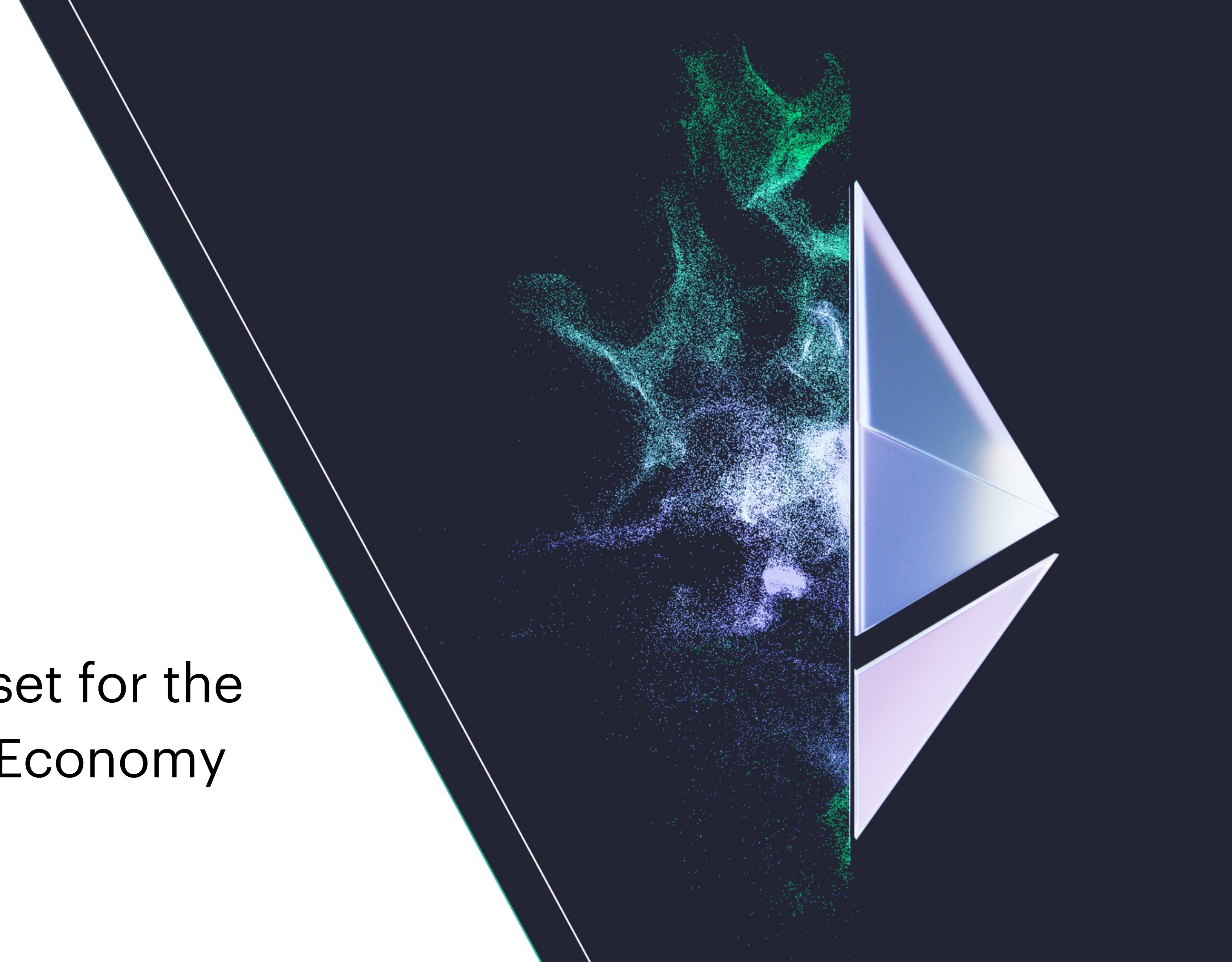


# Ether

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A Strategic Asset for the  
Decentralized Economy

JANUARY 2025





# Understanding Ethereum & Ether

# What is Ethereum?

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## Ethereum is a Next-Generation Blockchain

The Ethereum blockchain, like Bitcoin, is a decentralized, distributed ledger that records transactions and data. However, Ethereum takes the concept a step further by enabling the creation and execution of smart contracts and decentralized applications (dApps) on its blockchain platform:

- **The Ethereum Network:** The Ethereum network is made up of a global community of nodes, which are computers connected to the network that help validate transactions and execute smart contracts. These nodes maintain a copy of the Ethereum blockchain, ensuring that the data stored is transparent, immutable, and accessible to all participants. The decentralized nature of the network means no single entity controls the blockchain, making it resistant to censorship and tampering.
- **Smart Contracts:** A key feature that sets Ethereum apart from Bitcoin is its ability to create and execute smart contracts. A smart contract is a self-executing agreement with the terms directly written into code. When predefined conditions are met, the contract automatically executes, ensuring all parties adhere to the agreement without intermediaries. Smart contracts enable a wide range of applications and form the basis for dApps built on the Ethereum platform.
- **Ether and Gas:** Ether (ETH) is the native cryptocurrency of the Ethereum network. It serves as a digital currency for sending and receiving value and as a means to pay for transaction fees and computational services. When a user wants to execute a smart contract or perform a transaction, they must pay a fee in Ether, known as "gas." The gas fee is proportional to the computational effort required and incentivizes validators to process the request.
- **Mining and Consensus:** Ethereum has upgraded to a proof-of-stake (PoS) consensus mechanism to validate transactions and create new blocks. Validators and users can stake their Ether to validate transactions and secure the network in exchange for rewards. This new process to secure the network is much more energy-efficient than the prior mechanism proof-of-work (PoW), where miners used energy intensive compute power to compete to solve complex mathematical problems, and the first to find a solution would add the next block to the blockchain and receive a reward in Ether.
- **Decentralized Applications (dApps):** The Ethereum blockchain enables the creation of dApps, which run on the decentralized network. These dApps can serve various purposes, from financial services to gaming and social networks. Running on the decentralized Ethereum network makes dApps resistant to censorship, downtime, and tampering, offering users security and autonomy.

# What is Ether?

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## Ether Fuels a New Era of Digital Contracts and Apps

Ether (ETH) is a groundbreaking cryptocurrency and the native token of the Ethereum blockchain, a decentralized, open-source platform that enables the creation of smart contracts and decentralized applications (dApps). Proposed in 2013 by programmer Vitalik Buterin, Ethereum has since grown to become the second-largest cryptocurrency by market capitalization, behind only Bitcoin. Unlike Bitcoin, which was designed primarily as a digital currency, Ethereum was built to be a more versatile, open-source platform. It introduces the concept of smart contracts, self-executing agreements with the terms directly written into code. These smart contracts form the backbone of dApps, which run on the decentralized Ethereum network rather than on a single computer, ensuring that no single entity can control or censor these applications.

Ether serves two main purposes within the Ethereum ecosystem. First, it acts as a digital currency, allowing users to send and receive value without intermediaries. Second, it is used to pay for transaction fees and computational services on the network. When users want to execute a smart contract or perform a transaction, they must pay a fee in Ether to incentivize the network's miners to process and validate their request. Ethereum uses a consensus mechanism called proof-of-stake (PoS), which is more energy-efficient than Bitcoin's proof-of-work (PoW) system. In PoS, users can "stake" their Ether as collateral to validate transactions and secure the network, receiving rewards in newly minted Ether.

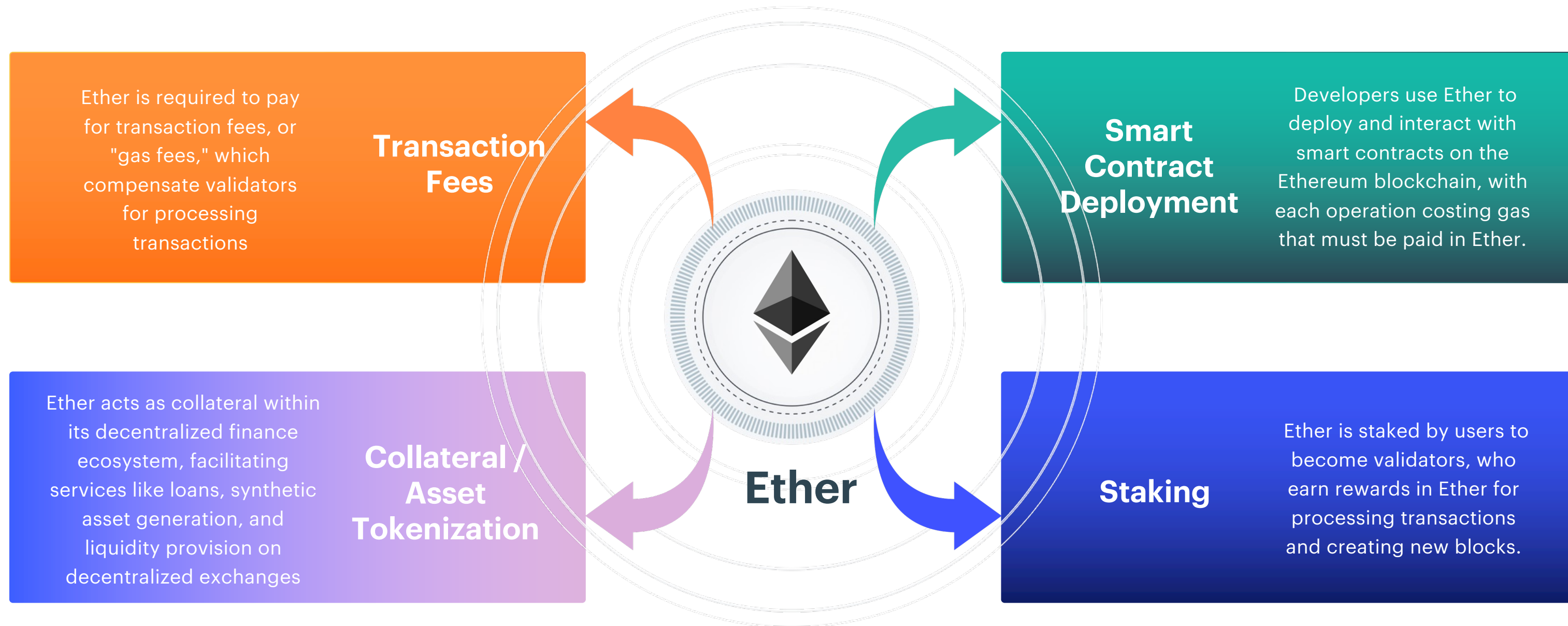
The Ethereum protocol relies on several key components:

