Has Their Time Come? Cryptocurrencies as Assets on Corporate Balance Sheets

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Abstract

This study investigates the strategic drivers and operational challenges of adopting cryptocurrencies as corporate assets. While Bitcoin and other digital assets have historically been associated with speculative investment, a growing number of corporations are exploring their utility as part of broader treasury strategies.

Using a mixed-method design, this research integrates twelve expert interviews with senior finance professionals and a structured analysis of eight publicly traded firms holding digital assets. The findings reveal four primary adoption motivations: portfolio diversification, inflation hedging, innovation signaling, and high-growth potential. However, adoption is constrained by five core challenges: regulatory uncertainty, accounting complexity, custody and security risks, exposure limitations, and extreme volatility.

Quantitative analysis suggests that neither firm size nor industry alone predicts the level of crypto adoption; rather, proportional exposure is shaped by a combination of treasury scale and strategic intent. These insights are contextualized through Resource-Based Theory, Dynamic Capabilities, and Signaling Theory. The study concludes that cryptocurrencies, while not yet mainstream treasury instruments, are emerging as strategic tools for financial flexibility and competitive differentiation. This thesis offers practical guidance for treasurers, regulators, and investors navigating the evolving intersection of digital assets and corporate finance.

Keywords: Cryptocurrencies, Corporate Finance, Digital Assets, Treasury Strategy, Bitcoin, Portfolio Diversification, Regulatory Risk, Resource-Based Theory, Dynamic Capabilities, Innovation Signaling

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Sumário

Este estudo investiga os fatores estratégicos e os desafios operacionais associados à adoção de criptomoedas como ativos corporativos. Embora o Bitcoin e outros ativos digitais tenham sido historicamente ligados ao investimento especulativo, um número crescente de empresas está explorando sua utilidade dentro de estratégias mais amplas de tesouraria.

Com base em um desenho metodológico misto, a pesquisa combina doze entrevistas com executivos financeiros seniores e uma análise estruturada de oito empresas de capital aberto que possuem ativos digitais. Os resultados revelam quatro principais motivações para a adoção: diversificação de portfólio, proteção contra inflação, sinalização de inovação e potencial de crescimento elevado. Por outro lado, cinco desafios principais limitam a adoção: incerteza regulatória, complexidade contábil, riscos de custódia e segurança, limitações de exposição e alta volatilidade.

A análise quantitativa indica que nem o setor nem o porte da empresa, isoladamente, explicam o nível de exposição; a alocação proporcional depende da escala da tesouraria e da intenção estratégica. Este estudo contribui com implicações práticas e teóricas, mostrando que ativos digitais estão se tornando ferramentas estratégicas para flexibilidade financeira e diferenciação competitiva.

Palavras-chave: Criptomoedas, Finanças Corporativas, Ativos Digitais, Estratégia de Tesouraria, Bitcoin, Diversificação de Portfólio, Risco Regulatório, Teoria dos Recursos, Capacidades Dinâmicas, Sinalização de Inovação

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List of Abbreviations

AML. *Anti-money laundering*
ASU. *Accounting Standards Update*
BTC. *Bitcoin*
CBDCs. *Central Bank Digital Currencies*
CCC. *Cash Conversion Cycle*
CFO. *Chief Finacial Officer*
CFTC. *Committee of the Commodity Futures Trading Commission*
CTF. *Counter-terrorist financing*
DeFi. Decentralized Finance
ETF. *Exchange-Traded Fund*
EU. *European Union*
FASB. *Financial Accounting Standards Board*
FATF. *Financial Action Task Force*
FV. *Fair Value*
FX. *Forex*
GAAP. *Generally Accepted Accounting Principles*
IAS. *International Accounting Standard*
ICO. *Inital Coin Offering*
IFRS. *International Financial Reporting Standards*
IRS. *Internal Revenue Service*
JIT. *Just-in-time*
KYC. *Know Your Customer*
MiCA. *Markets in Crypto-Assets*
P&L. *Profit & Loss*
PoS. *Proof of Stake*
PoW. *Proof of Work*
RBT. *Resource Based Theory*
UAE. *United Arab Emirates*
US. *United Staates*
USD. *United States Dollar*
VAT. *Value-Added Tax*
YoY. *Year-over-Year*

1. Introduction

Cryptocurrencies are cryptographic tokens that differ fundamentally from fiat currencies in that no central authority issues them. They reside on decentralized permissionless ledgers and enable transnational transfers without traditional intermediaries. Initially conceived and adopted primarily for speculative trading, cryptocurrencies have over the past decade begun to mature into strategic corporate assets. Early corporate adopters such as MicroStrategy and Tesla pioneered this shift by allocating portions of their cash reserves to Bitcoin (BTC), not only to bolster their balance sheets but also to signal a commitment to technological innovation (Yermack, 2017). These holdings offered distinct benefits including non-correlated portfolio diversification, partial inflation protection and significant upside potential (Bouri et al., 2017).

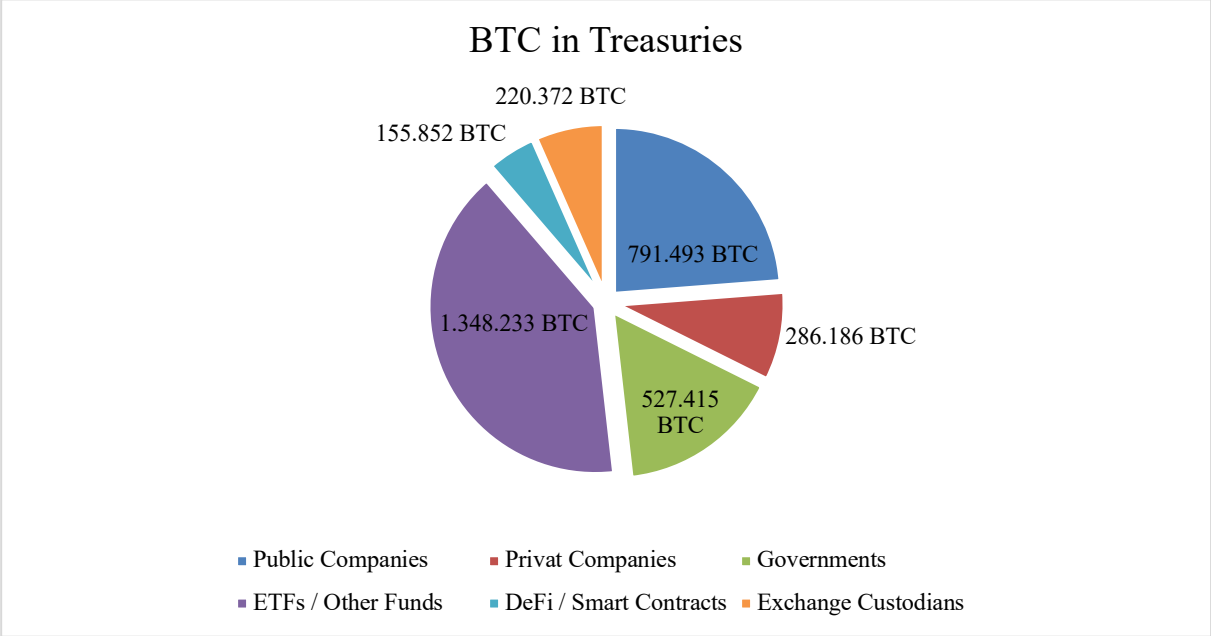

Figure 1: BTC in Treasuries (Institutional & Government Holdings)

Source: Data retrieved from bitcointreasuries.net (accessed May 2025)

Building on these precedents, subsequent adopters have emerged across diverse sectors. In 2021, El Salvador became the first nation to grant Bitcoin legal tender status, underscoring the currency's disruptive capacity in public-sector finance. More recently, publicly traded firms in the United States such as GameStop have disclosed Bitcoin allocations as part of their treasury strategies (GameStop Corp., 2025). Discussions among US policymakers and central-bank observers have even broached the possibility of Federal Reserve holdings of digital assets. As of the second quarter of 2025, US government entities hold approximately 0,9 percent of

Bitcoin's total supply, while public corporations collectively account for about 3,79 percent of outstanding coins (Figure 1).

The strategic advantages of cryptocurrencies for corporate treasuries are manifold. Firms can capture asymmetric returns and enhance resilience by holding digital assets alongside traditional cash and marketable securities. Yet these benefits come with significant operational and institutional obstacles. Extreme price volatility complicates capital preservation under fair-value accounting; cybersecurity vulnerabilities and immature custody arrangements introduce operational risk; regulatory ambiguity across jurisdictions creates compliance uncertainty; and inconsistent accounting models under IFRS and evolving US GAAP standards impose substantial administrative burdens (Dyhrberg et al., 2018; Auer et al., 2020)

Scholarly discussion about cryptocurrency as corporate assets remains nascent. Although there is extensive literature on the asset class in decentralized finance, their potential as strategic assets in corporate finance remains relatively under-investigated. This study seeks to address this gap by examining the following Research Question:

RQ: What are the drivers and challenges of companies adopting cryptocurrencies as corporate assets?

This study employs a mixed-method design, integrating a comprehensive literature review with twelve semi structured interviews of senior professionals and quantitative analysis of eight US firms' Bitcoin allocations. By triangulating qualitative insights and secondary data, we elucidate both the strategic rationales and operational constraints of corporate crypto adoption.

The remainder of the paper proceeds as follows. Chapter 2 reviews related literature. Chapter 3 outlines our research design. Chapter 4 presents empirical findings. Chapter 5 discusses these results considering management theory. Chapter 6 concludes with implications, limitations and avenues for future research.

2. Literature Review

2.1. Financial Foundations

The 2008 global financial crisis underscored the importance of balance sheet management, as poor liquidity, excessive leverage, and weak capitalization caused balance sheet implosions that led to systemic failures. Beyond recording the asset and liability mix of a firm, a well-managed balance sheet guides capital allocation, debt management, and risk mitigation. Strong asset-liability management furthermore ensures liquidity for stability and investment opportunities. As finance evolves, digital assets are appearing on balance sheets, prompting re-evaluating traditional financial models.

2.1.1. Corporate Balance Sheets: Concepts and Theoretical Foundations

A balance sheet is a fundamental financial statement that's a detailed snapshot of a firm's financial position at a specific point in time. It classifies company resources and obligations into assets, liabilities, and equity, in line with the fundamental accounting equation: Assets = Liabilities + Equity (Brealey et al., 2020). This equation underlies financial reporting and offers critical insights into a firm's operational efficiency and overall financial stability.

Current and fixed assets represent all the economic resources under a company's control. These include tangible items such as property, plant, and equipment as well as intangible assets like intellectual property, patents, and goodwill. Assets form the foundation for generating future economic benefits and are essential for sustaining long-term growth and viability of the firm as a going concern. Tirole (2006) emphasizes that a firm's asset base is not only a measure of current value but also a key determinant of its strategic capacity to invest and innovate.

Liabilities encompass a firm's obligations to external parties, classified into current liabilities, such as short-term borrowings and accounts payable, and long-term liabilities, including bonds and bank loans. How liabilities are managed influences a firm's liquidity and solvency, determining its capacity to meet short-term obligations and its resilience against financial distress. Equity, which represents the residual interest after all liabilities have been settled, represents shareholders' claim on assets and retained earnings. Together, these components codify an historical financial snapshots of the firm, and also serve as a foundation for forecasting future performance and making strategic decisions (Allen et al., 2002).

Financial analysts and investors depend on various ratios derived from balance sheet data—such as liquidity ratios (E.g., current ratio, quick ratio), solvency ratios (E.g., debt-to-equity

ratio), and leverage ratios—to assess operational performance and gauge risk exposure. For instance, Ohlson (1980) demonstrated that financial ratios are crucial predictors of bankruptcy risk, highlighting the importance of maintaining an optimal balance between debt and equity. Moreover, empirical studies on balance sheet adjustments during the 2008 financial crisis illustrate how mismanagement of liabilities and insufficient capital buffers lead to rapid deleveraging and systemic instability (He et al., 2010).

Liquidity practices not only bolster operational efficiency but also improve a company's ability to capitalize on strategic opportunities (Becker-Blease & Paul, 2006). A rigorous approach to balance sheet and cash flow management lay the groundwork for effective corporate finance (Burton, 1963). The optimal blend of debt and equity financing promotes long-term value creation (Sibilkov, 2009).

2.1.2. Corporate Capital Structure and Balance Sheet Interrelationship

A firm's capital structure is the strategic mix of debt and equity employed to finance operations and growth. Modigliani-Miller state that in a frictionless market, a firm's value is independent of its capital structure and traces to the firm's assets and earnings capacity, not how assets are financed (Modigliani & Miller, 1958). However, real-world market imperfections—such as taxes, bankruptcy costs, and agency problems prompt firms to tailor financing decisions to their circumstances.

The makeup of liabilities and retained earnings shapes the equity base and influences internal financing capabilities (Brealey et al., 2020). This relationship creates a dynamic feedback loop: Strategic financing choices impact the balance sheet structure, determining future financing opportunities and constraints. For instance, amid deteriorating financing conditions in 2008, sectors such as commercial banking were able to increase asset holdings and leverage by accessing more stable funding sources (He et al., 2010). Thus, firms with access to liquidity may deviate significantly from traditional capital structure norms, highlighting the importance of balance sheet quality for crisis resilience.

Beyond Modigliani-Miller, the Resource-Based View, now Resource Based Theory (RBT) offers a strategic lens that views the firm's unique internal bundle of resources as the source of competitive advantages (Rumelt, 1984; Barney, 1991; Amit & Schoemaker, 1993; Carter & Mueller, 2006). Bowman and Toms (2010) mention how there's been little overlap between the literature on accounting and scholarship in strategic management to explain how firms outcompete each other. Insofar as resources that are valuable are a source of firm advantages

over peers, balance sheet management would seem to fit within the parameters of RBT management theory.

Kale & Shahrur (2007) found that the level of leverage in a firm correlates with the nature of its external stakeholders such as suppliers. In industries where strategic alliances and joint ventures are common, firms tend to opt for lower levels of debt and have more conservative capital structures to induce investment alliances. Burgman (1996) illustrates how global operational complexities and cross-border financing considerations further shape capital structure choices. He points to how multinational enterprises often face unique challenges—such as variations in regulatory environments and market conditions—that require adjusting the debt-equity mix to optimize financing costs and maintain flexibility across different regions. In addition to the RBT, the knowledge-based view of the firm proposes that knowledge resources are the source of outperformance (Grant, 1996; Kogut & Zander, 1996).

