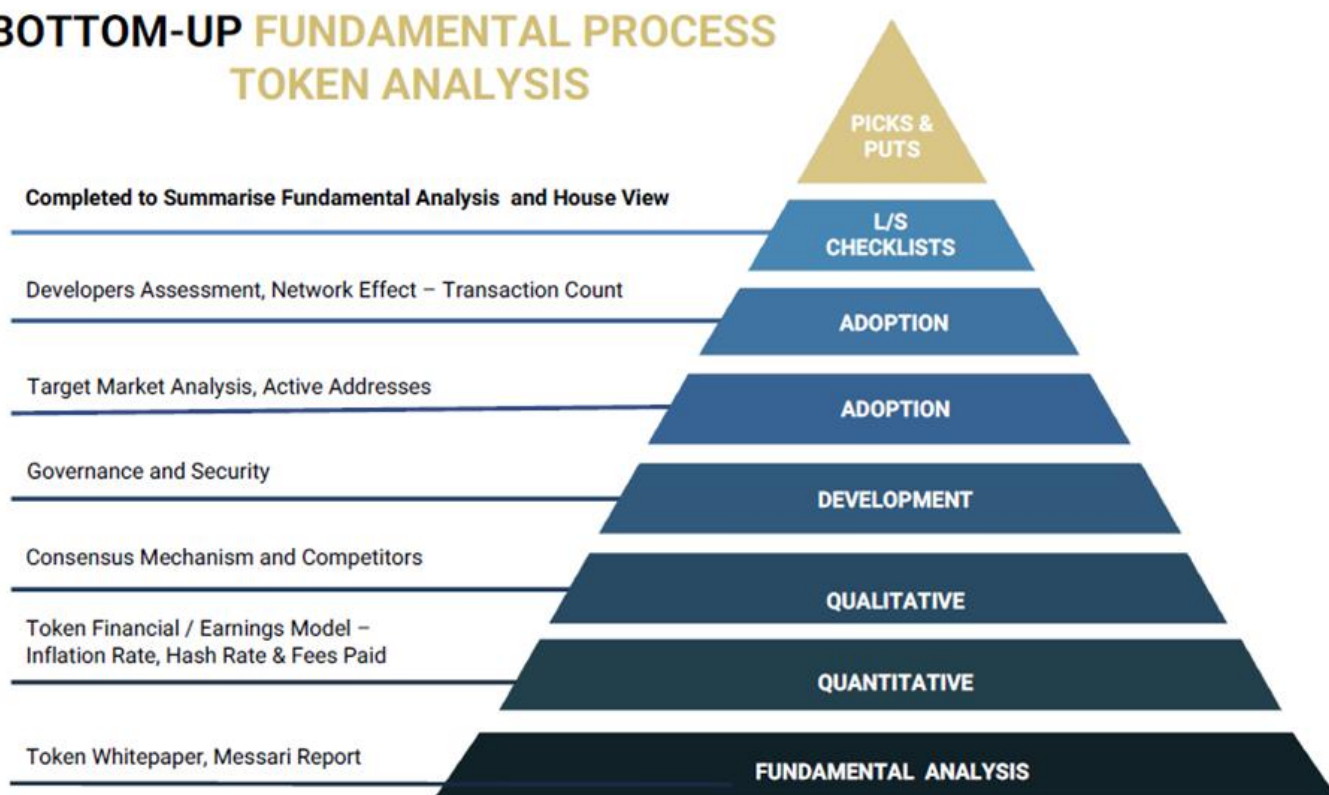


3. This quantitative screening process generates a shorter more manageable list of investment opportunities that we then can focus our research efforts on and performing deep bottom-up fundamental token analysis. The process we follow in gathering information we require is as follows:

- I. Analysis of the token's publicly available information, including their smart contracts and applications

- II. Utilising a momentum-based analysis and applications model with a focus on their potential for adoption, long term stability in margin and profitability ratios, and most importantly free cash-flow generation
- III. Compile a DD questionnaire and conduct analysis to interrogate the strength of token's strategy and assumptions.
- IV. Collate the steps above into a summarised Research Report.