- Smart contracts: Self-executing agreements with the terms directly written into code, eliminating the need for intermediaries and enabling trustless interactions.
- Ethereum Virtual Machine (EVM): A decentralized, emulation of a complete computer system (or virtual machine) that executes smart contracts on the Ethereum network.
- Gas: A unit that measures the computational effort required to execute a smart contract or transaction on the Ethereum network. Users must pay gas fees in Ether to compensate for the computational resources used.

# From Gas to Growth: Ether's Revenue-Driving Role



Ether serves as the fuel for the Ethereum network, compensating validators for computations and transactions. Ether's reflexivity, driven by price leading on-chain activity and subsequent Ether burning, creates a feedback loop enhancing its network effect.





# Investing in Ether

# Investment Thesis: The Smart Contract Powerhouse



The investment thesis for Ether and Ethereum is based on its position as a decentralized smart contract platform capable of executing any transaction that can be algorithmically defined. Ethereum's native support for programmable transactions enables developers to build decentralized applications without launching separate blockchains for each one. Ethereum's interoperability, or the ability of blockchain networks to transact with each other, has proven to create strong network effects. In addition to this, Ethereum's tokenomics creates an incentive for token holders through staking rewards and a fee-burning mechanism that reduces the circulating supply, thus creating a deflationary dynamic. Ethereum has garnered attention as an alternative investment due to its potential for asymmetric returns and its staking rewards. Lastly, Ether's fundamental value refers to the intrinsic worth of an asset, derived from its ability to generate cash flows. For example, the Ethereum network produces revenue, such as transaction fees, staking rewards, or service subscriptions, thus providing fundamental value.

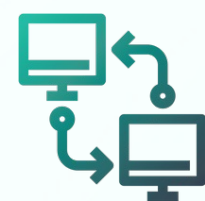
Next, we will outline how the following points translate into how Ethereum will power the next generation of applications built for the decentralized web.

## Smart Contract Platform



A decentralized environment, enabling the creation and execution of self-executing contracts and decentralized applications.

## Interoperability



The ability of different blockchain networks to communicate and interact, allowing seamless data and value transfer.

## Tokenomics



The blockchain's economic model, focusing on token design, distribution, and incentives to ensure network growth and stability.

## Fundamental Value

$$\sum \frac{CF}{(1+r)^t}$$

The intrinsic worth of an asset based on its ability to generate and sustain future cash flows.

# Ethereum is the Digital Infrastructure King



## An Operating System for the Decentralized World

Total Addressable Market (TAM) quantifies the revenue opportunity available for a product or service, assuming maximum market penetration under ideal conditions. First-generation blockchains, like Bitcoin, primarily focused on secure, decentralized monetary transactions. Second-generation blockchains, like Ethereum, aim to expand their TAM by introducing programmable transactions.

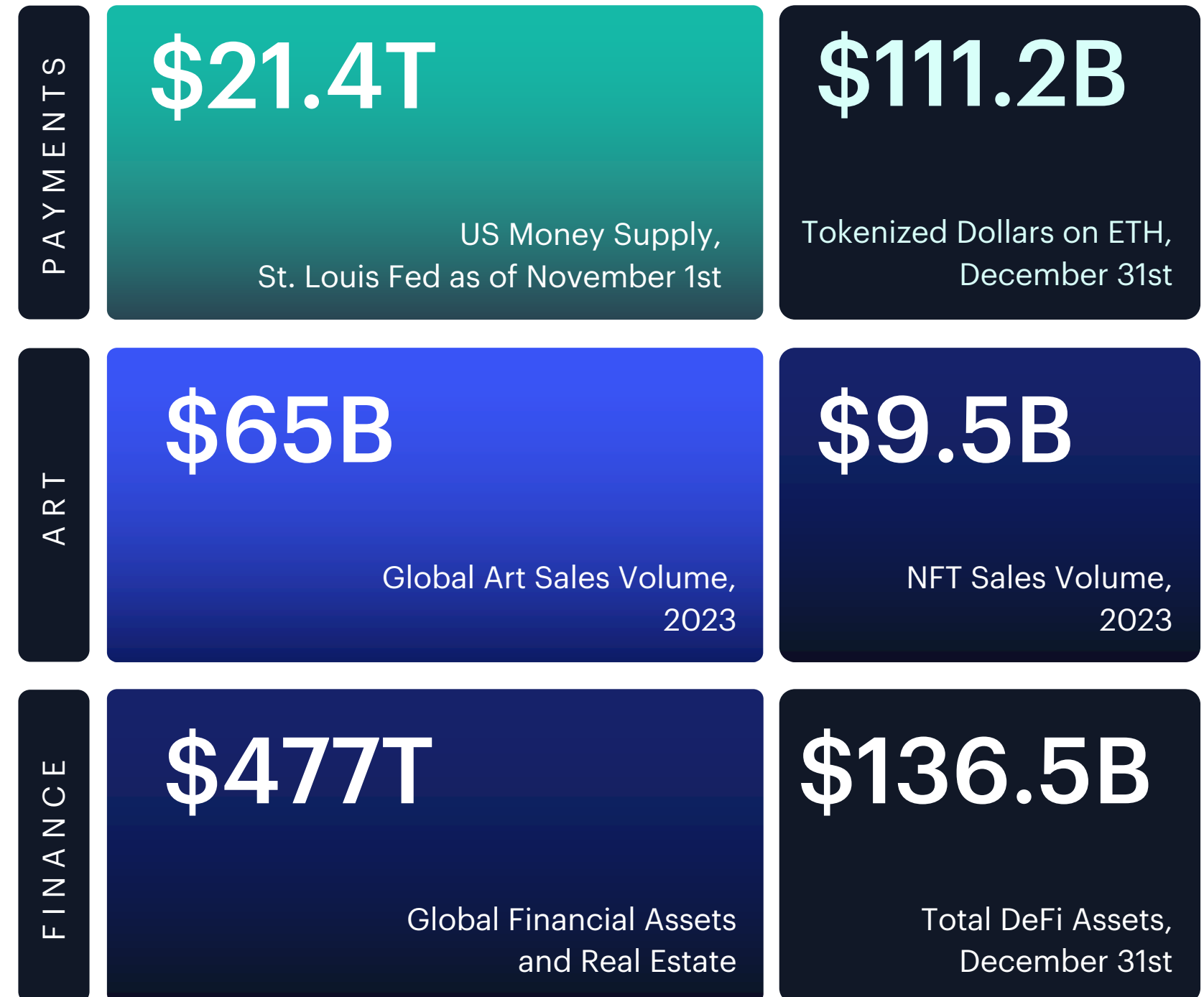
Ethereum acts as the foundational infrastructure for the decentralized web, akin to how Microsoft Windows or macOS support personal computing. It enables the creation and operation of decentralized applications (DApps) using the Ethereum Virtual Machine (EVM), which executes code in a manner similar to cloud hosting services.

DApps on Ethereum are built using smart contracts. A smart contract is a self-executing agreement on the blockchain that automatically enforces and verifies the terms and conditions coded within it. This automated execution has proven useful in sectors, such as finance, where seamless, error-free transactions are critical.

Ethereum supports multiple token standards, enabling integration of both fungible and non-fungible assets. This powers diverse applications, from digital dollar payments to tracking unique assets like digital art. Its flexibility spans finance, gaming, and real estate, enhancing liquidity and accessibility by tokenizing real-world assets. ERC-20 tokens represent fungible assets, while ERC-721 and ERC-1155 tokens handle non-fungible and semi-fungible assets, respectively, providing a robust framework for digital asset management and ownership tracking.