The Dynamic Capabilities framework modifies the resource framework by proposing that firm resources must be conceived as capabilities—continuously integrated, built, and reconfigured in response to rapidly changing environments (Teece et al., 1997; Eisenhardt & Martin, 2000; Teece, 2018; Barreto, 2010). Dynamic Capabilities enable firms to pivot their financing strategies in reaction to disruptions, emerging technologies, or new competitive threats. This adaptive approach is particularly valuable during periods of economic stress or regulatory upheaval, where timely reallocation of resources is critical to preserving liquidity and maintaining long-term competitiveness. Eisenhardt and Martin (2000) provide empirical support for this view, demonstrating that firms with strong dynamic capabilities are better equipped to adjust their capital structures in turbulent times.

Integrating insights from Modigliani-Miller, the RBT, and Dynamic Capabilities provide a framework for understanding how managing the corporate capital structure is an imperative for strategic management. While the Modigliani-Miller highlights the theoretical neutrality of the asset-liability mix under ideal conditions, real-world conditions underscore the importance of a firm's financing capabilities. This points to the fact that optimizing financing strategies enhances corporate financial flexibility and ultimately sustains long-term value creation. Moreover, cash management practices for effective liquidity management allow companies to meet short-term obligations, seize growth opportunities, and complement broader capital structure strategies.

2.1.3. Cash Management and Treasury Operations in Corporations

Treasury operations enhance stability by managing cashflows, investments, and risks. Firms hold liquid assets for transactional and precautionary needs, with Keynes (1937) highlighting the role of liquidity for meeting payments and mitigating financial shortfalls. Firms with strong growth prospects and volatile cash flows maintain higher reserves, whereas those with ready capital market access hold lower balances (Opler et al., 1999). Efficient cash management reduces financing costs and improves financial flexibility, while poor liquidity management increases financial stress and weakens creditworthiness (Hill et al., 2012). Treasury functions manage liquidity, optimize working capital, and invest surplus cash in short-term instruments.

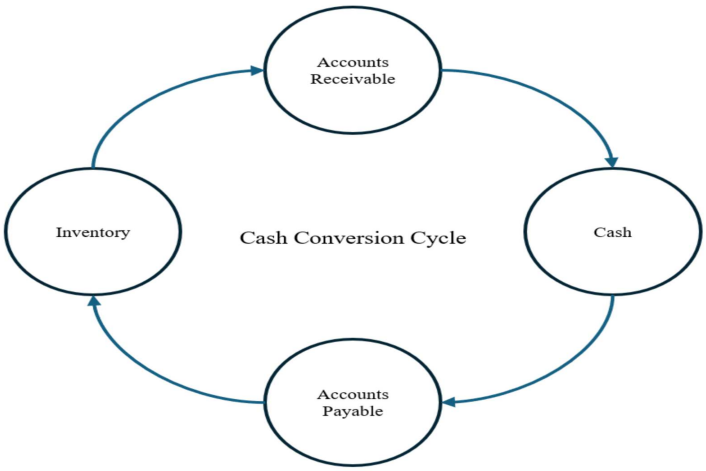

Figure 2: Cash Conversion Cycle (CCC)

The cash conversion cycle (CCC) (Figure 2) measures cash flow efficiency through inventory conversion, receivables collection, and payables deferral (Nobanee & Hajjar, 2014). A shorter CCC increases cash availability and reduces financing costs, whereas a prolonged CCC ties up capital and heightens reliance on external funding. Empirical evidence supports CCC optimization, with Deloof (2003) finding that shorter CCCs enhance profitability. Effective CCC management balances inventory turnover, receivables acceleration, and supplier negotiations, though excessive reductions may disrupt supply chains or create liquidity shortages.

Working capital management ensures firms balance short-term assets and liabilities, enhancing liquidity while preserving profitability. Strategies include stricter credit policies, just-in-time (JIT) inventory, and extending payables without straining supplier relationships (Opler et al., 1999). Rampini & Viswanathan (2010) highlight trade-offs between liquidity and financing

constraints, noting firms with limited external funding prioritize liquidity over risk management. While excess working capital reduces efficiency, insufficient liquidity heightens financial risk, making strategic working capital management critical for stability.

Treasury operations also involve risk hedging against financial volatility. Firms manage FX risk through derivatives, foreign currency debt, and pricing strategies (Giambona et al., 2018). Interest rate fluctuations are hedged via swaps and futures, while commodity and credit risks are mitigated with futures contracts, options, and counterparty assessments. Repurchase agreements (repos) provide short-term liquidity while managing interest rate exposure. Aretz & Bartram (2010) emphasize that hedging is integral to corporate strategy, aligning with capital structure and financial planning. However, regulatory frameworks significantly influence hedging activities. Regulations like Dodd-Frank have increased compliance costs and imposed stricter oversight, indirectly constraining firms' access to derivatives (Dimitrov et al., 2015). This has led to a more cautious approach in risk management, particularly in credit and liquidity hedging.

As financial management evolves, firms are integrating digital assets like cryptocurrencies, offering alternatives for capital efficiency, diversification, and inflation hedging. However, regulatory uncertainty, security risks, and volatility present challenges. The following sections analyze current industry practices and explore the strategic drivers and challenges of corporate digital asset adoption.

2.1.4. Cryptocurrencies on Corporate Balance Sheets

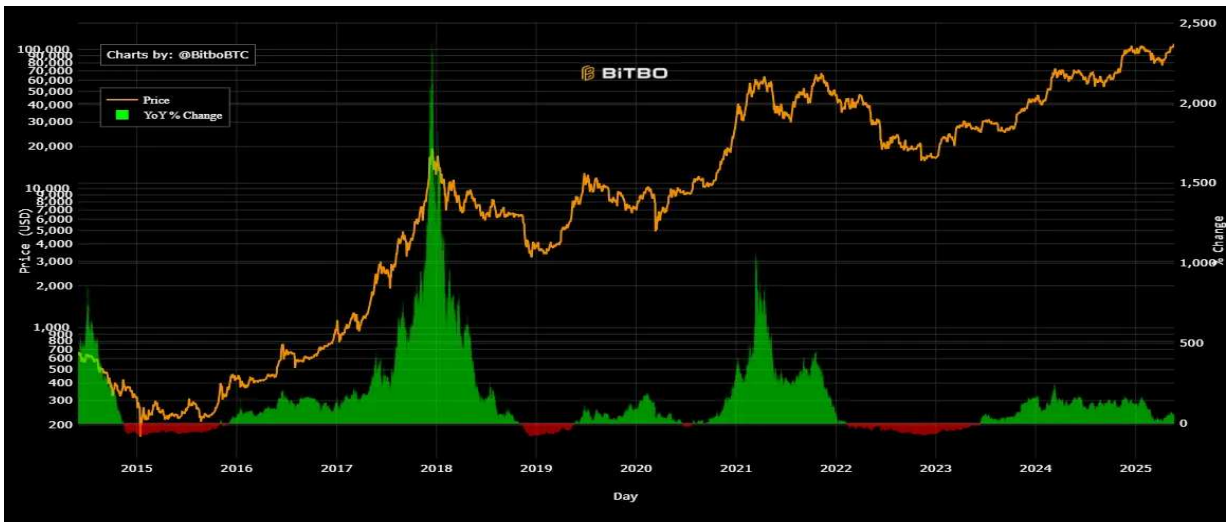

Figure 3: BTC Price in USD / YoY growth in %

Source: Screenshot retrieved from https://charts.bitbo.io/price-year-over-year/ (accessed May 2025)

On May 22, 2025, Bitcoin (BTC) reached an all-time high of $109,000, marking unprecedented year-over-year (YoY) growth of over 100%. This milestone coincided with changes in accounting standards, which reshaped how companies report digital asset holdings. Notably, Tesla's 2024 annual report revealed a $600 million gain from its Bitcoin holdings due to the adoption of new fair-value accounting standards. These standards require crypto assets to be measured at fair value, with changes reflected in net income each reporting period (Tesla Inc., 2024).

In December 2023, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2023-08, requiring certain crypto assets to be recorded at fair value and providing more transparent financial reporting (FASB, 2023). Previously, companies classified crypto holdings as intangible assets, meaning impairment losses were recognized, but fair value gains were not. The update, effective December 15, 2024, eliminates this asymmetry, allowing both gains and losses to be recorded (Deloitte, 2023b).

Integrating digital assets into corporate balance sheets is becoming more common. While still relatively niche, several publicly traded companies, including MicroStrategy, Tesla, and Coinbase, hold substantial cryptocurrency reserves, using them for hedging against inflation and currency devaluation, as well as strategic positioning in the digital economy (Luo & Yu, 2024). Beyond technology-driven firms, financial institutions and asset managers also incorporate digital assets, highlighting their growing role in payments, investment products, and economic infrastructure (Fidelity Digital Assets & TP ICAP, 2024). Companies are investigating cross-border transactions, decentralized finance (DeFi), and balance sheet optimization, indicating a shift away from speculative investment (Anderson et al., 2022).

However, corporate adoption remains in its early stages, facing challenges related to accounting standards, regulatory compliance, and financial risk management. Under IFRS guidelines (IAS 38 Intangible Assets), crypto assets are still classified as intangible assets, with fair value gains excluded from net income (IFRS, 2024). The recent shift in FASB standards, as seen in Tesla’s latest 10-K report, signals a move toward greater financial transparency, potentially driving wider corporate adoption (Tesla Inc., 2024). The following section will introduce the underlying technology behind cryptocurrencies.

2.2. Origins and Technological Foundations

Bitcoin originated from Satoshi Nakamoto's 2008 Whitepaper, "Bitcoin: A Peer-to-Peer Electronic Cash System," which eliminated the need for centralized intermediaries. Nakamoto's architecture employs cryptographic methods—specifically, digital signatures for transaction verification and hash functions for data security—to ensure each transaction is verifiable and immutable. Transactions are recorded on a decentralized distributed ledger (the blockchain), enabling consensus across an extensive network of nodes (Nakamoto, 2008).

Integrating reliable timestamping is a crucial component of this invention. Haber and Stornetta (1991) introduced a technique for digital timestamping to create a tamper-evident record. Referenced by Nakamoto, it laid the groundwork for the blockchain's architecture by ensuring that the data in each block securely links to its predecessor, thus preventing modifications to historical records.

Nakamoto's Whitepaper gave rise to an extensive ecosystem of blockchain platforms embracing cryptographic security and distributed ledgers. Bitcoin uses a proof-of-work (PoW) consensus mechanism incentivizing miners (Nakamoto, 2008). These are network participants who leverage computational power to solve complex cryptographic puzzles, thus validating a transaction and adding new blocks to the blockchain. By performing these tasks, minors secure the network and maintain consensus among all participants, receiving cryptocurrency rewards as an incentive for their efforts (Biais et al., 2019).

While PoW is highly effective in securing the blockchain by making modifications computationally infeasible, it demands substantial energy. In contrast, several modern blockchains employ proof-of-stake (PoS) systems, where validators are selected based on the amount of cryptocurrency they stake as collateral. PoS significantly reduces energy consumption and improves sustainability (Buterin, 2014). These evolving consensus protocols are crucial for network security and for enabling advanced features such as smart contracts, driving considerable disruption in traditional financial systems (Cong & He, 2019).

Bitcoin's design allows for periodic halving events and a strict cap of 21 million coins, while various other digital currencies employ similar scarcity models to ensure a finite and predictable supply. This controlled issuance reduces inflationary pressures. Some researchers, including Böhme et al. (2015) and Dyhrberg (2016), have discovered that an asset's value and reputation as "digital gold" are significantly influenced by its limited supply and open verification mechanisms.

2.3. Digital Asset Classifications

There are various digital assets, ranging from cryptocurrencies, stablecoins, and tokens to Central Bank Digital Currencies (CBDCs).

Stablecoins are tied to a reference asset, such as a fiat currency or commodity. Stability is achieved via methods like collateralization, where reserves of the reference asset are held, or through algorithmic controls that adjust supply based on market conditions. Studies show that effective collateral management and robust stabilization protocols are crucial for maintaining a stablecoin's peg, making it reliable for everyday transactions (Lyons & Viswanath-Natraj, 2023). Their predictable nature also appeals to institutional investors looking for lower-volatility options (Arner et al., 2020).

Tokens, in contrast, are digital representations issued on existing blockchain platforms and can be broadly categorized into utility tokens and security tokens. Utility tokens grant holders access to specific decentralized services or applications, forming a cornerstone of decentralized finance (DeFi) ecosystems. Security tokens, on the other hand, represent fractional ownership or financial rights in an underlying asset and are therefore subject to more stringent regulatory requirements, similar to traditional securities. Smart contracts established the groundwork for token-based applications (Buterin, 2014). Initial coin offerings highlight differences between utility and security tokens with regard to purposes and compliance requirements (Fisch, 2018).

CBDCs are a distinct category. Issued and governed by central banks, CBDCs merge the efficiency of digital transactions with the stability and oversight characteristics of traditional monetary systems. Dirk Niepelt (2024) argues that CBDCs could modernize payment infrastructure, reduce transaction costs, and promote financial inclusion, all while maintaining the control essential for effective monetary policy. Additionally, CBDCs provide a direct channel for monetary policy transmission, bypassing traditional banking intermediaries and addressing liquidity shortages. Unlike decentralized cryptocurrencies, CBDCs operate within a state-controlled framework that aligns with existing regulatory and policy structures, preserving the two-tier banking system while introducing new monetary policy tools (Niepelt, 2024).

2.4. Shift from Speculation to Strategic Use

Bitcoin's early price movements exhibited characteristics of a speculative bubble, driven more by investor sentiment and short-term trading than by economic fundamentals (Baur et al., 2015; Urquhart, 2016). Instability was further exacerbated by price manipulation, contributing to

extreme volatility and reinforcing the speculative nature of early cryptocurrency trading (Gandal et al., 2018; Y. Liu & Tsyvinski, 2021)

As the market matured, a shift occurred. Improved market infrastructure, risk management, and regulatory clarity played key roles in this transition. The rise of regulated exchanges and custodial services significantly reduced trading risks, while enhanced security measures—including multi-factor authentication, cold storage, and advanced encryption—helped protect digital assets from cyber threats and fraud (Deloitte, 2023a) Furthermore, regulatory frameworks such as the EU's Markets in Crypto-Assets (MiCA) provided clearer guidelines, increasing institutional confidence and paving the way for corporate adoption of digital currencies (ESMA, 2023).

These developments have allowed corporations to incorporate digital assets into their financial strategies, using them as hedges against inflation and efficient tools for cross-border transactions (Dyhrberg, 2016). The following chapters are going to explore this evolving landscape and its ongoing challenges.