BOTTOM-UP FUNDAMENTAL PROCESS TOKEN ANALYSIS

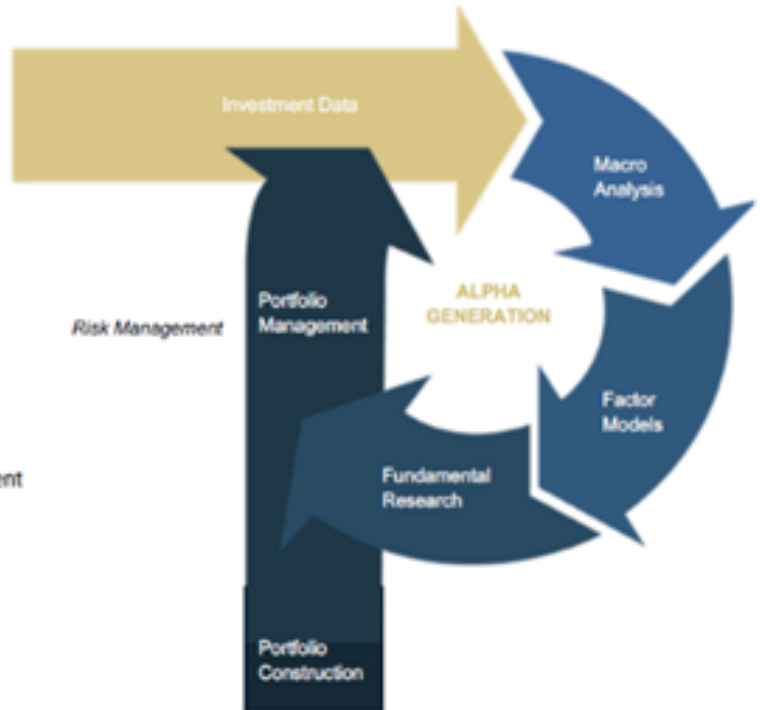


4. Present our investment hypothesis in the form of a trade proposal, which condenses all of the

above into an investment hypothesis and is used to execute the trade and revisit the initial hypothesis.

TRADE EXECUTION PROCESS AND CHECKLIST

1. Potential trade / value unlock catalysts
2. Current shareholders analysis
3. Tokenomics and Initial Distribution
4. Token Supply on Exchanges
5. Token Balance Changes on Exchanges
6. Technical analysis
7. Level of Confidence – Position Size / Risk Management
8. Execution
9. Monthly Review of Trade