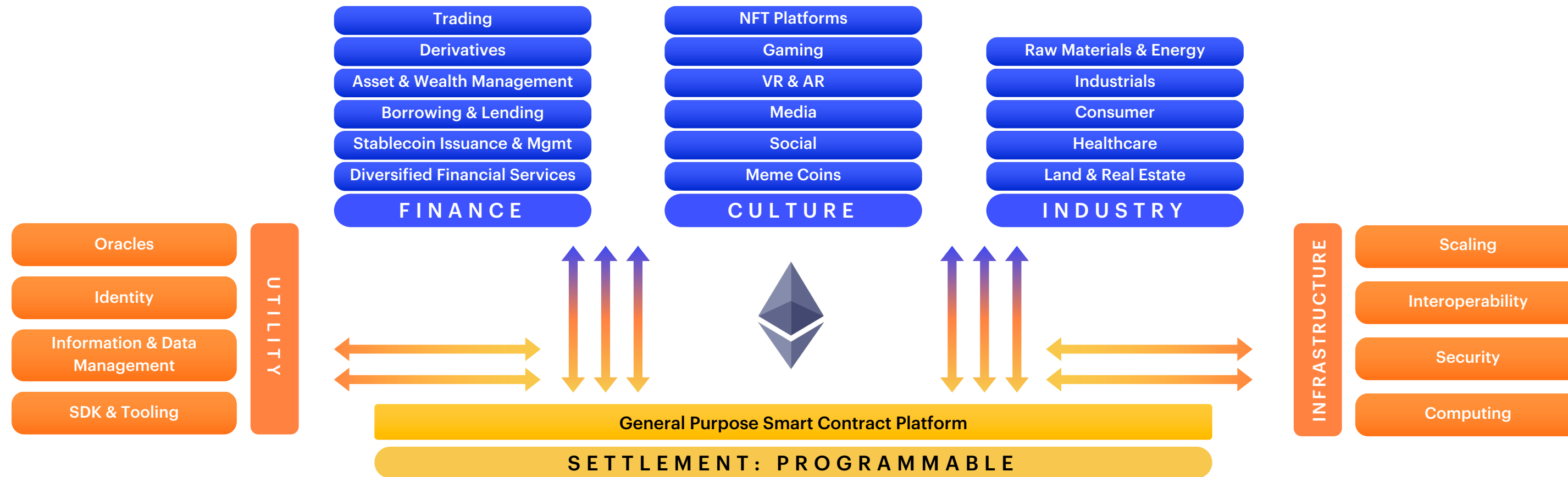
Sources: CF Benchmarks, Dune Analytics, Defillama, BCG 2024 Wealth Report

## Asset Tokenization Creates a Deep Opportunity Set





# Ethereum's Interoperability Fuels Platform Growth



Blockchain interoperability allows different blockchain networks to communicate and interact seamlessly, which is critical for a programmable settlement layer as it enables the exchange of assets, data, and functionalities across various services and applications. This robust network of use cases drives innovation and expands market opportunities. The CF Digital Asset Classification Structure (CF DACS) can be used to visualize the different segments Ethereum is interoperable with, aiding institutional investors in strategy development and portfolio optimization.

Ethereum's interoperability is a cornerstone of its value proposition, enabling seamless interaction with a wide array of systems and protocols. Through cross-chain bridges, Ethereum is able to transfer tokens and share data with other blockchains. Oracles feed external data into smart contracts, expanding their utility beyond blockchain-exclusive information. Scaling infrastructure such as Optimistic Rollups, boost capacity and reduce costs while preserving security. Enterprise solutions offer customizable blockchains for specific business needs. APIs and SDKs streamline integration with traditional web systems, enabling users to interact seamlessly with DApps. This makes Ethereum a powerful platform for a variety of applications.

# Ethereum's Network Effects Drive Innovation

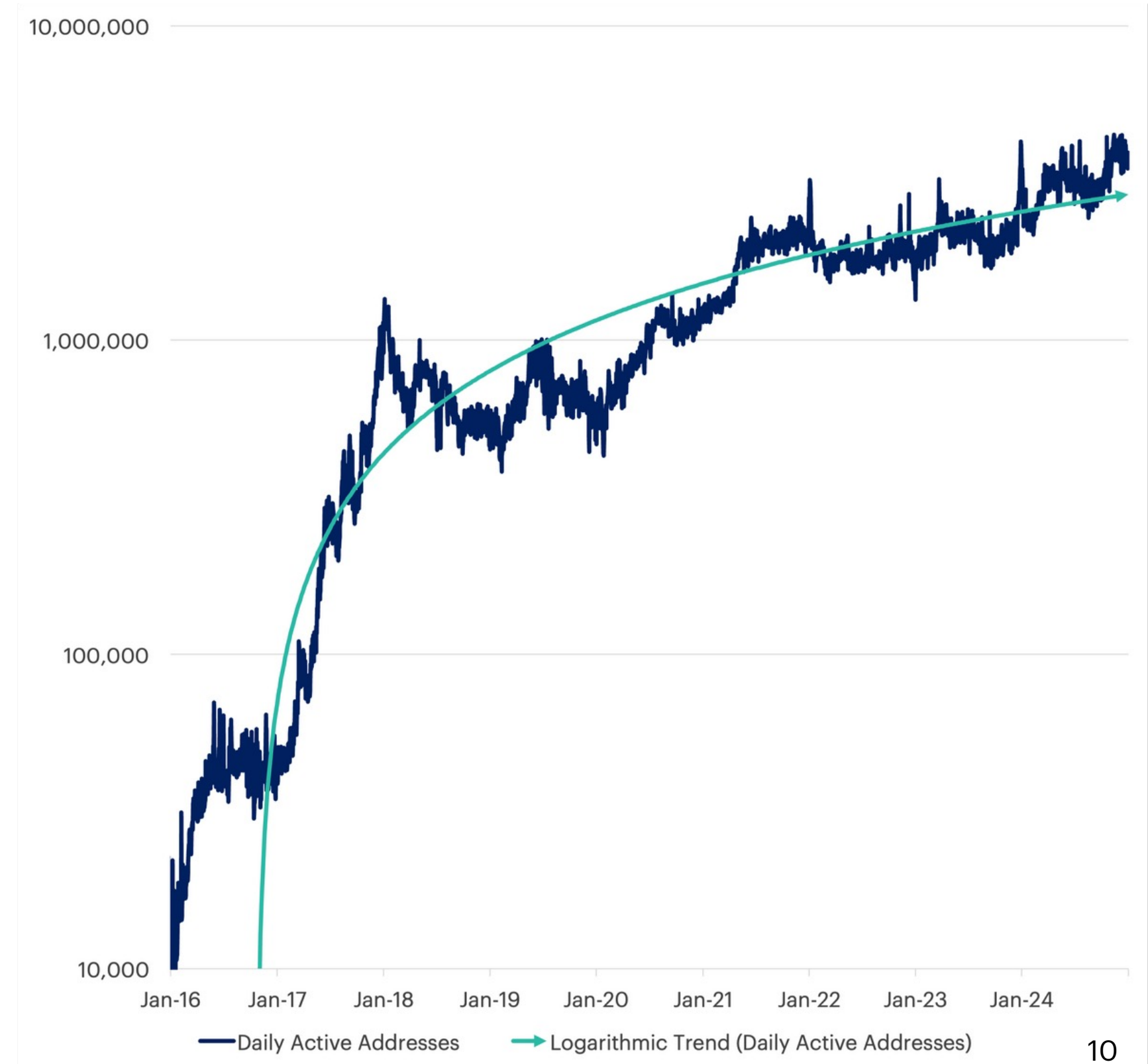


Network effects are a phenomenon in which the value of a product or service increases as more people use it. This occurs because a larger user base makes the product or service more useful to everyone. For example, a social networking platform is more valuable to its users if more of their friends are on it. A messaging app is more useful if more of the people you want to communicate with are using it. And a marketplace is more attractive to buyers and sellers if it has a large number of both.