2.5. Strategic Drivers for Cryptocurrency Adoption

Corporations are increasingly incorporating cryptocurrencies into their strategic frameworks, driven by a combination of theoretical insights and empirical evidence found in both academic studies and corporate annual reports. Primary drivers can be categorized into comprehensive themes, each supported by scholarly contributions and illustrated by real-world examples.

2.5.1. Signaling Innovation and Market Leadership

Spence (1978) argued that firms undertake costly actions to signal quality to the market, a concept that extends to the adoption of advanced technologies. In the context of cryptocurrency, early adoption is not merely a financial decision but also a powerful signal of a company's commitment to innovation. According to Kerin, Varadarajan and Peterson (1992), firms that are first movers in adopting emerging technologies can accrue advantages by shaping industry standards, securing early adopters, and creating strong brand associations with innovation. This underscores how companies leveraging cryptocurrency adoption can position themselves as industry pioneers. For instance, Tesla's high-profile investment in Bitcoin evinces its readiness to engage with emerging technologies and establishes it as a leader in technological innovation (Tesla Inc., 2024). Furthermore, Teece (2018) highlights that companies investing in disruptive

technologies not only demonstrate their innovative capacity but also cultivate advantages over time.

MicroStrategy's annual report exemplifies this approach; by designating Bitcoin as its primary treasury reserve asset, the company strengthens its reputation as a digital pioneer, thereby enhancing investor confidence and distinguishing itself in a competitive landscape (MicroStrategy Inc., 2024).

2.5.2. Portfolio Diversification and Hedging

Baur, Hong and Lee (2015) indicate that cryptocurrencies, particularly Bitcoin, usually exhibit low correlation to conventional asset classes such as stocks and bonds. This serves as an effective diversification strategy, enabling companies to protect themselves against inflation, currency swings, and general market volatility. Corbet et al. (2019) further emphasize that Bitcoin's position as a non-traditional asset enhances its role as a hedge, particularly during periods of economic uncertainty. Dyhrberg (2016) suggests Bitcoin is similar to traditional safe-haven assets like gold. Additionally, Square, Inc.'s annual report (Block Inc, 2024) illustrates how the firm incorporates Bitcoin into its treasury management not just for speculative purposes but for financial stability amidst market uncertainties. Fidelity Digital Assets suggests that adding Bitcoin to a corporate treasury may enhance portfolio resilience due to its low correlation with traditional assets, scarcity-driven monetary policy, and growing role as a store of value. Thus, Bitcoin can serve as both a diversification tool and a strategic hedge in response to fiscal deficits, currency debasement, and geopolitical instability (Bhutoria et al., 2023).

2.5.3. High Growth Potential

Despite their high volatility, cryptocurrencies offer substantial growth potential, presenting a high-risk, high-reward opportunity for forward-thinking firms. Tesla's Bitcoin investment exemplifies this dual strategy—serving as both a hedge against market instability and a speculative asset with exponential growth potential. Bouri et al. (2017) found that digital assets can generate significant long-term returns despite short-term fluctuations.

Liu et al, (2022) identify market, size, and momentum effects as key risk factors driving cryptocurrency returns. The size effect shows that smaller cryptocurrencies yield higher excess returns, suggesting that firms investing early in digital assets can capture upside. The momentum effect highlights how past price trends influence future returns, reinforcing their speculative nature. Companies incorporating digital assets can enhance liquidity, hedge

macroeconomic risks, and unlock high-growth opportunities beyond traditional investments (Y. Liu et al., 2022).

2.6. Challenges and Risks of Cryptocurrency Adoption

Embracing cryptocurrencies also involves risks, such as volatility, tax and accounting complexities, regulatory ambiguity, and security vulnerabilities for corporations.

2.6.1. Volatility

Cryptocurrency markets are highly volatile, influenced by speculation, market structure, and regulatory uncertainty. Chaim and Laurini (2018) identify two major volatility periods: 2013–2014, triggered by the Mt. Gox collapse, and 2017, driven by speculative surges. These fluctuations often feature sudden price jumps, where negative shocks have a stronger impact than positive ones.

Correlation amplifies volatility. Yi et al. (2018) demonstrate that Bitcoin transmits volatility across the market; however, smaller cryptocurrencies also contribute. Unlike gold, Bitcoin has a positive correlation with stock market downturns, which limits its utility as a safe-haven asset (Klein et al., 2018). Regulatory actions, such as China's ICO ban, further increase market instability (Aalborg et al., 2019), while liquidity constraints worsen price swings (Pichl et al., 2017).

Econometric models help measure and predict volatility. GARCH models improve short- and long-term forecasting (Katsiampa, 2017), while machine learning techniques, such as neural networks, capture complex volatility patterns (Pichl et al., 2017). Despite these advancements, cryptocurrency volatility remains a challenge for investors and regulators.

2.6.2. Accounting and Taxation Issues

Cryptocurrency accounting varies globally. In the United States, FASB requires cryptocurrencies to be marked at fair market value, reflecting gains and losses in net income (FASB, 2023). In contrast, Europe follows IFRS, classifying cryptocurrencies as intangible assets (IAS 38) or inventory (IAS 2), requiring impairment testing rather than fair value measurement. This approach can understate asset values during price increases, creating differences with U.S. GAAP (IFRS, 2025). While IFRS is mandatory for publicly traded EU companies, non-listed firms may follow national standards, adding to inconsistencies (European Commision, 2025). Even within IFRS, companies apply different measurement bases, further complicating financial reporting (Luo & Yu, 2024). Many countries outside the

U.S. and EU follow IFRS, though China maintains its own accounting framework despite IFRS convergence efforts (IFRS, 2025). These differences create reporting challenges for multinational firms holding crypto assets.

Tax treatment also varies. In the U.S., the Internal Revenue Service (IRS) classifies cryptocurrency as property, subject to capital gains tax (Aalborg et al., 2019). The EU has no unified approach, with some countries applying VAT exemptions while others impose corporate or income taxes. In Asia, Japan taxes crypto up to 55%, while India applies a flat 30% tax plus a 1% transaction levy (Koinly, 2025), complicating tax planning for businesses.

Under IFRS, impairment losses must be recorded when prices drop, but upward revaluations are not allowed unless assets are sold, potentially understating asset values (Klein et al., 2018). The FASB's fair value model addresses this by allowing real-time price adjustments (FASB, 2023). However, crypto price volatility still causes earnings fluctuations, posing challenges for firms (Bouri et al., 2017). Luo & Yu (2024) highlight further distortions, noting that firms classify crypto-related cash inflows inconsistently—some under operating, others under investing—misleading investors about liquidity and performance.

The U.S. shift to fair value accounting may encourage more firms to hold crypto, while the EU's MiCA framework seeks regulatory harmonization (ESMA, 2023). Other countries impose strict tax regimes, reflecting a cautious stance. These disparities highlight the need for global coordination to simplify compliance and enhance transparency.

2.6.3. Regulatory Uncertainty

Cryptocurrency regulation remains fragmented, with jurisdictions adopting different approaches, leading to uncertainty and regulatory arbitrage as firms seek favorable conditions (Silva & Mira Da Silva, 2022; Wronka, 2024)

Anti-money laundering (AML) and counter-terrorist financing (CTF) compliance remain key concerns. The Financial Action Task Force (FATF) urges enforcement, but regulatory responses vary, complicating oversight in major financial hubs like the U.S., EU, and UAE (Al-Tawil, 2023).

The classification of cryptocurrencies also presents challenges. In the U.S., agencies such as the SEC and CFTC take differing stances, creating legal uncertainty (Wronka, 2024). In contrast, the EU's Markets in Crypto-Assets Regulation (MiCA) seeks to establish a unified framework (ESMA, 2023). The rise of Decentralized Finance (DeFi) and stablecoins

complicates regulation. DeFi's lack of intermediaries hinders Know Your Customer (KYC) enforcement, while stablecoins pose financial stability risks, prompting discussions on Central Bank Digital Currencies (Silva & Mira Da Silva, 2022).

2.6.4. Security Threats and Cyber Risks

Managing cryptocurrency assets poses notable security challenges, especially concerning custody, wallet architecture, and key management. Organizations face a choice between self-custody, which grants complete control but demands advanced technical skills, and third-party custody, which eases operational complexity yet exposes them to risks like insolvency and regulatory issues (Deshpande et al., 2024). The security of wallets is another issue. While hot wallets offer greater accessibility, they are often prime targets for cyberattacks, whereas cold wallets provide enhanced protection, albeit with reduced convenience and increased recovery difficulty (Houy et al., 2024). Even hardware wallets, which are generally deemed highly secure, have revealed weaknesses to side-channel attacks that can compromise private keys with limited access (Park et al., 2023).

Cryptocurrency security relies on public-private key cryptography. Loss of a private key results in irreversible loss of funds, emphasizing the importance of secure key generation and storage. Innovations such as hierarchical deterministic wallets, biometric-based key recovery, and privacy-preserving key derivation schemes offer improved resilience and usability (Z. Liu et al., 2022; Wang et al., 2023). Despite technical advances, fraud and breaches persist, largely due to user error and phishing. Thus, beyond implementing secure infrastructure, companies must adopt layered security frameworks, conduct user training, and comply with evolving regulatory standards to effectively manage digital asset risks.

3. Methodology

3.1. Research Design

This study employed a mixed methods approach to integrate qualitative insights and quantitative evidence, enhancing validity through data triangulation (Sekaran & Bougie, 2016). By combining deductive theory-driven coding with inductive discovery of emergent themes, the analysis balanced structure with flexibility (Sekaran & Bougie, 2016).

Primary data were collected through semi-structured expert interviews, a method well-suited for capturing in-depth organizational perspectives (Pink, 2013). Secondary data were drawn from corporate disclosures, providing an objective basis for comparison.

The analytical process unfolded in three stages: thematic coding of interviews, structured analysis of firm-level financial data, and an integrative comparison to link subjective motivations with observable corporate practices.

3.2. Data Collection

Primary data were obtained through semi-structured interviews with senior corporate executives and institutional investors, capturing in-depth perspectives on cryptocurrency adoption. Secondary data consisted of quantitative and qualitative information extracted from the public disclosures of firms that have reported digital-asset holdings.

3.2.1. Primary Data

We conducted twelve semi-structured interviews (Table 1) with senior executives and institutional investors responsible for their organizations' treasury risk management or strategic finance decisions. With twelve interviews, we achieved data adequacy and saturation (Guest et al., 2020).

Code	Position & Organization	Sector Focus
I1	Renae Cormier, CFO, Semler Scientific	Med-tech corporate treasury management, strategic Bitcoin allocation, fair-value accounting challenges
I2	Hannes Demske Co-Founder & CEO, Sunrise Investment Group	German private investment & VC, corporate vs. personal crypto holdings, tax-driven treasury decisions
I3	Treasury Manager, Leading DAX 40 Company	Large-cap industrial manufacturing treasury, conservative liquidity management, regulatory constraints
I4	Treasury Senior Manager, U.S. SME (ex-Binance)	Mid-market U.S. SME treasury operations, fintech integration, risk management for digital assets
I5	Senior Manager, Big Four Advisory Firm	Professional services in digital-asset strategy, client advisory on custody, accounting, and compliance
I6	Ricardo Martins, Head of Crypto, Bison Bank	Commercial banking crypto solutions: institutional custody, stablecoin liquidity management, tokenization
I7	Julia Henning, Head of Treasury, Syntegon	Private equity-owned packaging machinery treasury, restrictive financing mandates, traditional assets
I8	CFO,Crypto Mining Company	Crypto mining operations, production-to-cash conversion, mark-to-market volatility & hedging strategies
I9	Max Ilse, Investment Manager, Blockchain Foundation Group	Web3 accelerator VC: early-stage token allocations, equity-token governance, cross-jurisdictional compliance
I10	Senior Manager Treasury, publicly traded U.S. technology firm	Digital asset strategy, treasury allocation to Bitcoin, fair value accounting, regulatory navigation
I11	Christian Forma, Head of Treasury, WIBank	DLT pilot issuer & investor, ECB/Bundesbank settlement trials, regulatory capital treatment of blockchain instruments, innovation signaling through tokenized bonds
I12	CFO, European industrial company	conservative asset allocation, digital assets excluded due to strategic misalignment, regulatory and volatility concerns

Table 1: Interview Overview

Participants were secured from a diverse array of industries (Table 1), including medical technology, industrial manufacturing, financial services, and blockchain venture capital, via professional networks and a snowball sampling technique.

An interview guide, refined through two pilot sessions, addressed two main areas: the strategic drivers behind cryptocurrency adoption, such as uncorrelated asset exposure, preservation of purchasing power, and market signaling, and the operational challenges encountered, including earnings volatility under fair value accounting, institutional custody and insurance constraints, and evolving regulatory and tax landscapes.

Each interview was conducted via secure video conference or telephone and was audio recorded with informed consent. Transcripts for participants requesting confidentiality were anonymized; others were maintained in their original form but treated as confidential. All transcripts were imported into qualitative analysis software, which facilitated the systematic management of codes and memos.

Coding proceeded in two iterative rounds: an initial assignment of passages to the deductive codes and a subsequent line-by-line open coding that uncovered emergent themes (Appendix A), such as board-level approval processes, innovative financing vehicles, or nuanced interpretations of international regulation. Analytical memos documented code evolution, illustrative quotations, and reflections on theme relationships, creating an internal audit trail that underpins methodological transparency.

3.2.2. Secondary Data – Dataset

To augment the interview findings, we collected a secondary dataset from eight publicly traded firms known to hold cryptocurrencies (Appendix N), spanning crypto-native operators, technology and fintech adopters, and more traditional enterprises. Our source materials comprised annual and quarterly reports (Forms 10-K/10-Q), investor presentations, earnings-call transcripts, and regulatory filings that reflect the adoption of fair-value accounting standards. From these documents we extracted quantitative measures—Bitcoin balances, crypto fair-value and unrealized gains (USD m), crypto's share of total assets, acquisition year of first digital-asset purchase, company age (years since founding), and asset-mix breakdown—and qualitative disclosures, including executives' strategic rationales (e.g. diversification, inflation hedging, innovation signaling, growth potential), custody and insurance arrangements, accounting treatments, and regulatory positioning statements. We organized this information into a tidy dataset with one row per firm and standardized columns for each metric and coded

theme, facilitating side-by-side comparison with the interview analysis. This structure underpins our univariate and multivariate quantitative analyses (Sections 4.2.1–4.2.3) as well as our qualitative review of disclosure patterns (Section 4.2.4), thereby enabling an integrated, triangulated assessment of corporate cryptocurrency practices.