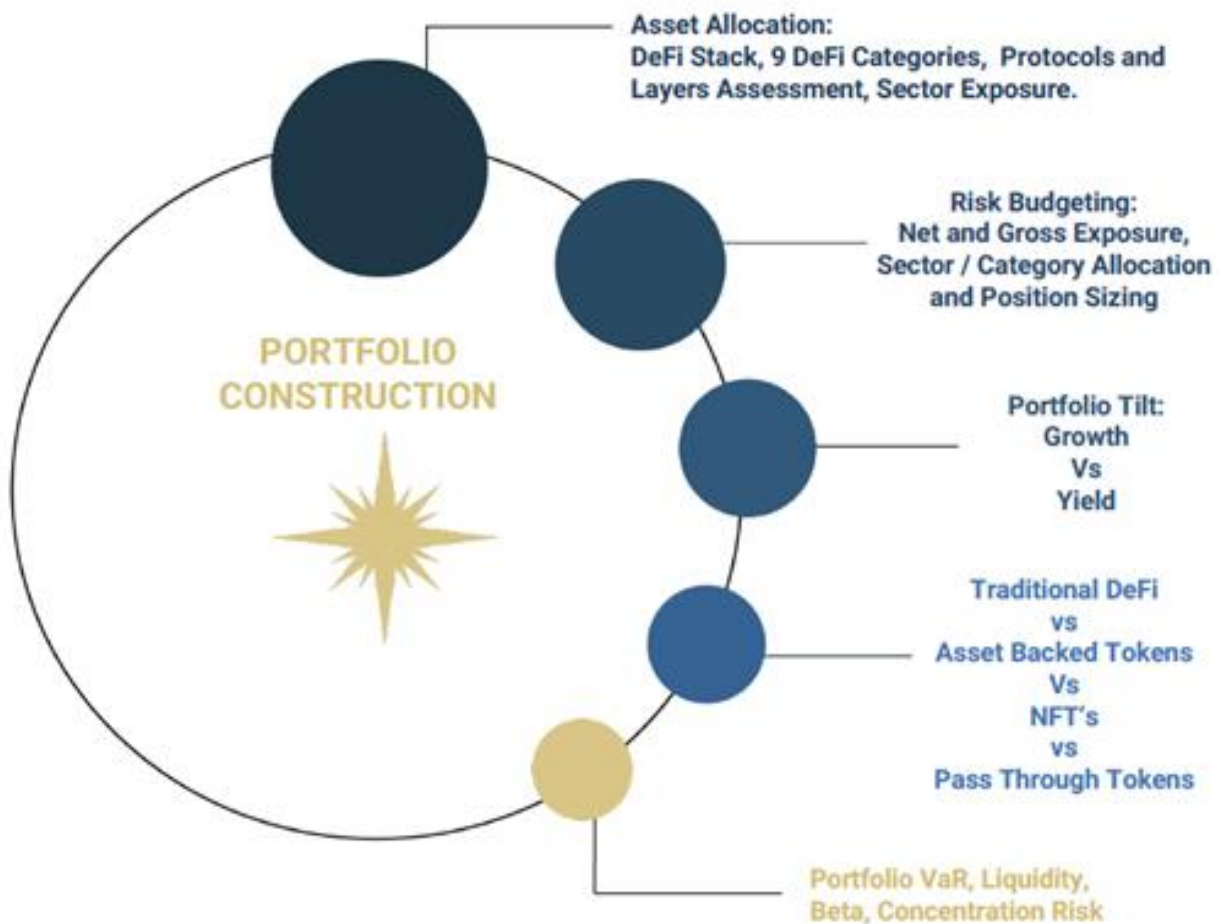
Portfolio Construction

Portfolio construction takes all of the research discussed above and utilises it to construct a balanced portfolio which is long the sectors we like and neutral /short the sectors we don't. Portfolio construction balances risk vs. expected return for a given view and position. We pay particular attention to our differing levels of conviction. This allows our bet sizes to reflect our relative confidence of views as and when we continue to develop our investment hypothesis.

We implement our asset allocation primarily based on our thematic views and construct our individual industry buckets based on those views above.

Each Industry bucket is treated as almost a separate individual portfolio and as such has exposure that is independent of the overall portfolio's exposure and positioning. We establish risk budgets for each sector, as well as position sizing and overall net and gross exposure targets.

We aim to manage a relatively concentrated portfolio of roughly 30 longs vs BTC/ETH Futures shorts with some index / option overlays to manage the Fund's Beta. This is to ensure that we reflect the best ideas and opportunities in the portfolio.



Risk Management

Risk management is the core of our overall investment process, and we place a high focus on its implementation. We have a calculated approach to risk, as well as the risk-reward trade off necessary in our investment decisions.

We realise that there is risk inherent in each aspect of our process, from the gathering of data and performing of research to executing trades and portfolio construction.

We therefore attempt to mitigate risk at each stage of our investment process, as well as within our administration and operations.

We view portfolio risk on an overall portfolio (Beta), sector and individual position level as per the diagram below:

RISK MANAGEMENT



We have built a risk framework with Risk Cafe as our portfolio risk management system. We conduct Scenario Analysis and run Monte Carlo Simulation to analyse our overall portfolio performance and / or Beta. We then assess which sectors are contributing the most to overall risk, and finally then position-specific or 'pin' risk. Once we have identified and quantified the risks that our portfolios are exposed to, we decide which risk to mitigate and which risks to accept on each level of the portfolio.

The types of shocks we would apply to our portfolio on a monthly basis are events such as the Lehman's Default in September 2008 that sparked the Global Financial Crisis, and more recently the "Covid crash".

The results are assessed and ranked accordingly. This is not a complete or exact representation of how the portfolio would react in each scenario, but more of a tool to identify where the risk in our Fund lies and how expected performance may be impacted.

Performance attribution and VaR is assessed on frequent basis and this is then incorporated into the investment hypothesis / trade proposal for discussion and continuous feedback into the investment process.