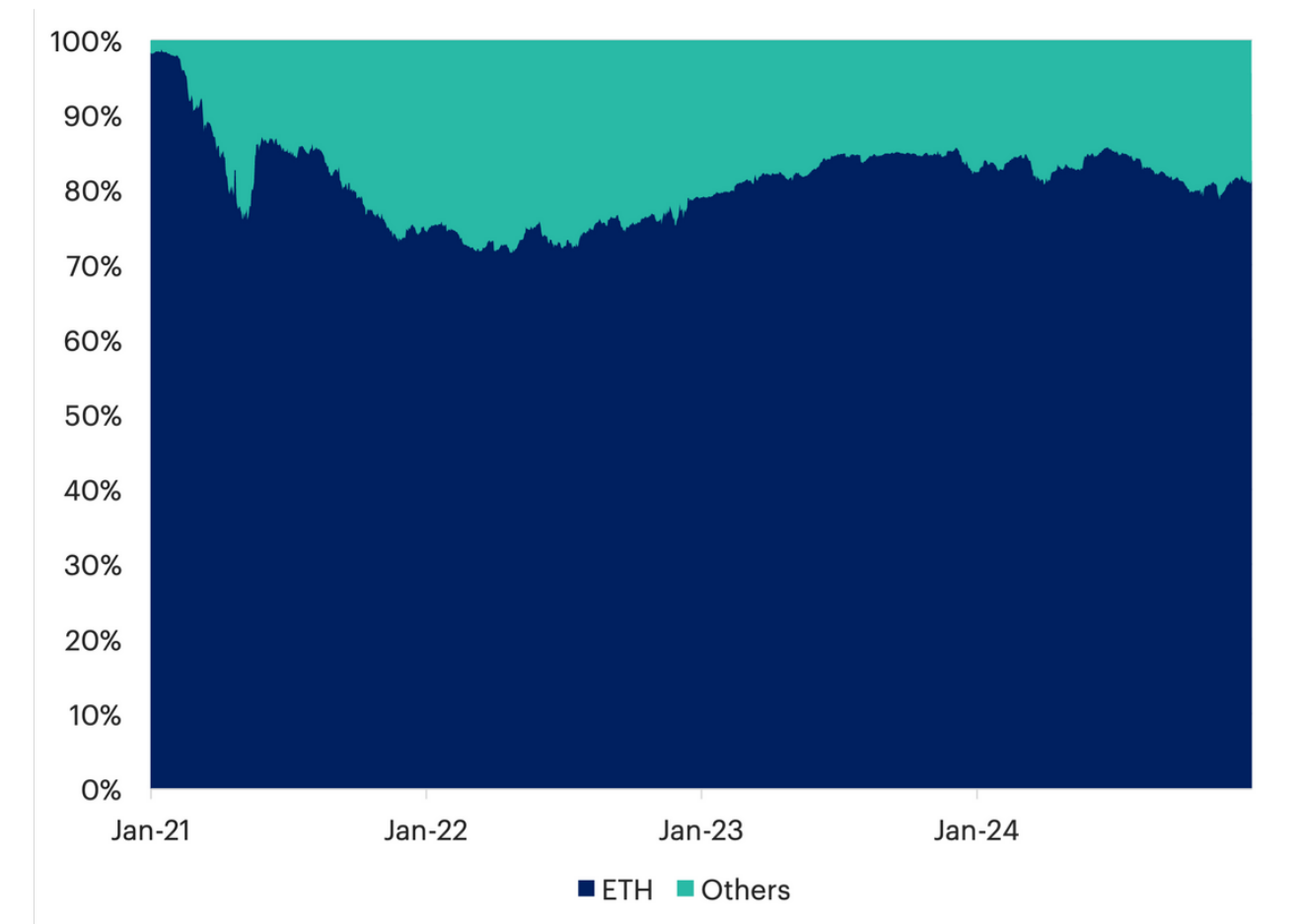
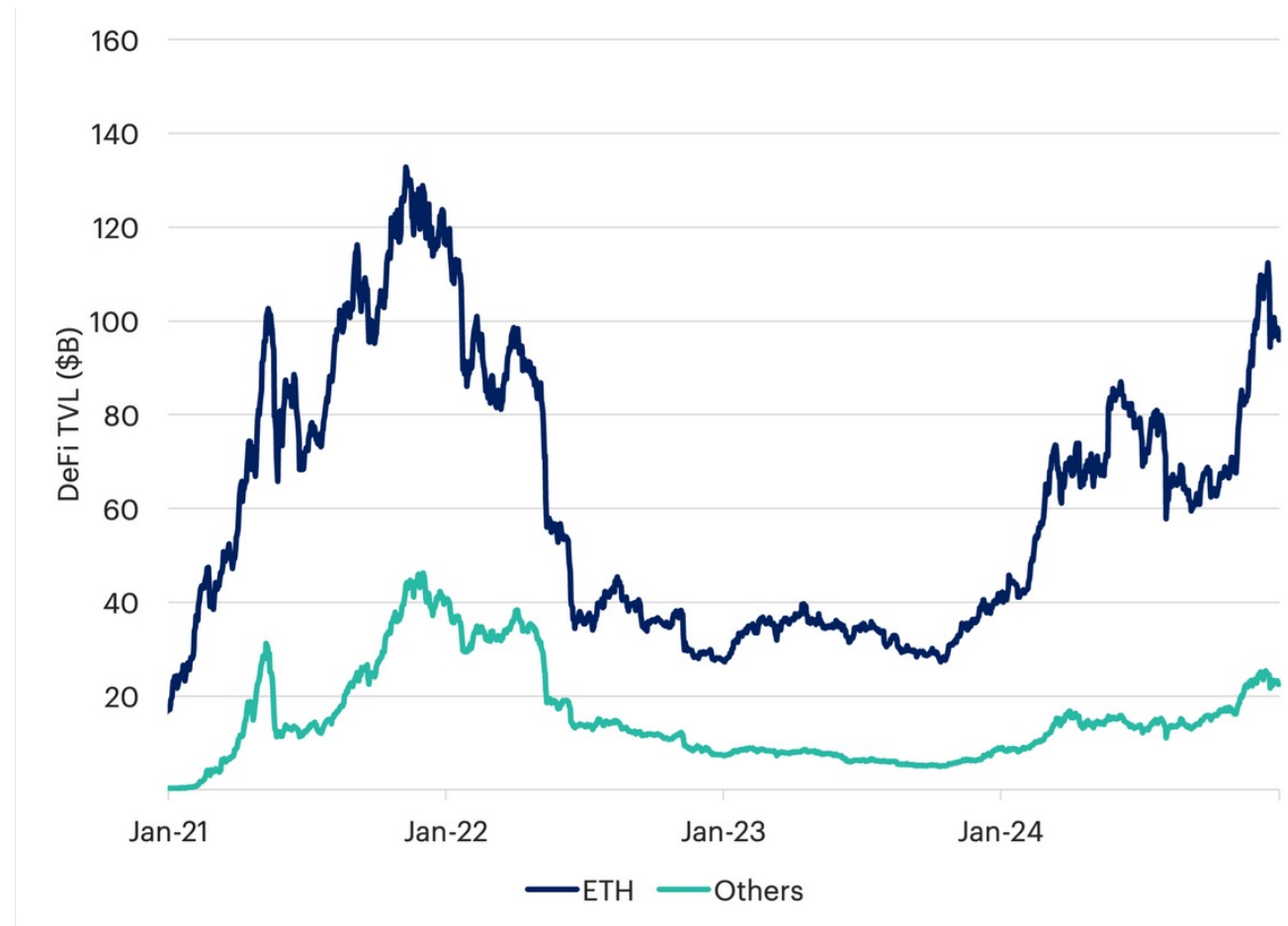
Ethereum has several network effects within its ecosystem:

- **User Base:** Existing applications built on Ethereum have attracted a robust user base. As Ethereum's user base expands, developers are more likely to build applications on the blockchain.
- **Developer Community:** As more developers deploy DApps on Ethereum, it becomes a more attractive ecosystem for new developers due to the increasing availability of resources, community support, and powerful network effects between applications.
- **Investment and Funding:** As Ethereum has proven to be a successful platform, it has attracted increased venture capital funding for companies building sector applications and blockchain services.

Our illustration highlights the active addresses on Ethereum, which serves as a proxy for daily active users. Daily active user growth on Ethereum translates into more transactions and smart contracts being executed, which creates an increased demand for Ether. Despite the recent downturn in the Ether's price, the number of users has reached new highs. The continued growth points to Ethereum's improving utility and expanding user base.



# Ethereum is the Leader in Decentralized Finance



Total value locked (TVL) represents the aggregate value of assets committed to decentralized finance (DeFi) protocols, including the amount of capital secured within these systems. It serves as a key metric for assessing the health, growth, and adoption of the DeFi ecosystem. Higher TVL reflects increased liquidity and greater utilization of DeFi services such as lending, borrowing, and trading.

By being the first mainstream decentralized platform, Ethereum maintains a dominant position in TVL when compared to other programmable blockchains. Ethereum's position as the largest chain by TVL is a signal of market confidence. The above illustration shows that in the recent market downturn, Ethereum's "Blue Chip" reputation has resulted in relative resilience for its TVL when compared to other programmable settlement networks in times of increased market uncertainty.



# Ethereum is Modernizing Financial Markets



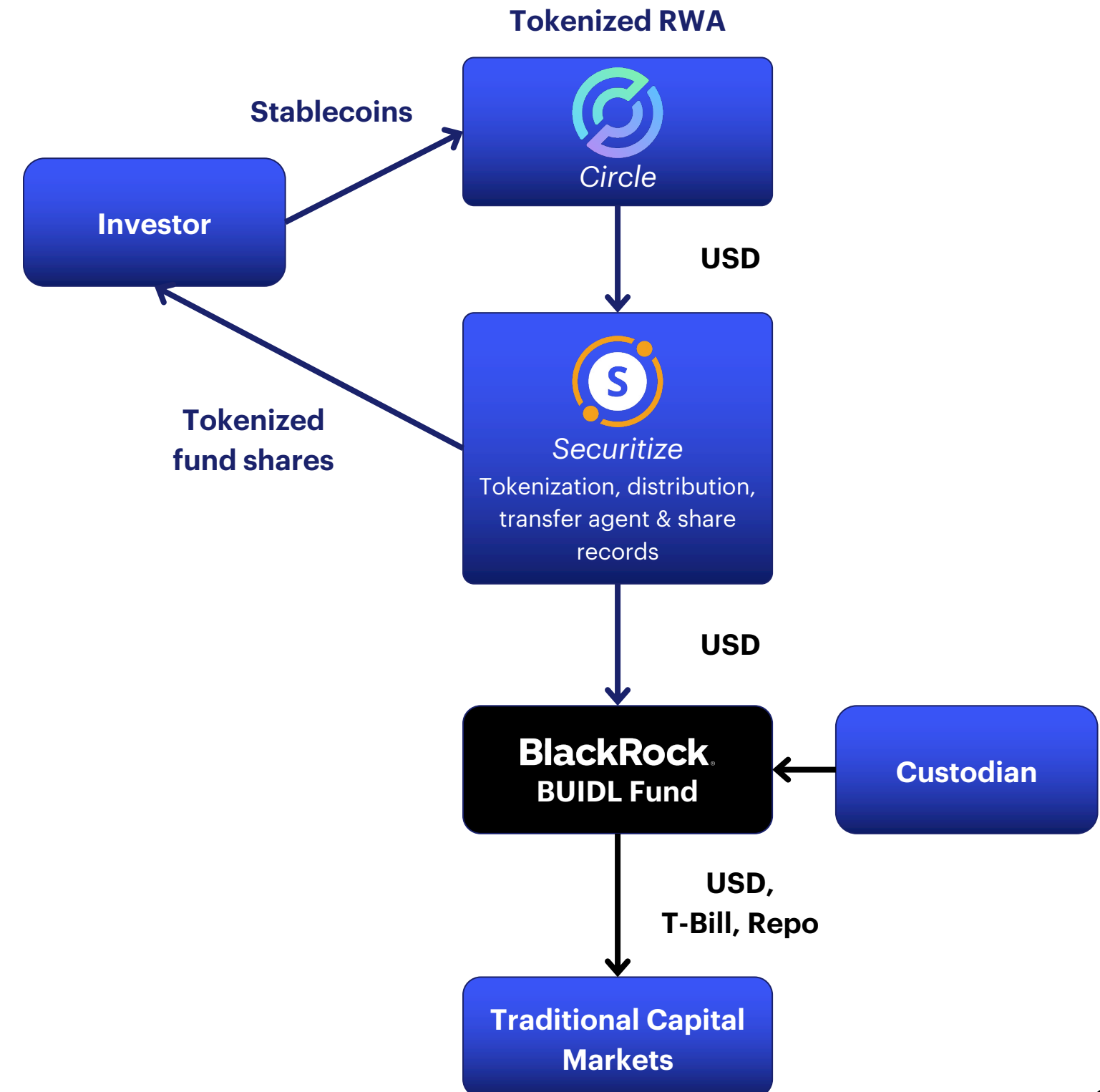
Tokenization enables issuers to digitize real-world assets, enhancing liquidity and streamlining transactions. Through smart contracts, it ensures transparent, secure, and automated management, reducing costs and eliminating intermediaries. Tokenized assets can transform the asset management industry by making traditionally illiquid assets tradable, creating new investment opportunities.