3.2.3. Secondary Data – Literature Review

To situate this study within the broader scholarship on corporate cryptocurrency adoption and treasury management, we conducted a systematic review of 92 sources. Initially, we searched major academic databases using targeted keywords such as "corporate cryptocurrency holdings", "digital-asset accounting," "crypto treasury risk management" and "custody and insurance". We then refined this corpus through backward and forward citation chaining of seminal papers on treasury diversification frameworks, IFRS/GAAP treatments of digital assets, volatility mitigation, and governance mechanisms. To capture emerging interdisciplinary perspectives, we employed tools to identify related works on decentralized finance structures, institutional custody models, and regulatory impacts on corporate blockchain strategies. After title-abstract screening and full-text review for relevance and methodological rigor, the final set of 92 sources was synthesized to inform both our interview protocol (Section 3.1) and the secondary-data analyses (Section 3.2.2). This comprehensive literature foundation ensures our research rests on both established theory and the latest empirical developments in corporate digital asset practice.

4. Analysis

4.1. Interview-Based Analysis

This section presents the findings derived from twelve expert interviews (Appendix B-M), analyzed through a thematic coding process. Before presenting detailed thematic findings, a descriptive overview of the code frequencies provides an initial indication of the relative importance and distribution of key themes across the expert interviews.

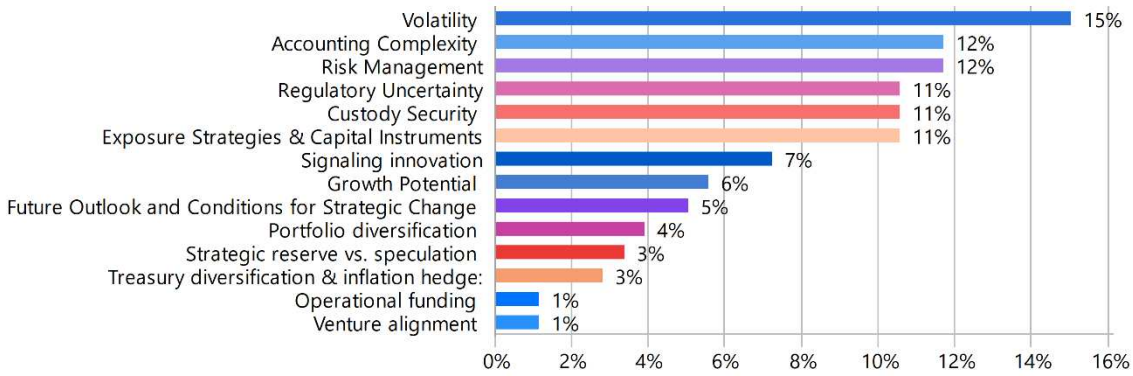

Figure 4: Total number of coded segments associated with each theme across all interviews in %

Figure 4 illustrates the total number of coded segments associated with each theme across all twelve interviews. This metric reflects the intensity and depth with which topics were discussed. Themes such as Volatility, Accounting Complexity, and Risk Management emerged as particularly prominent, suggesting that concerns around financial volatility and strategic treasury management were dominant narratives among participants.

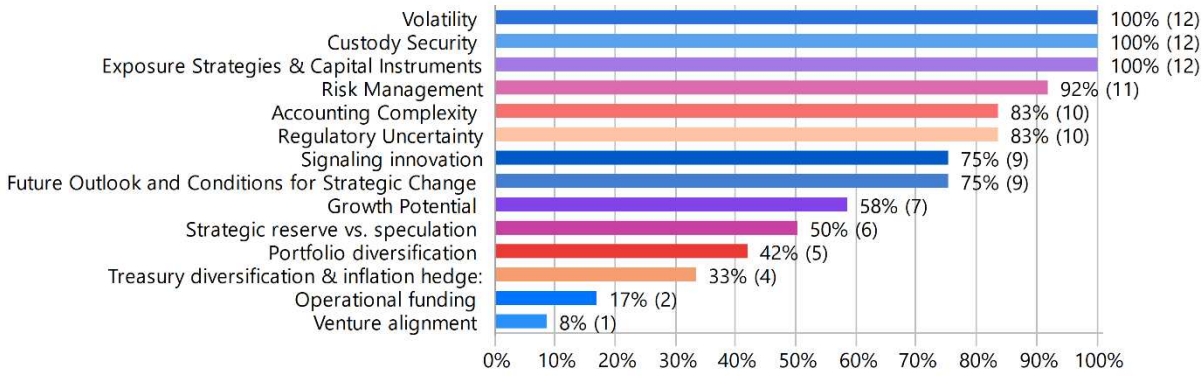

Figure 5: Number of interviews of each theme mentioned in Values and %

Complementing this view, Figure 5 displays the number of interviews in which each theme was mentioned at least once. This second measure highlights the breadth of relevance across different interviewees. Nearly all participants discussed themes like regulatory uncertainty and custody security, indicating their pervasive impact regardless of a company's adoption status or strategic focus.

Together, these descriptive visualizations establish a preliminary framework for the deeper thematic analysis that follows. High-frequency and widely referenced themes form the backbone of the subsequent findings, while more niche topics are also explored for their strategic significance.

4.1.1. Drivers of Adoption

This section presents the strategic drivers discussed by firms that considered or adopted digital assets as part of their treasury and investment activities. While some participants ultimately rejected adoption, the thematic analysis identified four key factors influencing adoption discussions: portfolio diversification, growth potential, signaling innovation, and treasury diversification coupled with inflation hedging. The prominence and relevance of these drivers varied depending on sector, company size, and strategic priorities.

4.1.1.1. Portfolio Diversification

Portfolio diversification emerged as a notable strategic driver for corporate cryptocurrency adoption. Several executives emphasized the role of Bitcoin and other digital assets for enhancing treasury resilience and reducing reliance on low-yield traditional instruments.

One CFO explained that “one of our board members introduced the idea of using Bitcoin as an alternative store of value—a sort of digital gold” (I1), framing Bitcoin as a non-correlated asset class capable of preserving purchasing power. Advisory professionals observed that “digital assets are increasingly viewed as an alternative to traditional cash reserves,” as companies reassessed their treasury compositions away from instruments like T-bills (I5).

Even firms that ultimately chose not to adopt digital assets acknowledged the diversification argument (I8). Among adopters, treasury diversification was explicitly positioned as a core objective, with one executive emphasizing Bitcoin’s role as a non-correlated asset to protect purchasing power in low-yield environments (I10). This finding aligns with Baur et al. (2015), who identified Bitcoin’s low correlation with it being a compelling diversification tool.

Portfolio diversification was coded across 5 of the 12 interviews (41,7%), suggesting that while diversification was an important motivator for some, it was not a universal driver across the sample.

4.1.1.2. Growth Potential

The potential for superior returns and strategic positioning was another key driver associated with corporate cryptocurrency adoption. Several interviewees viewed Bitcoin and digital assets as opportunities to access growth markets and enhance traditional treasury portfolios.

One CFO described Bitcoin as “a unique opportunity to preserve purchasing power while also potentially generating returns far beyond those of traditional short-term instruments” (I1). In

venture capital, token holdings were seen as both investment upside and strategic alignment with startup founders (I9). Financial institutions also observed a trend toward capturing growth in tokenized markets as traditional benchmarks evolve (I6).

However, many industrial firms rejected direct adoption despite acknowledging the market appeal. Executives stressed that digital assets, while innovative, did not align with their operational mandates or financial governance models (I7, I8, I12).

In technology-forward sectors, digital assets were more favorably considered, often viewed as complementing traditional cash reserves and providing potential upside in volatile macroeconomic conditions (I10).

Overall, the theme of growth potential was coded across 7 of the 12 interviews (58,3%), indicating that while adoption remained selective, digital assets were increasingly seen as high-upside instruments, particularly in innovation-driven industries.

4.1.1.3. Signaling Innovation

Beyond diversification and growth potential, the ability to signal innovation and forward-thinking strategy was also a key driver for digital asset adoption. Several executives highlighted that holding Bitcoin served both financial and reputational purposes.

Interviewees noted that companies like Tesla and Semler Scientific used Bitcoin “to create visibility and a strong investment case” while signaling strategic leadership (I2, I3, I4). Advisory professionals reinforced that integrating digital assets allowed firms to “set themselves apart” and project a forward-thinking image to investors and markets (I5, I6).

However, executives from more traditional sectors emphasized that while signaling innovation had symbolic value, it remained incompatible with their financial principles and operational priorities (I7, I8). In contrast, technology-focused firms deliberately used digital assets to position themselves as innovators, with one treasury manager noting that “holding Bitcoin enhances our brand among tech-savvy investors and customers” (I10). A promotional bank executive similarly recognized the competitive signaling advantage in innovation-driven economies (I11).

The theme of signaling innovation was coded across 9 of the 12 interviews (75%), illustrating that beyond financial considerations, the symbolic role of digital assets increasingly shaped corporate positioning strategies.

4.1.1.4. Treasury Diversification & Inflation Hedge

A recurring theme across the interviews was the use of Bitcoin and digital assets to diversify treasury holdings and hedge against macroeconomic risks, particularly inflation and currency devaluation. Several executives described digital assets as modern alternatives to traditional cash management strategies.

One CFO highlighted that the "core rationale behind our Bitcoin holdings is to utilize it as a strategic treasury reserve asset. We view Bitcoin as a long-term hedge against inflation and currency debasement" (I1). A senior treasury manager at a U.S. technology firm similarly recounted that after internal studies on market volatility, the company "proposed allocating up to 5% of excess cash to Bitcoin as a hedge against inflation and to signal our commitment to emerging technology" (I10).

Advisory and banking sector professionals observed a broader trend toward incorporating digital assets into treasury operations. One advisor noted that early adopters "set themselves apart by implementing innovative treasury strategies" and "use excess cash to drive long-term value creation" through digital assets (I5), while a banking executive emphasized that "many corporates see digital assets as a modern treasury tool to complement traditional cash reserves, especially when conventional instruments underperform," and that funds allocating to crypto "not only hedge against traditional risks but also diversify liquidity management strategies" (I6).

Overall, integrating Bitcoin into treasury frameworks was not driven solely by speculative motives but often reflected a deliberate strategy to preserve purchasing power and modernize liquidity structures in response to evolving economic conditions. In total, the theme of treasury diversification and inflation hedging was coded across 4 of the 12 interviews (33,3%), suggesting that while the approach remains relatively selective, it is gaining traction among companies seeking long-term financial resilience.

4.1.2. Primary Purpose

Interviewees saw three core operational uses for digital assets: as part of daily funding, strategic reserves, or venture alignment—moving beyond mere signaling. In crypto-native firms, like miners, holdings are integral to operations ("We've held digital assets since founding," I8), whereas traditional companies often prohibit such investments via shareholder agreements (I7). Some adopters view Bitcoin as a liquidity tool—"we started holding Bitcoin in May 2024"

(I1)—but others, especially industrial firms, reject it over volatility and treasury-strategy misalignment (I3, I4). Advisors note growing interest in crypto reserves but flag regulatory limits and institutional mandates—particularly in public-sector banks—as persistent adoption barriers (I5, I11).

4.1.3. Challenges of Digital Assets Adoption

Custody concerns, volatility, accounting complexity, regulatory uncertainty, exposure limitations, and incomplete risk management frameworks collectively represent major barriers to corporate digital asset adoption. While some firms have developed strategies to mitigate these risks, widespread adoption remains constrained by persistent structural and regulatory challenges.

4.1.3.1. Custody & Security

Custody and security concerns emerged as one of the most significant barriers to broader corporate adoption of digital assets. Across all interviews, participants emphasized that safeguarding cryptocurrencies presents operational, technical, and legal challenges far greater than those associated with traditional assets.

Executives from firms holding Bitcoin stressed the necessity of using regulated, institutional-grade custodians. One CFO described how all transactions were routed through vetted custodians, relying on cold storage and regulatory compliance to minimize security risks (I1). Providers such as Coinbase Prime, Nydig, and Fireblocks were frequently cited, particularly for their multi-signature cold wallets, insurance coverage, and SOC-certified controls (I5, I6, I9).

Security standards were decisive in custody evaluations. Firms managing mining output or token portfolios emphasized rapid asset conversion or exclusive reliance on institutional custody partners to minimize exposure (I8, I9, I10).

Even firms avoiding digital assets cited custody risks as a major deterrent. Executives referenced persistent vulnerabilities, such as cyber threats, weak legal enforceability of ownership rights, and the lack of standardized custodial frameworks (I7, I12). Several other executives (I2, I3, I4, I11) similarly emphasized custody risks linked to operational vulnerabilities, regulatory uncertainty, and concerns about asset recovery in the event of security breaches.

Advisory professionals reinforced this cautious stance, consistently recommending third-party custodians with cold storage and strict regulatory governance (I5, I6).

Concerns related to custody and security were raised across all interviews (I1–I12), confirming that secure storage remains one of the most universal and unresolved challenges facing corporate crypto adoption.

4.1.3.2. Volatility

Volatility emerged as a major recurring theme across all interviews, cited as a critical financial and operational risk. Participants consistently highlighted extreme and unpredictable price fluctuations as a core challenge for both stability of returns and liquidity management.

Executives from firms holding digital assets acknowledged that fair value revaluations introduced short-term earnings volatility. One CFO noted that "the inherent price volatility of Bitcoin still presents reporting challenges," but explained that liquidity buffers and a long-term holding strategy helped mitigate these effects (I1). Mining and venture-backed firms similarly accepted volatility as part of the risk-return profile, managed through conservative portfolio sizing and liquidity stress testing (I8, I9, I10).

In contrast, companies that rejected direct crypto exposure emphasized that volatility fundamentally conflicted with their financial strategies. Treasury executives stressed that "wild price swings jeopardize capital preservation" and that "extreme fluctuations are incompatible with our risk management frameworks" (I3, I4, I7, I12).

Advisory professionals echoed these concerns, recommending that clients treat digital assets as long-term strategic allocations rather than transactional instruments, supported by robust liquidity reserves to buffer against market swings (I5, I6).

Across the interviews, volatility was not seen as an incidental risk but as a structural characteristic of digital assets, fundamentally challenging traditional treasury models.

All 12 interviews (100%) highlighted concerns about volatility, affirming that price instability is a significant barrier to wider corporate adoption.

4.1.3.3. Accounting Complexity

Accounting complexity was a major hurdle to broader digital asset adoption, despite recent improvements. Several participants acknowledged that updates like the adoption of fair value

accounting under U.S. GAAP have improved transparency, allowing assets like Bitcoin to be marked to market rather than subjected solely to impairment (I1, I10).