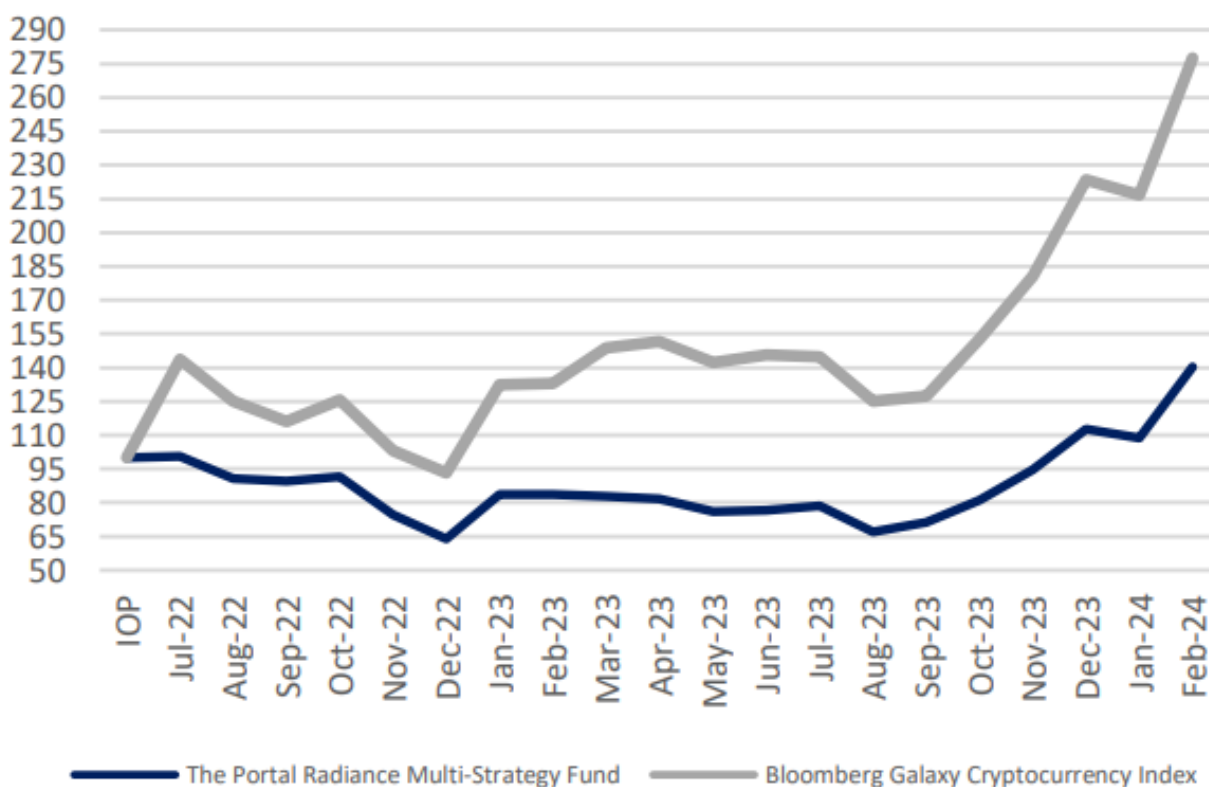
Performance Statistics

Track Record Past performance does not predict futures returns

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	YtD
2022							0.44%	-9.83%	-1.18%	2.12%	-18.51%	-14.27%	-36.15%
2023	30.89%	0.02%	-0.87%	-1.45%	-6.96%	0.70%	2.77%	-14.96%	6.54%	13.68%	16.89%	19.03%	76.49%
2024	-3.56%	+29.07											+24.48%

Performance Since Inception

Past performance does not predict futures returns



Contacts

PORTAL

ASSET MANAGEMENT

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Further Reading

Blockchain Technology: Part of The Fourth Industrial Revolution

Introduction

The Fourth Industrial Revolution, a term coined by Klaus Schwab, founder and executive chairman of the World Economic Forum, is characterized by a range of new technologies that are fusing the physical, digital, and biological worlds. Among these new technologies, blockchain stands out for its potential to disrupt various industries and redefine our understanding of transactions.

Blockchain: A Revolutionary Technology

Blockchain technology, first implemented in 2009 as a core component of Bitcoin, is a decentralized, distributed ledger that records transactions across multiple computers. Its decentralized nature ensures that no single entity has control over the entire network, making it resistant to censorship and immune to control by any government or organization.

Facilitating Transactions with Blockchain

Blockchain technology can facilitate all manner of transactions, not just financial ones. Here's how:

Financial Transactions: Blockchain can streamline financial transactions by eliminating the need for intermediaries, reducing costs, and speeding up transaction times. It can also provide greater transparency and traceability, which can help prevent fraud and improve auditing.

Smart Contracts: Blockchain enables the creation of smart contracts, which are self-executing contracts with the terms of the agreement directly written into code. Smart contracts can automate a wide range of transactions, from rental agreements to insurance claims, improving efficiency and reducing the potential for disputes.

Supply Chain Management: Blockchain can provide end-to-end visibility in supply chains, improving traceability and reducing the risk of counterfeiting. It can also automate various supply chain processes, improving efficiency and reducing costs.

Identity Verification: Blockchain can provide a secure and immutable way to manage digital identities, facilitating transactions that require identity verification, such as voting or accessing medical records.

Decentralized Finance (DeFi): Blockchain is the backbone of the emerging DeFi sector, which aims to recreate traditional financial systems, such as lending and borrowing, in a decentralized manner.