Some asset managers have launched tokenized money market funds on the Ethereum blockchain. These funds seek to offer a stable value of \$1 per token and pay daily accrued dividends directly to investor's wallets as new tokens each month. Fund participants will have flexible custody options, allowing them to choose how to hold their tokens.

Tokenized funds offer several advantages over current mutual funds, as outlined in the table below. In addition to benefiting mutual fund holders, the adoption of tokenized funds will also benefit Ether holders. The increased use of tokenized funds will drive higher transaction volumes on the Ethereum network, resulting in increased gas fees. This, in turn, creates value for the network by incentivizing validators to secure the blockchain.

	Mutual Fund	Tokenized Fund
Settlement Time	T+1 Days	Minutes to Hours
Intermediaries	Custodians, clearinghouses, brokers	Smart Contracts
Security	Centralized systems, subject to hacks and fraud	Decentralized, cryptographically secure
Operational Costs	High due to multiple intermediaries	Lower due to automation and reduced intermediaries
Liquidity	Limited to fund Trading hours	24/7 trading
Accessibility	Restricted by market hours and intermediaries	Global, 24/7 access with the internet

Source: BlackRock.com, CF Benchmarks



# Ethereum Drives New Standards in Enterprise Tech



Notable members of the Ethereum Enterprise Alliance



Companies building on Ethereum



Institutional adoption of Ethereum is gaining momentum as financial institutions and corporations recognize the potential that blockchain technology has to improve various aspects of their operations. Ethereum's position as the leader in both the size of the developer base and the user base make it an attractive platform for businesses to build on top of. The Ethereum Enterprise Alliance (EEA) contributed to Ethereum adoption by uniting Fortune 500 companies, startups, academics, and technology vendors to develop industry standards and facilitate collaboration. EEA's framework for developing blockchain based solutions provides standardized protocols and guidelines, allowing seamless integration and communication between blockchain applications across industries. This interoperability enhances the network effect by enabling more business to join and interact within the ecosystem, increasing the overall utility of the network.

# Ethereum's Staking Model Rewards Holders



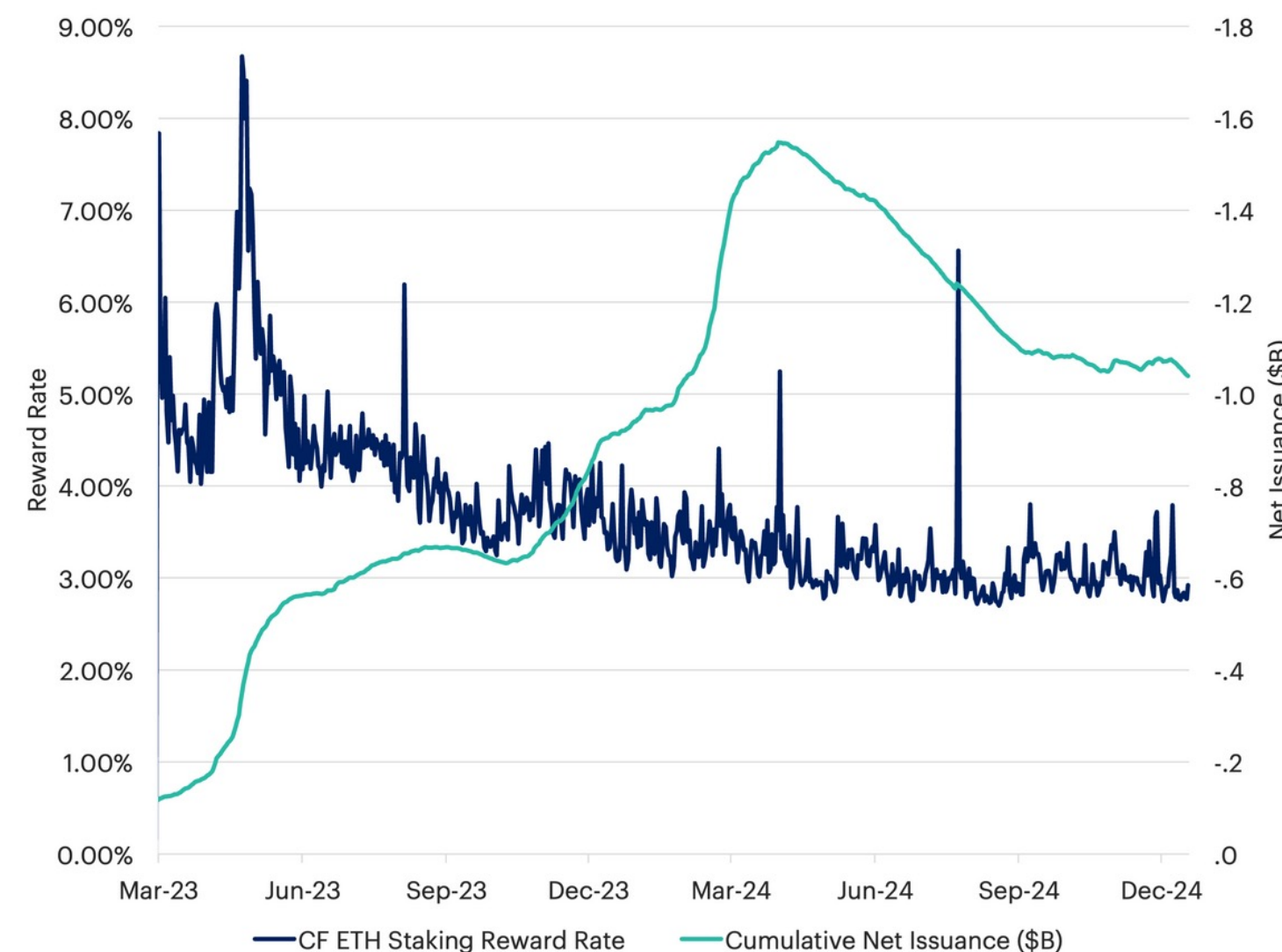
Ethereum's historic transition from a proof-of-work (PoW) to a proof-of-stake (PoS) consensus mechanism has ushered in a new era for the network, bringing about significant improvements in tokenomics.

Staking involves locking up Ether in order to participate in the process of validating transactions on the network. In return, stakers earn rewards in the form of newly minted Ether and a portion of the transaction fees paid by users of Ethereum. The staking reward is paid out to validators proportional to their staked amount. As the Ethereum network sees increased adoption, yields may increase for validators as more fees are paid to use on chain services.

In addition to the staking yield, Ethereum rewards holders with its fee burning mechanism. When a user transacts on Ethereum, a portion of the fee they pay to validators is removed from the supply of Ether. As activity on the network increases, the amount of Ether burned can exceed the newly minted tokens. This allows the network to automatically perform what is effectively a buyback when its fee revenues reach a certain threshold.

The deflationary pressure on Ether, combined with the increased demand for the token as a staking asset, has the potential to create a positive feedback loop that drives up the value of Ether over time. As more Ether is burned and removed from circulation, the scarcity of the token increases, making it an attractive investment opportunity for those seeking to benefit from the growth and adoption of the Ethereum network.

Source: CF Benchmarks, Dune Analytics, as of December 31, 2024



	Staking Reward	Net Issuance (%)	Total Reward
30-Day	0.25%	0.00%	0.24%
90-Day	0.76%	0.02%	0.74%
1-Year	3.23%	-0.02%	3.25%



# User Interactions Fuel Billions in Fees Paid to Holders



The intrinsic value of the Ethereum blockchain and its native cryptocurrency, Ether, can be attributed to the platform's ability to generate fees from its thriving ecosystem of decentralized applications (dApps) and smart contracts. As developers build and deploy innovative solutions on the Ethereum network, users interact with these dApps, fueling demand for Ether to pay for transaction fees and computational resources.