Nonetheless, operational challenges persist. Executives highlighted the administrative burdens of tracking acquisition lots, managing real-time price volatility, and reconciling blockchain transactions within traditional ERP systems (I1, I8, I10). Mining companies and venture funds further noted the need for specialized accounting processes and liquidity buffers to manage valuation swings (I8, I9, I10).

Accounting-related concerns were central among firms avoiding digital assets. Interviewees cited the absence of standardized valuation methods, the rigidity of impairment-only models under IFRS, and the difficulty of auditing blockchain-based assets (I3, I4, I7, I12). One treasury executive emphasized that “current standards don't offer the clarity or consistency needed to account for digital assets properly” (I3).

Advisory professionals confirmed that while some clients have adapted to fair value reporting, challenges such as earnings volatility, liquidity pressures, and limited accounting expertise remain significant (I5, I6).

While some progress has occurred, the complexity of accounting remains a significant obstacle. Issues were highlighted in 10 out of the 12 interviews (83,3%), emphasizing the persistent challenges of incorporating digital assets into traditional financial systems.

4.1.3.4. Regulatory Uncertainty

Regulatory uncertainty—driven by fragmented, evolving rules—remains a significant barrier to corporate crypto adoption. Executives report months-long SEC disclosure reviews with intense language scrutiny (I1), and advisors warn of up to three-month documentation processes for asset disclosures (I5). Cross-jurisdictional compliance adds burdensome proof-of-reserves, chain-of-custody, and audit-ready reporting requirements (I9).

Tax ambiguities—such as the IRS treating each Bitcoin sale as a separate taxable event requiring detailed lot tracking (I10)—and unclear classification under Europe’s MiCA framework (I12), exacerbated by Germany’s stringent tax regime (I2, I4), further deter firms. Advisors emphasize these regulatory hurdles often outweigh potential strategic gains for smaller companies still grappling with new disclosure standards (I6). All 12 interviewees flagged regulatory uncertainty (100%).

4.1.3.5. Exposure Strategies & Capital Instruments

One executive noted, “We hold crypto-related equities like Coinbase or Nvidia… these kinds of exposures let us stay involved without direct volatility and custody risk” (I2). However, many participants rejected ETFs and funds due to concerns over counterparty risk, regulatory classification as investment companies, and added management fees (I3, I4, I5, I10).

Bitcoin-backed lending products were also viewed critically. Firms cited low loan-to-value ratios and high interest rates as making such financing unattractive compared to traditional credit lines (I1, I5, I6, I10, I12). One participant summarized, “The high cost of capital and legal ambiguity surrounding collateral enforceability make such products unappealing” (I12).

Insurance coverage for digital assets was described as limited and insufficient. Executives noted that pooled insurance offerings did not meet the risk management standards required by corporate treasuries (I7, I8, I11).

Overall, while alternative exposure mechanisms exist, most firms either preferred direct ownership or remained cautious, favoring traditional financing models to avoid additional regulatory and operational risks.

4.1.3.6. Risk Management

Effective risk management strategies are essential for companies considering digital asset exposure, yet interviewees emphasized that current tools and practices remain insufficiently developed. Insurance options were consistently described as limited in scope and scale. Participants noted that custodial insurance policies are typically pooled across many clients, providing limited individual coverage, and that standalone policies remain costly and difficult to obtain (I1, I2, I4, I5, I6, I10, I12).

Executives also stressed the importance of strong internal controls. Firms adopting digital assets implemented rigorous measures such as dual signoffs for transactions, board-level approvals, upgraded ERP systems to track coin lots, and strict segregation of duties to mitigate operational risks (I1, I5, I10). However, even with internal controls, companies highlighted that auditing custody arrangements remains complex, partly due to the lack of standardized documentation and the technical challenges of verifying private key control without compromising security (I4, I5).

Several participants emphasized that while risk management practices are improving especially through better custodial standards, current frameworks do not yet match the scale or risk profile required by traditional treasury operations (I6, I9, I10).

Overall, issues related to insufficient or underdeveloped risk management practices emerged in 11 out of the 12 interviews (91,7%). This highlighted that thorough insurance coverage, standardized controls, and scalable auditing solutions are vital gaps that need to be addressed for the corporate adoption of digital assets.

4.2. Secondary Data Analysis: Corporate Crypto Practices

This chapter examines eight firms' cryptocurrency disclosures and holdings, combining descriptive statistics, bivariate and multivariate analyses, and a review of public narratives on strategy, custody, accounting, and risk management to reveal diverse corporate crypto practices.

4.2.1. Univariate Descriptive Statistics

Table 2 presents the core sample descriptors for the eight firms (Appendix N): raw BTC holdings, total assets (in USDm), crypto fair-value (FV) (in USDm), derived percentage exposure, year of first acquisition, and company age. These values form the basis for our univariate analysis (Table 3).

Company	BTC	Assets	FairValue	FV/Assets	YearAcq	Age
MARA Holding Inc.	44.893,00	6.801,00	4.200,00	62%	2020	2010
Phunware Inc.	0,82	114,74	0,10	0,1%	2021	2009
Coinbase Inc.	6.885,00	22.540,00	1.550,00	7%	2012	2012
MicroStrategy Inc.	447.740,00	25.840,00	41.789,00	162%	2020	1989
Block Inc.	8.485,00	36.780,00	792,30	2%	2024	2009
KULR Technology	668,00	62,93	62,30	99%	2024	2013
Tesla Inc.	11.509,00	125.110,00	1.074,00	1%	2021	2003
Semler Scientific Inc.	3.192,00	239,83	280,40	117%	2024	2007

Table 2: Core Sample Descriptors

Variable	Mean	Median	Min	Max	Std Dev
BTC holdings (number of BTC)	65.421,60	7.685,00	0,82	447.740,00	155.153,88
Crypto % of total assets	56,17%	34,32%	0,09%	161,72%	63,53%
Year of first acquisition	2021	2021	2012	2024	3,96
Company age (years)	18,5	16	12	36	7,71

Table 3: Summary Statistics

Table 3 aggregates mean, median, minimum, maximum, and standard deviation for each metric. Bitcoin holdings range from 0,82 BTC to 447.740 BTC, yielding a pronounced right skew driven by a small number of very large corporate positions. Crypto fair-value as a percentage of total assets spans 0,09 % to 161,72 %, reflecting both modest treasury allocations and instances where market valuation of crypto exceeds reported asset bases. Firms 'first digital-asset acquisitions date from 2012 to 2024, indicating that six of eight entrants began after 2020. Company ages vary between 12 and 36 years, demonstrating that both legacy incumbents and younger adopters are active in corporate crypto markets.

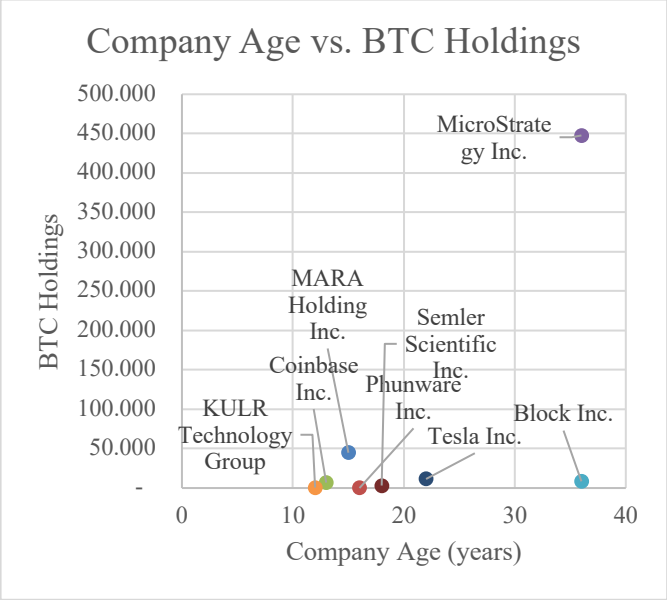

Figure 6: Company Age vs. BTC Holdings

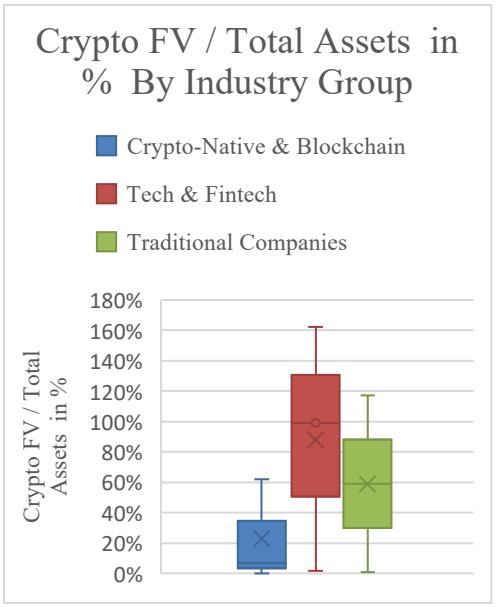

Figure 7: Crypto FV / Total Assets in % by Industry Group

Figure 6 displays a histogram of BTC holdings, highlighting concentration of firms in the 10^2–10^4 BTC bands and the long tail of outsized holders, while Figure 7 offers box-and-whisker plots of crypto-asset share by industry group, underscoring sectoral differences in exposure intensity. These univariate insights lay the groundwork for the forthcoming bivariate and qualitative analyses.

4.2.2. Bivariate and Multivariate Analyses

Building on the univariate findings, we next interrogate how firms' cryptocurrency exposures relate to scale, timing, and firm characteristics through correlation analysis, hypothesis testing, clustering, and regression.

	BTC	*Assets*	*FairValue*	*FV/Assets*	*YearAcq*	*Age*
BTC	1					
Assets	-0,01	1				
FairValue	1,00	-0,01	1			
FV/Assets	0,67	-0,39	0,67	1		
YearAcq	-0,09	-0,06	-0,11	0,27	1	
Age	-0,91	-0,29	-0,91	-0,55	-0,03	1

Table 4: Person coefficients

Table 4 reports Pearson coefficients among six continuous variables: Bitcoin holdings (BTC), total assets, crypto FV (FairValue), the ratio of fair-value to total assets (FV/Assets), year of first acquisition (YearAcq), and company age. As expected, BTC and FairValue correlate almost perfectly ($r \approx 0{,}999$), while BTC and total assets show virtually no relationship ($r \approx -0{,}06$). A moderate positive correlation between BTC and FV/Assets ($r \approx 0{,}67$) indicates that larger absolute BTC positions tend to accompany higher proportional allocations, but a negative correlation between total assets and FV/Assets ($r \approx -0{,}39$) reveals that larger firms' crypto still occupies a smaller share of their balance sheets. YearAcq and Age correlate only weakly ($|r| < 0{,}30$) with any crypto metric, suggesting timing and maturity alone do not drive exposure.

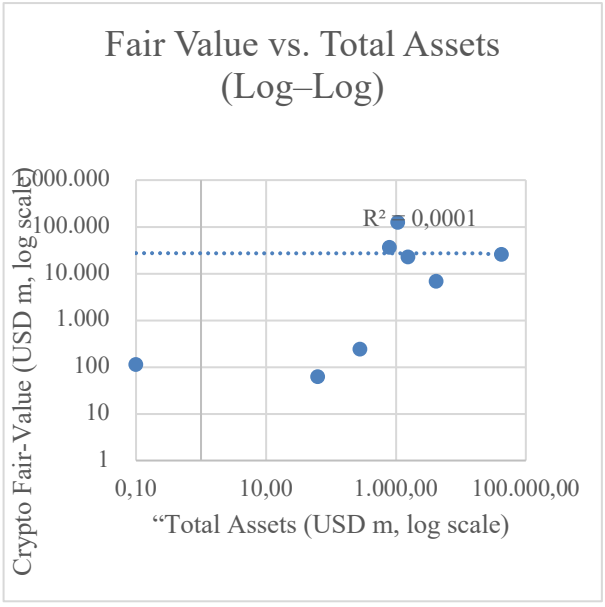

Figure 8: Fair Value vs. Total Assets (Log-Log)

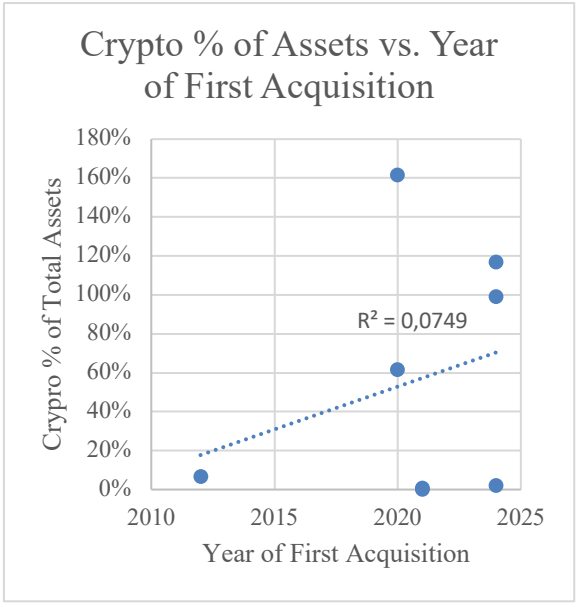

Figure 9: Crypto % of Assets vs. Year of First Acquisition

Figures 8-9 visualize these associations. In Figure 8, a log–log scatter of FairValue against total assets produces an essentially flat trendline ($R^2 = 0{,}0001$), confirming no systematic scale effect. Figure 9 plots FV/Assets against YearAcq, yielding a gentle upward slope ($R^2 = 0{,}075$) that implies entry timing explains only about 7 % of the variation in proportional exposure.

To test whether absolute scale or sector membership explains differences in crypto allocation, we performed:

t-Test: Two-Sample Assuming Unequal Variances

	High (≥ 10 k BTC)	*Low (< 10 k BTC)*
Mean	0,74778735	0,56236465
Variance	0,659648288	0,362397818
Observations	3	4
Hypothesized Mean Difference	0	
df	4	
t Stat	0,332770281	
P(T<=t) one-tail	0,378008752	
t Critical one-tail	2,131846786	
P(T<=t) two-tail	0,756017504	
t Critical two-tail	2,776445105	

Table 5: t-Test: High vs. Low BTC

Anova: Single Factor

SUMMARY

Groups	*Count*	*Sum*	*Average*	*Variance*
Core Crypto & Blockchain-Focused Companies	3	0,687194414	0,229065	0,114347
Technology & Fintech	3	2,628751837	0,876251	0,646251
Traditional Companies	2	1,177745935	0,588873	0,67347

ANOVA

Source of Variation	*SS*	*df*	*MS*	*F*	*P-value*	*F crit*
Between Groups	0,630241522	2	0,315121	0,717925	0,531998	5,786135
Within Groups	2,194664347	5	0,438933			
Total	2,824905869	7				

Table 6: Anova Single Factor Industries

A two-sample t-test (Table 5) comparing firms with High (≥ 10 000 BTC) versus Low (< 10 000 BTC) holdings on FV/Assets. Although High-BTC firms average 74,8 % allocation versus 0,56 % for Low-BTC firms, the t-statistic (0,33) and p-value (0,76) indicate this difference is not statistically significant.