Conclusion

In conclusion, blockchain technology has the potential to disrupt various industries and redefine our understanding of transactions. As we continue to explore its potential, blockchain could very well become the standard for future transactions and data storage.

Blockchain: An Enabler for AI, IoT, and TaaS

Introduction

Blockchain technology, known for its role in facilitating digital currencies, is emerging as a powerful tool in various sectors. Its potential to provide decentralized, secure, and transparent networks makes it an enabler for Artificial Intelligence (AI), Internet of Things (IoT), and Transport as a Service (TaaS) sectors.

Blockchain and Artificial Intelligence

Blockchain can play a significant role in the development and application of AI. It can provide a secure and transparent platform for sharing and storing data, which is crucial for training AI models. Blockchain can also facilitate the tracking and auditing of AI decisions, enhancing transparency and accountability.

Moreover, blockchain can enable decentralized AI applications, where multiple parties can contribute to the development and training of AI models without a central authority. This can lead to more robust and diverse AI systems.

Blockchain and Internet of Things

The IoT involves connecting various devices to the internet, enabling them to collect, share, and use data. However, this connectivity also raises concerns about security and privacy.

Blockchain can address these concerns by providing a secure and transparent platform for IoT devices to communicate. Each transaction between IoT devices can be recorded on a blockchain, providing an immutable record of all interactions. This can prevent unauthorized access and manipulation of data.

Furthermore, blockchain can enable decentralized IoT networks, reducing the need for central servers and reducing the risk of single points of failure.

Blockchain and Transport as a Service

TaaS involves providing transportation as a service, leveraging digital platforms to connect users with transportation providers. Blockchain can enhance TaaS platforms by providing a secure and transparent platform for transactions.

For instance, blockchain can facilitate peer-to-peer ridesharing services, where drivers and passengers can connect directly without an intermediary. All transactions can be recorded on a blockchain, providing a transparent and immutable record of all rides and payments.

Moreover, blockchain can enable the tracking and auditing of service quality, enhancing accountability and trust in TaaS platforms.

Conclusion

In conclusion, blockchain technology has the potential to become a significant enabler in the AI, IoT, and TaaS sectors. By providing a secure, transparent, and decentralized platform for transactions and data sharing, blockchain can address many of the challenges these sectors face, paving the way for more robust, secure, and efficient systems.

Tokenization of Real-World Assets

Introduction

Tokenization is the process of converting rights to an asset into a digital token on a blockchain. This innovative process has the potential to significantly disrupt traditional financial markets by providing a new and efficient method for buying, selling, and trading assets.

Understanding Tokenization

Tokenization involves creating a digital representation of a real-world asset on a blockchain. This digital token carries with it the rights to the underlying asset and can be bought, sold, or traded on a digital platform. Tokenization can be applied to a wide range of assets, including real estate, stocks, bonds, commodities, and even fine art.

Benefits of Tokenization

Liquidity: Tokenization can increase the liquidity of traditionally illiquid assets like real estate or art. By dividing the asset into smaller, more affordable units, tokenization opens up the market to a larger pool of potential investors.

Efficiency: Tokenization can streamline the process of buying and selling assets. Transactions can be executed instantly on a blockchain platform, reducing the need for intermediaries and lowering transaction costs.

Transparency: Blockchain's immutable and transparent nature ensures that all transactions involving the tokenized asset are recorded and visible to all participants in the network. This can reduce fraud and increase trust among market participants.

Accessibility: Tokenization can democratize access to investment opportunities. By breaking down barriers to entry, tokenization allows a wider range of investors to participate in the market.

Implications for Traditional Finance

The tokenization of real-world assets could have profound implications for the world of traditional finance:

Disruption of Traditional Finance: Tokenization could disrupt traditional financial markets by providing a more efficient, transparent, and accessible method for buying, selling, and trading assets.

New Investment Opportunities: Tokenization could create new investment opportunities by making previously illiquid or inaccessible assets available to a wider range of investors.

Regulatory Challenges: The tokenization of real-world assets could pose regulatory challenges. Regulators will need to adapt existing rules and regulations to accommodate this new form of asset ownership and exchange.

Risk Management: Tokenization could introduce new risks, including technological risks associated with the blockchain platform and risks related to the security and storage of digital tokens.

Conclusion

In conclusion, the tokenization of real-world assets represents a significant development in the finance world. While it offers many benefits, it also poses new challenges and risks. As the technology matures and regulatory frameworks adapt, tokenization could become a standard practice in the finance world, transforming how we buy, sell, and trade assets.