The highlighted chart illustrates the exponential growth of Ethereum's cumulative network fees over time, with the network's total balance of fee generation now totaling over \$19 billion. This has also resulted in a compounded annual growth rate (CAGR) of approximately 407%. As the ecosystem expands and matures, the demand for Ether to power transactions and interact with dApps has continued to rise, thus providing a theoretical intrinsic value dynamic as a key component of Ether and the Ethereum ecosystem.

The introduction of layer-2 scaling solutions has further amplified Ethereum's fee-generating potential. By offloading a portion of the transactional burden from the main chain, these scalers provide the necessary infrastructure to enable faster and cheaper transactions while maintaining the security and decentralization of the Ethereum network. This scalability enhancement attracts more users and dApp developers, creating a virtuous cycle of increased adoption and fee generation.

Ultimately, Ethereum's ability to generate fees through its vibrant dApp ecosystem, amplified by the integration of layer-2 scaling solutions, underpins the fundamental value of Ether as a vital asset within this disruptive decentralized economy.

Source: Dune Analytics, since January 2018, as of December 31, 2024

## Ethereum's Network Fees



# Portfolio Construction

# Ethereum Deserves a Spot Among Tech Giants



## A Next-Generation Technology Platform Shaping the Future

Why might investors struggle to categorize Ether? The answer lies in its revolutionary programmable blockchain technology, which sets it apart from both other non-programmable settlement blockchains as well as traditional information technology companies. However, investors may find that grouping Ether into their tech-equity allocations may be most appropriate. Just as traditional IT companies provide centralized cloud services and app stores, Ethereum essentially offers a decentralized cloud platform where developers can build and deploy smart contracts and decentralized applications (dApps). This decentralized platform enables users to interact with dApps without relying on intermediaries, fostering a truly open ecosystem and empowering developers worldwide.

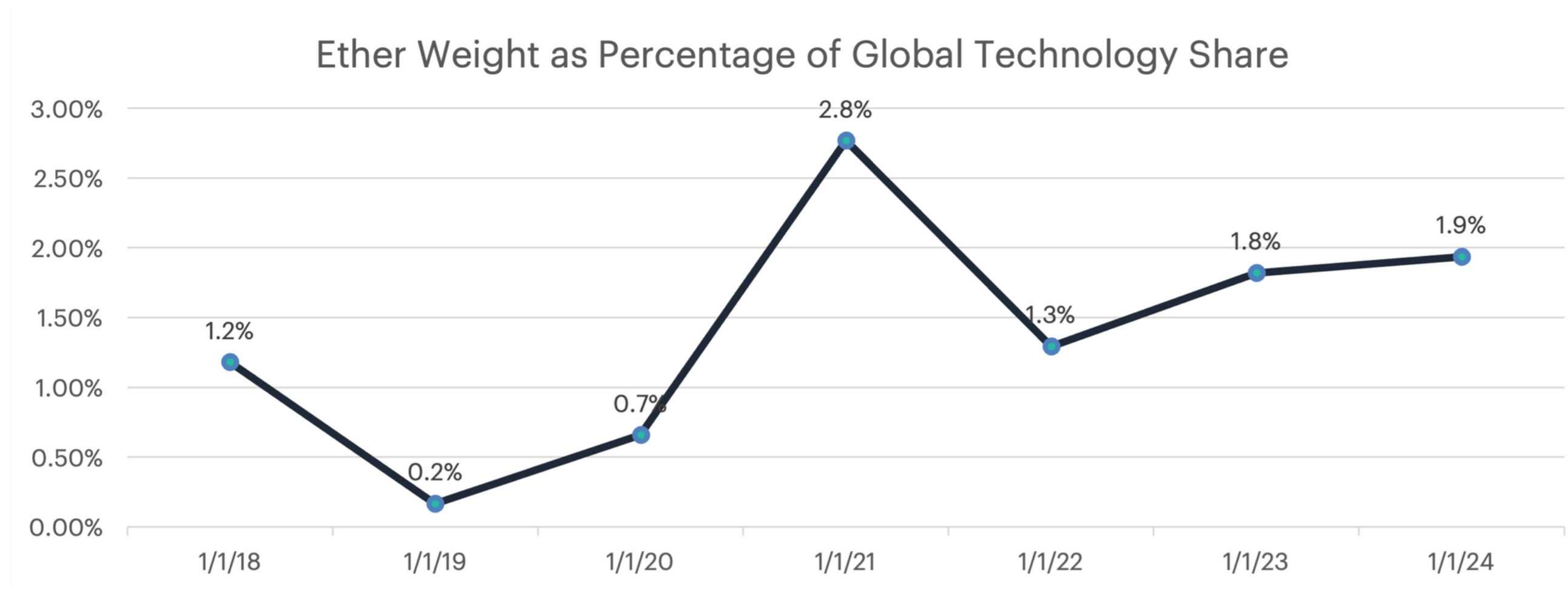
Comparing Ethereum's market capitalization to other publicly traded technology companies would place it securely within the top 10, alongside industry leaders such as Microsoft, Apple, and Nvidia. While some individuals may perceive Ethereum as merely another cryptocurrency, it is crucial to acknowledge its extensive potential beyond the scope of digital assets. Ethereum's thriving ecosystem has drawn a diverse community of developers, entrepreneurs, and users, generating a powerful network effect that rivals those of prominent IT companies. By providing a secure, transparent, and efficient foundation for dApps, Ethereum is well-positioned to disrupt traditional IT services and usher in a new era of decentralized innovation. As a result, categorizing Ethereum exclusively as a cryptocurrency would significantly underestimate its true potential as a transformative force within the information technology landscape.

Source: CF Benchmarks, S&P Global 1200 Information Technology Index, Bloomberg, as of December 31, 2024

Name	Market Cap (\$M)	Weight
NVIDIA CORP	\$3,492,763	16.8%
APPLE INC	\$ 3,350,137	16.1%
MICROSOFT CORP	\$3,301,533	15.9%
BROADCOM INC	\$ 1,146,995	5.5%
TSMC	\$ 900,662	4.3%
ORACLE CORP	\$ 513,251	2.5%
<b>ETHER</b>	<b>\$ 403,300</b>	<b>1.9%</b>
SAP SE	\$ 339,735	1.6%
SALESFORCE INC	\$ 319,523	1.5%
ASML HOLDING NV	\$ 290,058	1.4%



# Ether is the New Power Player in Tech



Despite its relatively short history, Ether has secured a position among the top ten tech companies by market capitalization. However, when considering its vast total addressable market (TAM), there is still significant room for further growth and adoption. Ether's weight in the tech space has steadily increased from 1.2% in December 2018 to 1.9% as of December 2024, demonstrating its expanding influence. Given Ether's potential for continued growth and its ability to capture and disrupt various markets through its decentralized programmable platform, a market capitalization weighted approach is recommended when considering investment allocations. This approach allows investors to capitalize on Ether's increasing significance while maintaining a balanced exposure to the overall technology sector.

Source: CF Benchmarks, Bloomberg, S&P Global 1200 Information Technology, as of December 31, 2024