A one-way ANOVA (Table 6) across three industry groups (Crypto-Native & Blockchain; Tech & Fintech; Traditional Companies). Despite mean FV/Assets of 22,91 %, 87,63 %, and 58,89 % respectively, the ANOVA yields F = 0,72, p = 0,53, again showing no significant sector

differences. These results, summarized in both Tables, demonstrate that neither sheer Bitcoin volume nor industry category alone reliably predicts proportional crypto exposure.

SUMMARY OUTPUT

Regression Statistics

Multiple R	0,99946
R Square	0,99891
Adjusted R Square	0,99746
Standard Error	0,03201
Observations	8

ANOVA

	df	**SS**	**MS**	**F**	**Significance F**
Regression	4	2,82	0,71	688,44	0,00
Residual	3	0,00	0,00		
Total	7	2,82			

	Coefficients	**Standard Error**	**t Stat**	**P-value**	**Lower 95%**	**Upper 95%**	**Lower 95%**	**Upper 95%**
Intercept	107,721	8,506	12,663	0,001	80,650	134,793	80,650	134,793
logBTC	0,355	0,010	33,955	0,000	0,322	0,388	0,322	0,388
logAssets	-0,564	0,014	-39,696	0,000	-0,610	-0,519	-0,610	-0,519
YearAcq	-0,009	0,003	-2,543	0,084	-0,020	0,002	-0,020	0,002
Age	-0,044	0,002	-23,755	0,000	-0,050	-0,038	-0,050	-0,038

Table 7: Mutiple linear regression of FV/Assets on log(BTC), log(Assets), Year and Age

A multiple linear regression (Table 7) of FV/Assets on $\log_{10}$(BTC), $\log_{10}$(Assets), YearAcq, and Age explains nearly all sample variation (Adjusted $R^2 = 0{,}9975$), although degrees of freedom are limited (n = 8, df_resid = 3). Significant predictors include log BTC ($\beta = 0{,}355$, $p < 0{,}001$), log Assets ($\beta = -0.565$, $p < 0{,}001$), and Age ($\beta = -0.044$, $p < 0{,}001$), with YearAcq marginally significant ($\beta = -0{,}009$, $p = 0{,}084$). These findings suggest that absolute Bitcoin scale, overall firm size, and maturity jointly influence proportional crypto allocations, but the high R^2 likely reflects overfitting given the small sample.

With only eight firms, statistical power is low and fit metrics may be inflated. Group tests, clustering, and regression results should therefore be considered exploratory. Expanding the sample in future research will be essential to validate and generalize these quantitative insights.

4.2.3. Qualitative Disclosure Patterns

All eight firms uniformly characterize cryptocurrency as a strategic treasury asset: every company cites portfolio diversification benefits, six explicitly frame digital assets as an inflation hedge, and half additionally highlight innovation signaling and potential upside. Custody disclosures are similarly pervasive—seven firms identify regulated institutional custodians (e.g., Coinbase Prime, Fireblocks), and six describe multi-signature or cold-storage protocols—

yet only three specify insurance coverage limits (ranging from USD 100 million to USD 500 million), underscoring an opportunity for greater transparency in risk transfer.

Accounting policies reveal that six firms have adopted fair-value measurement under ASC 321, detailing quarterly remeasurement procedures and impairment triggers, while the remaining two continue impairment-only treatment. All eight describe foundational internal controls such as dual-approval workflows, ERP-based transaction reconciliation, and strict segregation of duties; however, only four disclose advanced practices like stress-testing or dedicated liquidity buffers to mitigate valuation volatility. Notably, the depth and specificity of disclosure correlate with the scale of crypto exposure: larger-holding firms tend to provide more granular narratives and technical safeguards, suggesting that broader adoption of transparent insurance arrangements and formalized risk-management processes would strengthen corporate governance and stakeholder confidence.

4.3. Triangulation

This section integrates firms' public narratives with the quantitative patterns uncovered in Sections 4.2.1–4.2.3 and the expert-interview themes (Section 4.1), thereby assessing how stated motivations and observed behaviors converge in corporate disclosures.

First, strategic rationale is uniformly communicated: all eight firms present crypto as a portfolio diversification tool and six explicitly as an inflation hedge. These disclosures mirror interview coding—portfolio diversification (41,7 %) and inflation hedging (33,3 %)—and the univariate finding that the median crypto allocation is 34,3 % of total assets (Table 3). Moreover, the positive correlation between Bitcoin holdings and FV/Assets ($r \approx 0{,}67$) and the regression's significant log BTC coefficient ($\beta = 0{,}355$, $p < 0{,}001$) substantiate executives' claims that larger positions often coincide with higher proportional allocations, a rationale echoed in filings citing "up to 5 % of excess cash" devoted to digital reserves.

Second, innovation signaling and growth potential, coded in 75 % and 58,3 % of interviews, appear less consistently in allocation size but are nonetheless featured in 62,5 % and 50 % of disclosures. Quantitatively, neither entry timing nor firm size fully explains exposure variability ($R^2 = 0{,}075$ for YearAcq, $R^2 \approx 0{,}0001$ for assets vs. fair-value), reflecting interviewees' view that signaling and upside arguments are strategic choices rather than mechanical outcomes of scale or timing. Firms such as Tesla and Semler Scientific explicitly frame their holdings as "leadership signals," even when their proportional exposures fall near the sample median.

Third, custody and risk-management disclosures—cited by 100 % of interviewees—are broadly present: seven firms name institutional custodians and six describe cold-storage protocols. Yet only half disclose stress-testing or liquidity buffers, and fewer than 40 % specify insurance limits, despite the high dispersion in FV/Assets (SD 63,5 %) and repeated interview warnings about volatility and governance gaps. The t-tests and ANOVA in Section 4.2.2 found no significant differences in proportional exposure by scale or sector, underscoring that risk-management sophistication does not automatically track firm size or industry.

Finally, accounting transparency aligns with interview concerns over complexity: six firms employ ASC 321 fair-value measurement and detail quarterly remeasurement, matching the 83,3 % interview coding for accounting complexity. Yet only four disclose advanced controls such as board-level oversight thresholds, reflecting a partial "reporting–reality" gap between experts' recommended best practices and the granularity of actual public filings.

In sum, firms' qualitative disclosures substantiate the core drivers and challenges identified in interviews and reinforced by quantitative analyses—particularly diversification, hedging, and governance—while revealing opportunities for more detailed insurance, stress-testing, and regulatory-risk reporting to fully align practice with expert guidance and observed exposure patterns.

5. Discussion

5.1. Key Findings

This study uncovers four primary motivations driving corporate cryptocurrency adoption, alongside five significant constraints that firms must navigate.

First, portfolio diversification stands out as a deliberate strategy: many firms allocate modest slices of excess cash (typically up to 5 %) into digital assets to gain non-correlated exposure and hedge against inflation or currency devaluation. These crypto holdings are intentionally paired with traditional low-yield instruments—such as T-bills—to bolster overall treasury resilience.

Second, organizations in innovation-led industries underscore the growth potential of cryptocurrencies. They regard digital assets as vehicles offering outsized upside relative to conventional short-term investments, especially during periods of market exuberance.

Third, corporate crypto positions serve a signaling function. High-profile adopters willingly absorb price volatility and added disclosure complexity to credibly broadcast their commitment to technological leadership (Spence, 1978). Such reputational signaling can, in turn, influence investor perceptions and potentially reduce the firm's cost of capital.

Fourth, firms embed cryptocurrencies within broader treasury frameworks that include cash, bonds, and other liquid instruments. This multi-asset approach enhances flexibility—enabling treasurers to "sense" shifting market conditions and "seize" opportunities quickly, in line with the dynamic capabilities perspective (Teece et al., 1997).

However, five constraints temper these strategic imperatives.

- Custody & Security: Institutional-grade solutions remain immature. Firms face uncertainty around multi-signature cold storage, custodial insurance, and standard legal frameworks.
- Volatility: Extreme price swings challenge capital preservation under fair-value accounting models and heighten P&L unpredictability.
- Accounting Complexity: Detailed lot-level tracking, real-time revaluation reconciliations, and the IFRS impairment-only approach impose heavy administrative burdens—even after the 2023 U.S. GAAP update (ASU 2023-08).
- Regulatory Uncertainty: Fragmented global regimes—Europe's MiCA versus U.S. SEC/CFTC guidance—create compliance risks that deter many potential adopters.
- Alternative Exposure Risks: While ETFs or crypto-lending products offer indirect access, firms often avoid them due to counterparty risk, legal ambiguity, and high fees.

Quantitative analysis reveals no straightforward sectoral pattern in allocation sizes; instead, a firm's absolute scale and treasury magnitude jointly predict proportional crypto exposure, albeit with caution due to small-sample overfitting.

5.2. Linking Findings to Management Theory

Our empirical insights map onto five core management theories, providing a cohesive theoretical framework. Under the Resource-Based View, corporate crypto holdings qualify as valuable, rare, inimitable, and non-substitutable resources, granting adopters unique hedging capabilities and strategic optionality that competitors cannot easily replicate (Barney, 1991). From the perspective of Dynamic Capabilities, treasury teams exemplify sensing, seizing, and transforming by reconfiguring cash allocations and custody partnerships in response to market

disruptions and regulatory shifts, demonstrating adaptive capability in dynamic environments (Barreto, 2010; Teece et al., 1997) Signaling Theory explains how early investments in Bitcoin serve as costly, credible signals of innovation commitment, potentially lowering firms' cost of capital by enhancing stakeholder perceptions of technological leadership (Spence, 1973). Integrating Modigliani–Miller with market imperfections highlights that real-world frictions—tax treatment divergences and accounting asymmetries—drive deviations from capital-structure neutrality, as firms exploit fair-value recognition under ASU 2023-08 to optimize their financing mix (Modigliani & Miller, 1958). Finally, Institutional Theory accounts for coercive pressures (divergent tax and regulatory environments), normative professional standards, and mimetic isomorphism (emerging frameworks like MiCA), which collectively shape adoption patterns and suggest that evolving institutional contexts will drive convergence in corporate crypto practices.

In sum, corporate engagement with digital assets reflects strategic resource management, adaptive capability development, reputational signaling, and institutional responses—underscoring that cryptocurrency adoption constitutes a substantive, theory-grounded evolution in corporate finance rather than a transient speculative fad.

6. Conclusion

6.1. Research Question and Context

This study addressed the question “What are the drivers and challenges of companies adopting cryptocurrencies as corporate assets.” Motivated by the rapid growth of corporate digital-asset holdings alongside fragmented regulatory guidance and immature custody infrastructure, we conducted twelve in-depth interviews with treasury professionals at US firms and analyzed quantitative data from eight corporate crypto portfolios. Our aim was to deliver a systematic, empirically grounded account of why firms elect to hold digital assets and what obstacles they encounter in practice.

6.2. Synthesis of Key Findings

Our mixed-method investigation revealed a careful balancing of strategic opportunity against operational and institutional constraint. Four principal motivations emerged:

- Firms allocate up to five percent of excess cash into cryptocurrencies to achieve non-correlated portfolio diversification and hedge against inflation and currency volatility.
- Innovation-led organizations pursue asymmetric upside by treating digital assets as growth vehicles capable of outperforming traditional short-term instruments.
- High-profile adopters absorb price volatility and disclosure requirements to signal technological leadership and a forward-looking orientation to investors.
- Cryptocurrencies are integrated into broader multi-asset treasury frameworks, enabling treasurers to reallocate swiftly in response to changing macroeconomic and regulatory signals.

These drivers are counterbalanced by five core challenges: custody and security solutions remain underdeveloped and pose operational risk; extreme volatility complicates capital preservation under fair-value accounting; lot-level tracking and real-time revaluation impose heavy administrative burdens; regulatory divergence between Europe’s Markets in Crypto-Assets regulation and US SEC/CFTC guidance creates compliance ambiguities; and indirect exposure vehicles such as ETFs and lending platforms are often avoided due to liquidity constraints and elevated fees. Quantitative analysis further showed no simple industry pattern in allocation sizes; rather, a firm’s absolute scale and treasury magnitude jointly predict its proportional crypto exposure, subject to the caveat of a small sample.

6.3. Practical Implications

For corporate treasurers, our findings suggest that careful calibration of crypto allocations, selection of institutional-grade custodians and integration of blockchain-enabled accounting modules are essential to balance diversification benefits against volatility risk and administrative complexity. Regulators and standard setters should pursue greater harmonization of global frameworks by aligning Europe's MiCA regime with IFRS and US GAAP to reduce compliance ambiguity and clarify tax treatment. Investors and credit analysts should interpret corporate crypto disclosures as strategic signals of firms' risk appetite and innovation orientation when assessing cost of capital and credit spreads.

6.4. Limitations

This research was subject to several limitations. The qualitative insights derived from twelve interviews and the quantitative results from eight US firms, which constrained statistical generalizability. The exclusive focus on US-based corporations limited applicability to other legal and tax environments. We examined primarily Bitcoin and Ethereum allocations, leaving staking protocols, tokenized securities and decentralized-finance products unexplored. Finally, the rapid evolution of accounting and regulatory standards meant that practices and incentives may shift before long.

6.5. Future Research

Subsequent studies could pursue longitudinal tracking of corporate treasury reallocations across multiple market cycles to capture dynamic adoption patterns and performance outcomes. Comparative research under diverse regulatory regimes, including Europe and Asia, would clarify the influence of legal and cultural contexts. Investigations into corporate engagement with alternative digital-asset instruments and deeper analyses of market reactions to crypto-related disclosures would further advance both academic and practitioner understanding.

6.6. Final Reflection

By illuminating the strategic rationales and operational realities of corporate cryptocurrency adoption, this study established a robust empirical and theoretical foundation for the evolving role of digital assets in corporate finance. As digital-asset markets mature and regulatory frameworks coalesce, cryptocurrencies are likely to become enduring elements of treasury management, reshaping traditional approaches to risk mitigation, capital structure and competitive advantage.

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Appendices

Appendix A: Coding MAXQDA

Appendix B: Interview Renae Cormier CFO Semler Scientific (I1)

Question	Answer
Question 1: When did your company start holding digital assets, and what was the main driver?	Our company made the strategic decision to start holding Bitcoin in May 2024. At that point, Semler Scientific had accumulated approximately $60 million in cash reserves. As a med-tech company with strong profit margins and cash flow, we explored several traditional capital allocation options such as acquisitions and share buybacks. However, given high valuations in the M&A market and the limited impact of share repurchases, these strategies didn't align
Question 2: What is the primary purpose of holding digital assets?	The core rationale behind our Bitcoin holdings is to utilize it as a strategic treasury reserve asset. We view Bitcoin as a long-term hedge against inflation and currency debasement. Prior to this shift, our treasury portfolio was heavily allocated to U.S. Treasury bills. However, after considering the impact of inflation and tax treatment, it became clear that these instruments were eroding value in real terms. Bitcoin, with its capped supply and decentralized nature,
Question 3: Do digital assets provide your company with a competitive advantage?	Yes, we believe they do. Semler Scientific was among the first publicly traded non-crypto companies—after MicroStrategy—to implement a Bitcoin-centric treasury strategy. This early move has helped differentiate us in the eyes of both investors and talent in the tech and finance sectors. Moreover, our organizational structure, including a small and highly aligned board, enabled us to move quickly—something that's not always feasible at larger
Question 4: What are the biggest challenges your company faces in accounting for digital assets?	Although we proactively adopted fair value accounting under U.S. GAAP, which allows us to mark assets to market on our financial statements, the inherent price volatility of Bitcoin still presents reporting challenges. Moreover, U.S. tax law treats Bitcoin as a capital asset, meaning we must track every acquisition individually—every lot—for cost basis and potential future disposals. This administrative burden grows as we accumulate more Bitcoin, requiring precise record-keeping and robust audit trails.
Question 5: How do current accounting standards impact your ability to report the true financial position of your digital asset holdings?	The introduction of fair value accounting has been beneficial in offering a more transparent reflection of our financial position. Previously, digital assets were impaired but never written up, even if the market recovered, which created a skewed snapshot of value. However, volatility still leads to fluctuations in earnings, which can obscure underlying operational performance. Compared to companies reporting under IFRS, where impairment rules still
Question 6: How does your company acquire digital assets?	All our digital asset transactions are conducted through two institutional-grade custodians: Nydig and Coinbase Prime. We chose these partners after extensive due diligence due to their regulatory standing, security infrastructure, and cold storage capabilities. Our policy does not allow for self-custody; instead, all assets are held offline in cold wallets to minimize security risks.
Question 7: Why didn't your company just buy a Digital Asset ETF?	We considered ETFs, but they come with critical limitations. First, ETFs do not provide direct ownership of Bitcoin, which dilutes the treasury reserve thesis we were pursuing. Second, under the Investment Company Act of 1940, holding ETFs could have forced us to reclassify as an investment company—a regulatory burden we were not willing to take on. Direct ownership allowed us to fully benefit from Bitcoin's upside without triggering unwanted legal
Question 8: What custody solutions do you use?	We currently rely on Coinbase and Nydig, both of which provide institutional custody solutions. Their services include multi-signature cold storage wallets and insurance coverage. Security was a top priority in our evaluation process, and both partners are recognized leaders in the space.
Question 9: Would your company policies allow you to hold and trade at an exchange platform?	Yes, though with strict oversight. Any exchange engagement must go through a rigorous due diligence process and requires board-level approval. This ensures we only interact with platforms that meet our security, regulatory, and operational standards. For now, we prefer custodians that offer both storage and execution services.
Question 10: What are the main hurdles your company faces in securing and documenting digital asset custody?	Regulatory reporting is one of the most time-intensive hurdles. For example, the SEC required detailed disclosures in our S-3 filing. Additionally, the insurance market for digital asset custody is still underdeveloped. While our custodians have policies in place, the coverage is pooled and limited. Documenting controls and ensuring traceability across multiple wallets and transactions is an ongoing operational focus.
Question 11: Do you have insurance or risk management strategies for custody?	Our custodians maintain pooled insurance policies—Coinbase, for instance, has coverage up to $320 million. However, this is spread across all institutional clients. We explored standalone private insurance but found it cost-prohibitive for the coverage offered. Our main risk mitigation strategy lies in using top-tier custodians, cold storage, and internal segregation of duties.
Question 12: What impact have digital assets had on your P&L, cash flow, or liquidity?	Holding Bitcoin has introduced earnings volatility due to market revaluations each reporting period. While we're comfortable with this as part of our long-term strategy, it does mean that short-term financials can look more erratic. On a cash flow basis, the impact is minimal—we fund Bitcoin purchases from free cash flow and have not needed to liquidate any holdings.
Question 13: How do you manage volatility risks?	We take a long-term view. Our Bitcoin position is intended to be held over a multi-year horizon. We operate with a healthy cash buffer to ensure liquidity needs are met without needing to sell any Bitcoin. This approach allows us to ignore short-term price movements and focus on strategic value.
Question 14: Have you faced regulatory or tax challenges with digital assets?	Yes. The SEC filing process took months, with detailed scrutiny around disclosure language. From a tax standpoint, we haven't faced major issues yet since we haven't sold any assets, but future disposals will require detailed tracking and compliance. The broader regulatory environment is still evolving, which adds uncertainty.
Question 15: Have you used Bitcoin-backed financing or lending?	We've looked into it, but the current economics don't make sense for us. Most offerings come with low loan-to-value ratios and high interest rates, making them unattractive compared to traditional financing. As the market matures, we'll revisit the option.
Question 16: Do you plan to increase, decrease, or maintain your holdings?	Our intention is to gradually increase our position over time. We've used both ATM offerings and convertible debt instruments to raise capital for this purpose. While we don't have a hard target, Bitcoin will continue to be a core part of our treasury strategy.
Question 17: Are other alternative investments an option for your company?	We explored options like real assets and commodities but found Bitcoin to be the most compelling due to its fixed supply, growing institutional adoption, and digital-native nature. It aligns well with our risk tolerance and long-term value strategy.
Question 18: What factors will influence your future digital asset strategy?	The primary factors include the macroeconomic environment, regulatory clarity, market liquidity, and overall sentiment toward Bitcoin as an institutional asset class. Technological developments, such as advancements in custody or Layer 2 scaling, may also influence our approach.
Question 19: Are you holding privately digital assets or a digital asset-related vehicle?	Yes. I didn't hold any prior to our corporate initiative, but as I became more familiar with Bitcoin's fundamentals and the broader ecosystem during our due diligence process, I decided to invest personally. I view it as a high-conviction long-term holding.

Appendix C: Interview Hannes Demske Co-Founder Sunrise Investment Group (I2)

Question	Answer
Question 1: Has your company ever considered holding digital assets? If yes, what led to the decision not to proceed?	Yes, we've definitely considered it. We follow the crypto space quite closely and have been invested in it for several years now, especially in Bitcoin and Ethereum. But instead of holding digital assets directly through our company, we decided to manage those investments privately. That decision mainly came down to tax and regulatory reasons here in Germany, which make it a lot less attractive to hold crypto on the corporate balance sheet.
Question 2: What are the key reasons your company has chosen not to hold digital assets?	The biggest reason is the tax situation. In Germany, if you hold crypto privately for more than a year, you can sell it completely tax-free. That's obviously very attractive. But if you hold it as a company, you're looking at corporate and trade taxes — about 30% or more. So unless you're actively trading, which might justify the corporate structure, it makes way more sense to do it privately if your goal is long-term investment.
Question 3: Do you believe digital assets could offer a competitive advantage for companies in your industry? Why or why not?	Yes, absolutely. Just look at companies like Tesla or Semler Scientific — they've incorporated Bitcoin into their strategy, and it definitely creates visibility and a strong investment case. It's not just about price speculation; it also signals innovation and strategic thinking. For some companies, especially those with cash-heavy balance sheets, digital assets can add a new dimension to capital allocation.
Question 4: From your perspective, what are the major challenges in accounting for digital assets that discourage adoption?	N/A
Question 5: How do current accounting standards or audit requirements influence your company's stance on holding digital assets?	N/A
Question 6: If your company were to consider digital assets, what would be the preferred method of exposure?	We'd definitely look at trusted custodians like Coinbase. Cold storage would be a must for any significant holdings. We also like exposure through public equities — for example, we hold Coinbase and Nvidia, which gives us indirect crypto exposure but with more traditional reporting and tax treatment. ETFs might work too, but mainly on the private side.
Question 7: Why has your company not considered using a Digital Asset ETF or structured product instead of holding crypto directly?	We've looked into it, but ETFs aren't really tax-advantaged here in Germany, even when held by a company. They're treated like any other fund, and you still pay around 30% taxes as a business. As a private investor, you're taxed at 25% on gains, which is more manageable — but still not ideal compared to the one-year tax exemption on direct crypto holdings.
Question 8: Would your current internal policies allow you to hold and trade digital assets on an exchange?	N/A
Question 9: What concerns does your company have regarding custody and security of digital assets?	Custody is one of the biggest risks in the crypto space. There are still regular exchange hacks. Just recently there was a $1.4 billion hack at an Asian exchange. That's a huge concern. If we were holding Bitcoin in the company, we'd definitely want third-party custodians and cold storage. Coinbase, for example, offers corporate custody options, and many firms use them. Still, even then, you sometimes need to keep a portion on exchanges to be able to act quickly in the market. We spread our assets across multiple exchanges to minimize risk.
Question 10: What are the key hurdles you foresee in documenting or auditing digital asset custody arrangements?	N/A
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	Not yet. That's still a big issue. A lot of custodians advertise insurance, but it's usually limited — sometimes only $300 million total for all customers. That might sound like a lot, but for bigger companies, it's not. And individual insurance policies are expensive and hard to get. It's definitely something that has to evolve before digital assets can become a mainstream treasury asset.
Question 12: What are your main financial concerns about holding digital assets?	Volatility, no question. Even as someone who's used to investing, the swings in crypto can get intense. With small caps, you expect some movement, but with altcoins, you're sometimes looking at 50–60% corrections in a matter of days. So the big concern is protecting your capital. That's why we allocate a significant portion to Bitcoin and Ethereum — they're more stable — and spread the rest across smaller coins carefully.
Question 13: Are volatility and market cycles a major reason for not holding digital assets?	Yes, absolutely. You really have to know what you're doing, especially during bearish cycles. The crypto market runs in very clear four-year cycles, largely driven by events like the Bitcoin halving. If you're not ready to stomach 80% drawdowns, you probably shouldn't be in this space — or at least not with a big portion of your capital. That's also why I think corporates hesitate. The swings are hard to justify in a traditional financial reporting context.
Question 14: What regulatory or tax uncertainties most influence your company's current position?	The tax situation is the biggest one. As I mentioned, the advantage of holding crypto privately in Germany — where you can sell tax-free after one year — is significant. If that were to change, or if corporate tax treatment improved, that would definitely shift the conversation. Regulation in general still feels a bit behind, especially in Europe, where you see things like restrictions on certain stablecoins now coming into play.
Question 15: Would your company consider Bitcoin-backed financing or lending products in the future? Why or why not?	No, we never considered it.
Question 16: Under what conditions would you consider changing your position on digital assets?	If the tax regime changed to make corporate holdings more attractive, or if regulation became clearer and friendlier, then holding Bitcoin on the company's books would become a serious option. Right now, the private route is simply more efficient for our use case.
Question 17: Are alternative investments (e.g., gold, private equity, real assets) used or preferred in place of digital assets?	Yes, we hold crypto-related equities like Coinbase or Nvidia. Nvidia, for example, benefits indirectly from crypto via GPU demand for mining. These kinds of exposures let us stay involved in the ecosystem without taking on the direct volatility and custody risk of holding the tokens ourselves.
Question 18: Do you personally hold digital assets or invest in any crypto-related financial products?	Yes, absolutely. I've been personally invested in Bitcoin, Ethereum, and a few others for years. I manage the portfolio actively, adjusting with market cycles, and I believe in the long-term value proposition — especially for Bitcoin.
Question 19: What's your personal outlook on the future of digital assets in corporate finance?	I think we'll continue to see growth — the adoption curve is still strong. Bitcoin halving cycles create momentum, and user adoption keeps increasing. If more governments or major companies adopt Bitcoin as a reserve asset, that could really accelerate things. But regulation and infrastructure — especially custody and insurance — need to catch up. I think we'll see that happen over the next few years.

Appendix D: Interview with the Treasury Manager of a DAX 40 Company (I3)