# Ether's Low Correlation Boosts Portfolio Resilience



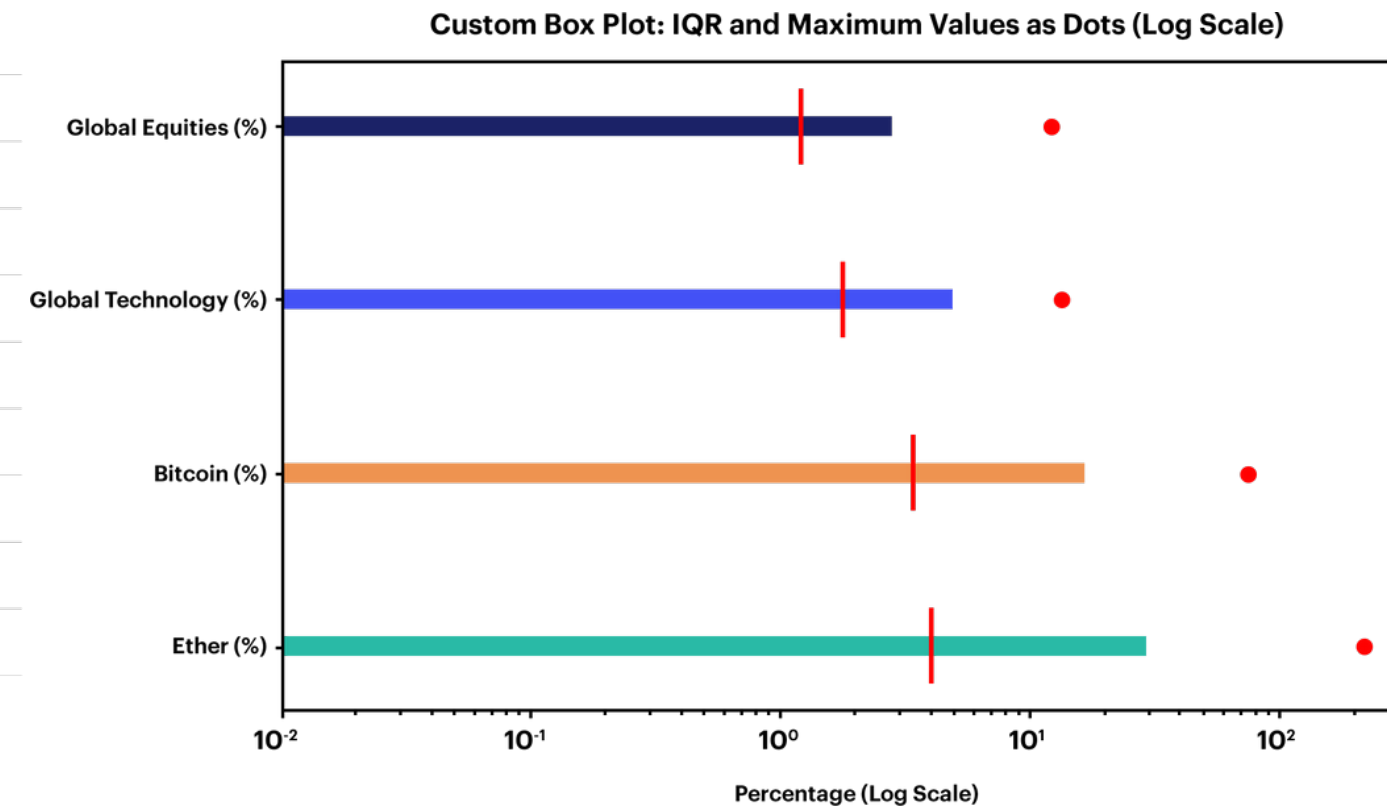
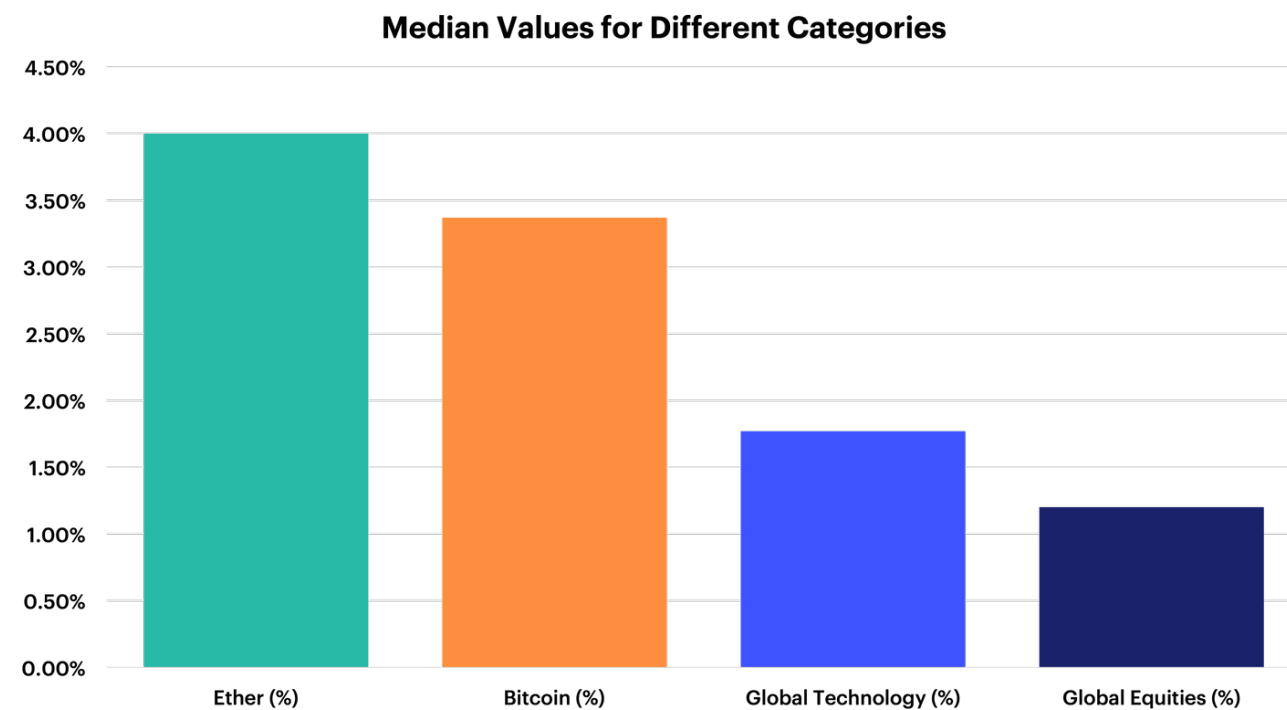
	Ether	Software & Services	Technology Hardware & Equipment	Semiconductors & Equipment	Global Information Technology
Ether	1.00	0.32	0.31	0.33	0.34
Software & Services	0.32	1.00	0.81	0.79	0.95
Technology Hardware & Equipment	0.31	0.81	1.00	0.74	0.90
Semiconductors & Equipment	0.33	0.79	0.74	1.00	0.91
Global Information Technology	0.34	0.95	0.90	0.91	1.00

The correlation matrix presented highlights the substantial diversification benefits that Ether could offer when incorporated into a global information technology equity portfolio. This matrix visually represents the relationships between Ether and the various technology subsectors, emphasizing Ether's low correlations and potential for diversification within a global information technology equity portfolio. Ether demonstrates the lowest correlations with the other technology subsectors, spanning from 0.31 to 0.32. When contrasted with the inter-subsector average correlation of 0.85, this suggests that Ether's price movements have a significantly weaker relationship with the other subsectors.

Incorporating an asset with lower correlations, such as Ether, into the overall portfolio could potentially reduce volatility through diversification. This is because Ether may not move in tandem with the other holdings, thereby providing a hedge against market fluctuations. During periods of market stress or sector-specific downturns, Ether's performance may not be as heavily impacted, thus mitigating potential losses in the portfolio.

Source: CF Benchmarks, Bloomberg, weekly correlations are calculated on price return indices over the past 5 years, as of December 31, 2024

# Ether's Asymmetric Gains Eclipse Tech and Equities



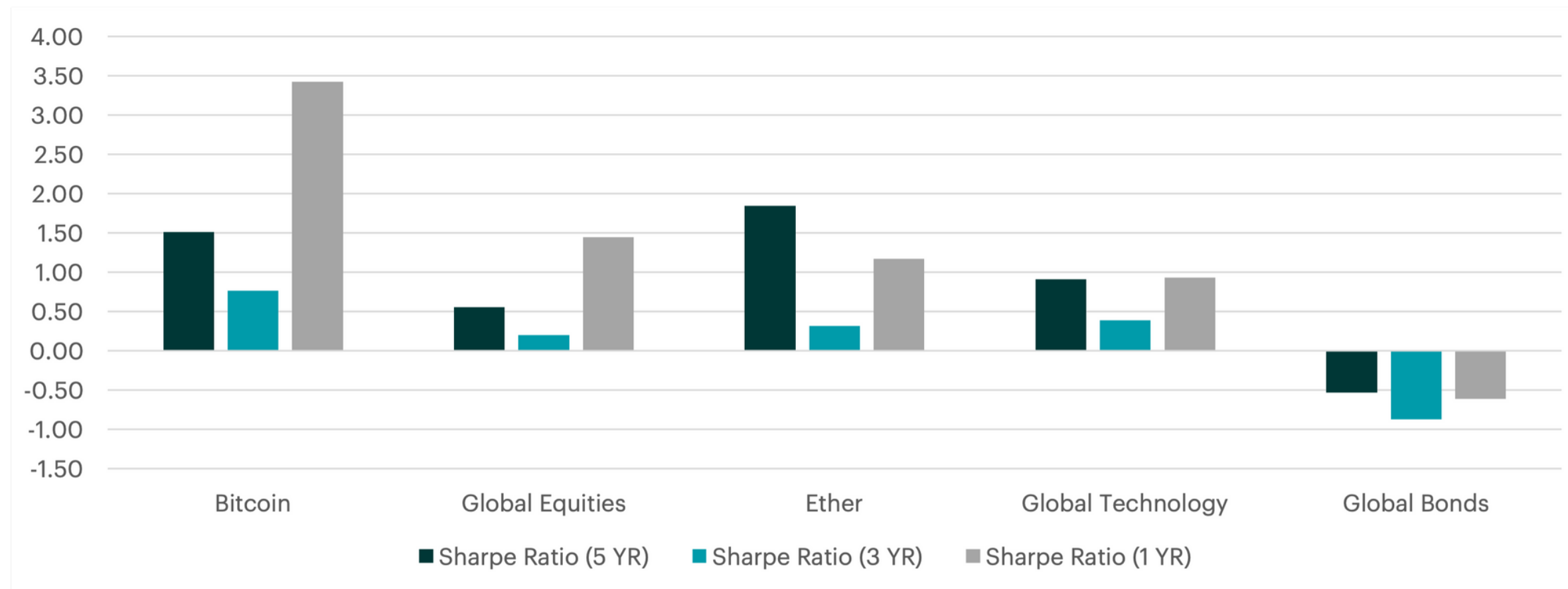
Ethereum, much like Bitcoin, exhibits positively skewed return distributions, indicating the potential for outsized gains. Ethereum maintains a slightly higher median monthly return of 4.00% compared to Bitcoin's 3.37%. This asymmetrical return profile is crucial for investors seeking to capitalize on the upside potential while managing downside risk, which ultimately, may enhance the overall performance of a prudently diversified portfolio.

When compared to traditional asset classes such as Global Technology and Global Equities, Ether's return distribution is distinctive. The horizontal boxes represent the interquartile range (IQR), spanning from the first quartile (-14.18%) to the third quartile (29.15%). The red line in the middle indicates its median monthly return, which is more than double that of Global Technology (1.77%) and greater than three times that of Global Equities (1.20%). Ether's maximum monthly return of 219.71% is greater than Bitcoin's 75.91%, and substantially exceeds the maximum returns of both Global Technology (13.41%) and Global Equities (12.21%). However, investors should note that Ether demonstrates higher volatility, with a minimum monthly return of -58.99%, compared to -12.58% for Global Technology and -13.73% for Global Equities.

Source: CF Benchmarks, Bloomberg, observation period begins on December 31, 2013, as of December 31, 2024



# Ether's Risk Adjusted Performance Outclasses Rivals



The Sharpe ratio, a key metric for assessing risk-adjusted returns, reveals the superior performance of Ether compared to other asset classes. Over the past year, Ether boasts a Sharpe ratio of 1.17, surpassing Global Technology and Global Bonds. This trend persists across longer time horizons, with Ether maintaining a Sharpe ratio of 1.84 over 5 years.

Ether's higher Sharpe ratios demonstrate its ability to generate substantial returns while compensating its risk effectively. Compared to Global Technology, which has a 1-year Sharpe ratio of 0.92, Ether's higher ratio suggests that it can enhance the risk-reward profile of an existing tech exposure. Similarly, when considering a globally diversified portfolio, Ether's Sharpe ratios consistently outperform Global Equities and Global Bonds, indicating its potential to add value and improve overall portfolio performance.

Source: CF Benchmarks, Bloomberg, total return indices are referenced in USD, as of December 31, 2024

# In Summary

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## Ethereum is Pioneering the Future of Programmable Money

- Ether (ETH) is the native cryptocurrency of Ethereum, a groundbreaking decentralized, open-source blockchain platform that enables the creation and execution of smart contracts and decentralized applications (dApps). Building upon the foundation laid by Bitcoin, Ethereum takes the concept of a blockchain further by introducing programmable transactions executed on the Ethereum Virtual Machine (EVM). Ether serves a dual purpose within the ecosystem: as a digital currency for sending and receiving value, and as a means to pay transaction fees ("gas") for computational services on the network. Ethereum's proof-of-stake (PoS) consensus mechanism allows users to "stake" their Ether to validate transactions and secure the network, offering a more energy-efficient alternative to Bitcoin's proof-of-work (PoW) system.
- The investment thesis for Ether and Ethereum revolves around its immense potential as the foundational infrastructure for the decentralized web. Ethereum's smart contract capabilities, enabling self-executing agreements with terms directly written into code, alongside its interoperability between different blockchain networks, position it as a valuable and strategic asset. The platform's tokenomics, which incentivize holders through staking rewards and a deflationary fee-burning mechanism, further enhance its appeal. Ethereum's growing user base, robust developer community, and increasing venture capital investment underscore its significant network effects, driving innovation and expanding the network's total addressable market.
- Ethereum has firmly established itself as a leader in the decentralized finance (DeFi) space, commanding the majority of the total value locked (TVL) across programmable blockchains. The platform's ability to tokenize real-world assets, such as art, real estate, and financial instruments, enhances liquidity and creates new market opportunities. Institutional adoption of Ethereum is accelerating as businesses recognize its potential to streamline operations, reduce costs, and drive innovation. The platform's transition to a proof-of-stake (PoS) consensus mechanism introduces a rewarding staking model for participants and creates deflationary pressure on Ether supply, further bolstering its value proposition.
- Despite its relatively short history, Ether has secured a position among the top ten technology companies by market capitalization, highlighting its rapid ascent and vast potential. Its low correlation to other technology subsectors emphasizes its diversification benefits within a global information technology equity portfolio. Moreover, Ether exhibits positively skewed return distributions and superior risk-adjusted returns, as measured by Sharpe ratios, compared to traditional asset classes such as global equities and bonds. This asymmetric return profile and attractive risk-reward characteristics demonstrate Ether's potential to enhance overall portfolio performance and resilience.

# Appendix



# Further Resources



## CFB Podcast



[Vimeo](#)



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CFB Talks Digital Assets is the home of informed conversation about crypto from CF Benchmarks. We are the first and leading digital asset index provider, authorized and regulated by the UK FCA. Respected and innovative financial institutions use our indices and reference rates to power regulated financial instruments, like listed derivatives, investment funds and structured products. Join CF Benchmarks' Head of Content, Ken Odeluga, Head of Research, Gabe Selby, CFA and Research Analyst, Mark Pilipczuk, as they talk with some of the most accomplished and influential figures in finance, about everything affecting digital assets – crypto protocols, markets, fund flows, on-chain metrics, macroeconomics and more.

## CFB Research & Insights

# CF Benchmarks Research & Insights

Explore all the latest digital asset research at:  
[cfbenchmarks.com/blog/category/research-and-insights](https://cfbenchmarks.com/blog/category/research-and-insights)

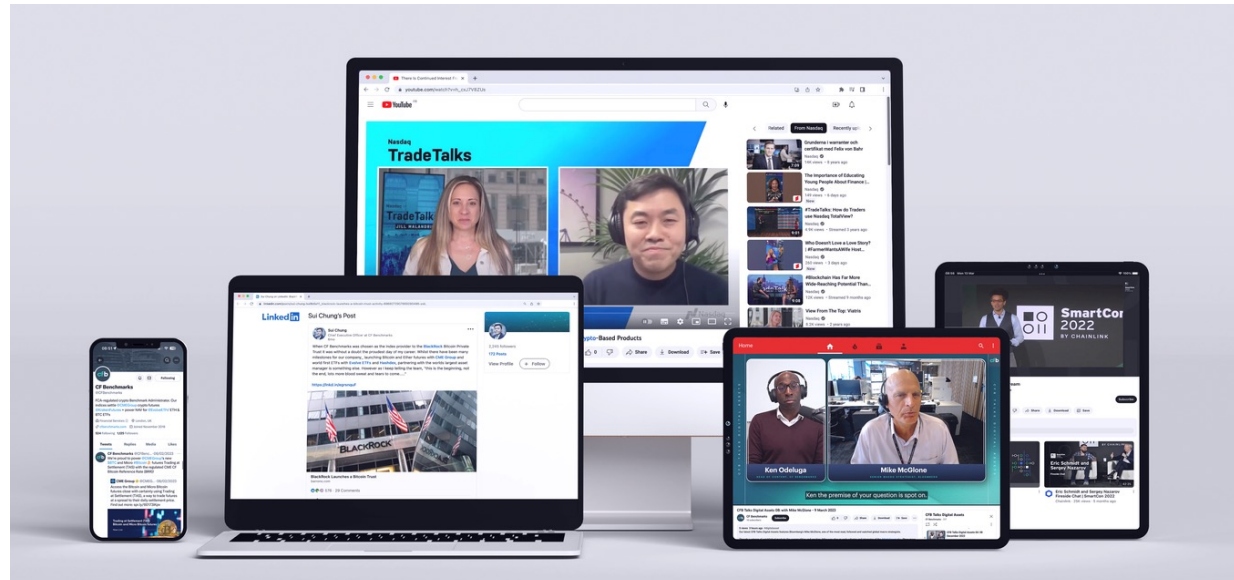
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a **kraken** company







# Further Resources



## CFB Social Channels



-  [LinkedIn](#)
-  [Twitter](#)
-  [Vimeo](#)
-  [YouTube](#)
-  [Instagram](#)

## CF DACS Token Explorer



## CFB Indices & Methodologies

For more information about our CF Benchmarks indices and our methodologies, please visit the respective web links:

- [CF Diversified Large Cap Index](#)
- [CF DeFi Composite Index](#)
- [CF Web 3.0 Smart Contract Platforms Index](#)
- [CF Digital Culture Composite Index](#)
- [CF Blockchain Infrastructure Index](#)
- [CF Cryptocurrency Ultra Cap 5 Index](#)
- [CF Broad Cap Index Market Cap Weight](#)
- [CF Broad Cap Index Diversified Weight](#)

## Contact us

Have a question or would like to chat? If so, please drop us a line to: [info@cfbenchmarks.com](mailto:info@cfbenchmarks.com)

# Glossary of Terms

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**Gas:** A unit that measures the cost to execute transactions and smart contracts on the Ethereum network, paid for in Ether.

**Consensus:** The process by which transactions are verified and new blocks are created in a blockchain. Ethereum uses a proof-of-stake (PoS) mechanism where validators stake Ether to validate transactions.

**Proof-of-Stake (PoS):** A consensus mechanism where users stake their cryptocurrency to validate transactions and secure the network, considered more energy-efficient than proof-of-work (PoW).

**Ethereum Virtual Machine (EVM):** A decentralized virtual machine that executes smart contracts on the Ethereum network, similar to cloud hosting services.

**Decentralized Applications (dApps):** Applications that run on a decentralized network rather than a single computer, making them resistant to censorship and control.

**Smart Contracts:** Self-executing contracts with the terms of the agreement directly written into lines of code, which automatically execute when predefined conditions are met.

**Sharpe Ratio:** A measure used to assess the performance of an investment by calculating the average return earned in excess of the risk-free rate per unit of volatility or total risk.

**TAM:** Total Addressable Market (TAM) quantifies the maximum revenue opportunity available for a product or service, assuming complete market saturation under ideal conditions.

**Market Cap:** The total value of a company's shares of stock or a cryptocurrency's circulating supply, calculated by multiplying the current price per share or per token by the total number of shares or tokens outstanding.



# CF Digital Asset Classification Structure



## CF Digital Asset Classification Structure

The CF Digital Asset Classification Structure (CF DACS) classifies coins and tokens based on the services that the associated software protocol delivers to end users, grouping assets by the role they play in delivering services to end users. The CF DACS powers CF Benchmarks' sector composite and category portfolio indices and allows users to perform attribution analysis to better understand the fundamental drivers of returns within their digital asset portfolios.



# Appendix

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# Appendix

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# Appendix

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