Question	Answer
Question 1: Has your company ever considered holding digital assets? If yes, what led to the decision not to proceed?	Yes, we did explore the idea. We monitored the crypto space closely and even ran several internal simulations. However, after careful analysis, we concluded that digital assets did not align with our long-term strategy. Our skepticism regarding their underlying stability and our commitment to traditional, proven asset classes steered us away from holding them on our balance sheet.
Question 2: What are the key reasons your company has chosen not to hold digital assets?	Our decision rests on several factors. First, we remain unconvinced about the long-term viability and fundamental value of digital assets. Additionally, the regulatory and tax environments introduce layers of complexity that conflict with our conservative investment philosophy. We believe our traditional portfolio offers a more stable and predictable risk–return profile.
Question 3: Do you believe digital assets could offer a competitive advantage for companies in your industry? Why or why not?	There's no doubt that some innovative companies may leverage digital assets to signal modernity. However, for a company operating under stringent regulatory conditions, the risks associated with crypto—especially volatility and uncertainty in valuation—outweigh the potential competitive advantages. Our focus remains on stability and consistency.
Question 4: From your perspective, what are the major challenges in accounting for digital assets that discourage adoption?	Accounting for digital assets is challenging due to their inherent volatility and the absence of standardized valuation methods. This ambiguity makes it difficult to integrate them into traditional financial reporting, which further reinforces our decision to avoid these assets.
Question 5: How do current accounting standards or audit requirements influence your company's stance on holding digital assets?	Current standards simply don't offer the clarity or consistency needed to account for digital assets properly. The resulting uncertainties in reporting and auditing increase our operational risk, so we've opted to remain outside this space.
Question 6: If your company were to consider digital assets, what would be the preferred method of exposure?	Hypothetically, if we were to consider exposure, we would likely look toward indirect methods—such as investments in publicly traded companies or funds with a digital asset focus. That said, our current strategic view does not support any direct or indirect digital asset exposure.
Question 7: Would your current internal policies allow you to hold and trade digital assets on an exchange?	Our internal policies have been crafted around traditional asset classes. Digital assets, given their unpredictable nature and current regulatory ambiguity, do not fit within our established framework.
Question 9: What concerns does your company have regarding custody and security of digital assets?	Security is a paramount concern. The crypto industry has seen its share of breaches and hacks, and the custody solutions available do not meet the stringent standards we require. We're not willing to expose our corporate treasury to such operational risks.
Question 10: What are the key hurdles you foresee in documenting or auditing digital asset custody arrangements?	The lack of standardized documentation and the rapid evolution of digital asset technologies pose significant challenges. Without a consistent framework, auditing these assets remains cumbersome and risky.
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	Not at this stage. While some custodians offer insurance, the coverage levels are relatively modest and often do not reflect the scale at which a company like ours operates. Comprehensive risk mitigation is still a work in progress in the digital asset space.
Question 12: What are your main financial concerns about holding digital assets?	The primary concern is volatility. Digital assets are subject to wild price swings, which can jeopardize capital preservation—a cornerstone of our financial strategy. We prioritize stability and transparency, qualities we currently do not associate with digital assets.
Question 13: Are volatility and market cycles a major reason for not holding digital assets?	Absolutely. The extreme fluctuations inherent in digital assets create an environment that is too unpredictable for our risk management framework. We need assets that provide more consistent, reliable performance.
Question 14: What regulatory or tax uncertainties most influence your company's current position?	Regulatory clarity is still lacking, and the tax treatment of digital assets remains less favorable compared to traditional investments. This uncertainty makes it hard to justify any exposure from a corporate governance perspective.
Question 15: Would your company consider Bitcoin-backed financing or lending products in the future? Why or why not?	No, we have not pursued Bitcoin-backed financing. Our analysis suggests that such products carry risks and complexities that do not align with our core financial principles and the stable financing structures we prefer.
Question 16: Under what conditions would you consider changing your position on digital assets?	A significant shift in the regulatory landscape—coupled with robust technological advancements that address security, custody, and accounting issues—might prompt us to reconsider. However, based on our current view, a change is unlikely in the near term.
Question 17: Are alternative investments (e.g., gold, private equity, real assets) used or preferred in place of digital assets?	Yes, we continue to rely on traditional alternative investments such as gold, private equity, and real assets. These alternatives align with our risk profile and have a long history of delivering stable returns.
Question 18: Do you personally hold digital assets or invest in any crypto-related financial products?	Personally, I do not hold any digital assets. My investment philosophy mirrors our corporate stance: I favor assets with proven track records and clear regulatory frameworks.
Question 19: What's your personal outlook on the future of digital assets in corporate finance?	While digital assets are generating significant buzz and may have niche applications, I remain skeptical about their role in corporate finance. Until issues around regulation, valuation, and security are resolved, I believe traditional asset classes will continue to dominate our financial strategies.

Appendix E: Interview with the Treasury Manager of an American SME (I4)

Question	Answer
Question 1: Has your company ever considered holding digital assets? If yes, what led to the decision not to proceed?	The company did explore the possibility of holding digital assets, and early simulations were even conducted as far back as 2017. However, after careful analysis, the decision was made not to proceed. The assets' inherent price volatility, an unclear long-term value proposition, and the misalignment with the firm's conservative treasury strategy ultimately led to the choice of not holding these assets directly on the balance sheet.
Question 2: What are the key reasons your company has chosen not to hold digital assets?	The primary reasons for not holding digital assets center around concerns about volatility, regulatory uncertainties, and accounting challenges. The firm finds that the rapid and unpredictable price fluctuations pose a risk to capital preservation. Moreover, with regulatory and tax guidelines continuously evolving and remaining inconsistent, taking on digital assets introduces operational risks that are difficult to manage within the current framework. The lack of a standardized approach for valuing and auditing these assets further reinforces the preference for traditional investments that offer greater stability.
Question 3: Do you believe digital assets could offer a competitive advantage for companies in your industry? Why or why not?	While digital assets might provide a competitive advantage for certain companies—particularly if they can leverage them to offer innovative financial products or expand their customer base—the situation is not straightforward for all firms. The potential advantage is more pronounced if a company adopts structured exposure through avenues like exchange-traded products or managed funds, thereby tapping into new markets. However, in a highly regulated and risk-averse environment, the complexity and additional compliance challenges tend to outweigh the benefits, meaning that any competitive advantage must be balanced against the increased risk and operational overhead.
Question 4: From your perspective, what are the major challenges in accounting for digital assets that discourage adoption?	The major challenges in accounting for digital assets include difficulties in reliable valuation and verification. Due to their extreme price volatility, determining a consistent value is challenging. There is also a lack of universally accepted accounting standards, which leads to discrepancies in financial reporting. Adding to these issues is the complexity of the audit process, where auditors not only have to verify the existence of the assets by reconciling on-chain data but also need to confirm control over private keys without compromising security—a process that requires specialized technical knowledge.
Question 5: How do current accounting standards or audit requirements influence your company's stance on holding digital assets?	Current accounting standards and audit requirements have a significant influence on the company's stance regarding digital assets. Early treatments, such as classifying these assets as intangible assets, proved inadequate because they failed to account for the assets' dynamic market nature. Subsequent regulatory adjustments, including the transition from SAB 121 to SAB 122, have introduced frameworks that allow for more nuanced treatments resembling those used for traditional securities. Nevertheless, the existing accounting models still fall short of capturing the full complexity of digital assets, thereby increasing operational risks and diminishing the clarity in financial reporting. This ambiguity reinforces the decision against direct digital asset exposure.
Question 6: If your company were to consider digital assets, what would be the preferred method of exposure?	Were the company to ever consider exposure to digital assets, the preferred method would most likely be indirect rather than a direct holding. This would involve investments through digital asset funds or exchange-traded products, or by acquiring stakes in companies that specialize in digital asset custody or blockchain technology. Such an approach would mitigate many of the risks associated with direct custody and compliance challenges while still allowing the company to participate in the potential upside of the digital asset space.
Question 7: Would your current internal policies allow you to hold and trade digital assets on an exchange?	Based on current internal policies, holding and trading digital assets on an exchange is not allowed. The firm's risk management practices and investment guidelines are designed around traditional asset classes, which naturally exclude the high volatility and regulatory uncertainties present in the digital asset market. This conservative approach ensures that the company remains within the bounds of well-understood and stable investment practices.
Question 9: What concerns does your company have regarding custody and security of digital assets?	When it comes to custody and security, the company is particularly concerned about the risks inherent in the digital asset ecosystem. The possibility of security breaches, as evidenced by numerous hacks in the crypto industry, is a major factor. Additionally, many third-party custodians are still in the early stages of developing robust controls and comprehensive SOC reports. The need for advanced technical solutions, such as cryptographic proofs to verify control over private keys, further complicates the operational landscape and reinforces the cautious stance.
Question 10: What are the key hurdles you foresee in documenting or auditing digital asset custody arrangements?	Documenting and auditing custody arrangements for digital assets present several significant hurdles. One challenge is the lack of standardized documentation from custodians, which forces companies to implement additional internal controls and work closely with auditors to reconcile on-chain information with their internal records. Moreover, the process of verifying private key control without compromising security is time-consuming and often requires bespoke tools and procedures. This extra complexity can lead to delays and additional operational costs, making the auditing process far more cumbersome than for traditional assets.
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	At this point, insurance and risk mitigation mechanisms for digital assets are not yet sufficiently developed for widespread corporate adoption. Although some custodians offer insurance, the coverage is usually limited and does not fully account for the scale or complexity of potential losses in a corporate treasury setting. The market for digital asset insurance is still maturing, meaning that comprehensive and reliable risk mitigation remains a work in progress.
Question 12: What are your main financial concerns about holding digital assets?	The main financial concerns about holding digital assets revolve around extreme price volatility and uncertain valuation. Sudden, unpredictable shifts in asset prices could jeopardize capital preservation and destabilize financial performance. In addition, the lack of a universally accepted method for determining the value of these assets complicates balance sheet reporting and might lead to frequent impairment losses. Taxation issues, arising from unclear regulatory treatment of digital asset transactions, further add to the financial risk profile, making digital assets an unattractive option compared to more stable traditional investments.
Question 13: Are volatility and market cycles a major reason for not holding digital assets?	Indeed, volatility and market cycles are central concerns and major reasons for the company's hesitance to hold digital assets. The unpredictable nature of digital asset prices not only makes them hard to manage but also exposes the company to risks that are fundamentally at odds with a focus on capital preservation and predictable returns. For companies with a conservative approach, such exposure is simply too unpredictable to integrate into their overall financial strategy.
Question 14: What regulatory or tax uncertainties most influence your company's current position?	Regulatory and tax uncertainties continue to have a substantial impact on the company's position regarding digital assets. The lack of clear and consistent regulatory guidelines, especially in key markets like the United States, creates an environment of unpredictability that discourages direct involvement. Tax treatment of digital asset transactions remains ambiguous as well, potentially leading to unexpected liabilities or compliance issues. These factors combined lead the company to opt for investments that offer greater regulatory and fiscal certainty.
Question 15: Would your company consider Bitcoin-backed financing or lending products in the future? Why or why not?	Bitcoin-backed financing or lending products are not currently considered viable alternatives. The inherent uncertainties in collateral valuation and the complex regulatory implications pose too great a risk. These products would require a level of stability and clarity in both market pricing and regulatory treatment that has not yet been achieved. As such, the volatility and operational risks associated with Bitcoin-backed financing remain incompatible with the company's conservative financial principles.
Question 16: Under what conditions would you consider changing your position on digital assets?	A shift in the company's position on digital assets would require significant changes in the external environment. First and foremost, regulatory clarity and consistency on a global scale would be essential. In addition, technological enhancements that provide secure, reliable custody solutions and standardized valuation methods would help bridge the existing gaps. Should these conditions be met and the overall risk profile of digital assets become more predictable, the company might re-evaluate its position. Until then, the existing framework remains too uncertain to justify a change in strategy.
Question 17: Are alternative investments (e.g., gold, private equity, real assets) used or preferred in place of digital assets?	Alternative investments such as gold, private equity, and real assets continue to be preferred over digital assets. These investment types have established track records of stability and predictable returns, making them an attractive hedge against economic volatility. Their long history and the familiarity they offer in financial reporting provide a sense of security that digital assets currently cannot match.
Question 18: Do you personally hold digital assets or invest in any crypto-related financial products?	On a personal level, I do not hold any digital assets or invest in crypto-related financial products. This personal stance mirrors the company's overall conservative investment philosophy. I prefer assets with clear regulatory frameworks and proven performance records, as these characteristics align well with a risk-averse and long-term wealth preservation strategy.
Question 19: What's your personal outlook on the future of digital assets in corporate finance?	My personal outlook on the future of digital assets in corporate finance is cautious. While there is no doubt that digital assets have spurred significant innovation and generated substantial market interest, broad adoption in corporate finance will likely remain limited until key challenges are addressed. Regulatory, accounting, and technological issues must be comprehensively resolved before digital assets can be seamlessly integrated into corporate balance sheets. For now, traditional asset classes will continue to dominate, given their proven track records and lower risk profiles.

Appendix F: Interview with Senior Manager of a Big Four Advisory Firm (I5)

Question	Answer
Question 1: When did you first begin advising companies on digital asset strategies, and what initially sparked your interest?	Our focus on digital assets began when I noticed that, even back when Bitcoin was barely trading at one dollar, companies were starting to explore its potential. This early exposure sparked my interest and led me to develop the tools and expertise necessary to advise clients in this fast-evolving space.
Question 2: What do you see as the primary purpose for companies to incorporate digital assets into their treasury strategies?	From my experience advising clients, digital assets are increasingly viewed as an alternative to traditional cash reserves. Companies are moving away from low-yield instruments like T-bills—which, after accounting for taxes and inflation, can erode value—to strategies that use digital assets with the potential for long-term appreciation.
Question 3: In your view, do digital assets offer companies a competitive advantage, and if so, how?	While our firm itself does not hold digital assets, we've advised early adopters who have set themselves apart by implementing innovative treasury strategies. By harnessing digital assets, companies can use excess cash to drive long-term value creation and signal a forward-thinking approach, which has proven advantageous compared to more risk-averse peers.
Question 4: Based on your experience, what are the biggest accounting challenges your clients face with digital assets?	One of the central challenges is managing the volatility inherent in digital asset prices, which can greatly impact reported earnings. Although many clients have adopted fair value accounting to simplify reporting, the need to track individual Bitcoin lots—given their treatment as capital assets—adds considerable complexity, especially during tax reporting.
Question 5: How do current accounting standards affect the ability of your clients to accurately report the financial positions of their digital asset holdings?	Under U.S. GAAP, fair value accounting forces companies to reflect real-time market fluctuations, resulting in substantial earnings volatility. In contrast, companies operating under IFRS, which often still rely on impairment accounting, face a disadvantage, since that method tends to obscure the true market value of digital asset holdings.
Question 6: What methods have you observed for acquiring digital assets, and what strategies do you usually recommend to clients?	In advising our clients, we emphasize the importance of partnering with trusted third-party custodians. The typical approach involves using established providers—such as Coinbase and Nydig—for all transactions and custody, ensuring that assets are securely stored in cold wallets rather than relying on self-custody.
Question 7: Why might a company choose not to invest in a Digital Asset ETF but pursue direct digital asset ownership instead?	An ETF does not grant direct ownership of Bitcoin, which is critical for strategic capital allocation. Additionally, owning an ETF could inadvertently classify the company as an investment company under the 1940 Act—a status that most corporate treasuries deliberately avoid. That's why we typically advise clients to seek exposure through direct, regulated instruments that confer actual ownership.
Question 8: Which custody solutions do you recommend, and what makes them suitable?	We consistently recommend reputable custodians such as Coinbase and Nydig. These providers specialize in digital asset custody by utilizing secure cold storage methods and ensuring strict regulatory compliance, which are essential for protecting high-value treasury positions.
Question 9: Would your clients' policies allow them to trade digital assets on an exchange, and what is the process for that?	Yes, many companies do allow trading on exchange platforms, but only after comprehensive due diligence and board approval. Our advisory work emphasizes that before any trading activity begins, a thorough review of the chosen custodial services must be completed to ensure they meet all the required safety and compliance standards.
Question 10: What are the main hurdles your clients encounter in securing and documenting digital asset custody?	In my experience, one significant hurdle is meeting the stringent filing requirements imposed by the SEC, which can be quite time-consuming. Moreover, the insurance market for digital asset custody is limited—coverage is pooled across many clients and rarely tailored to the specific risks of Bitcoin custody—making robust documentation and control even more challenging.
Question 11: Do you advise your clients to pursue additional insurance or risk management strategies for digital asset custody?	Absolutely. While trusted custodians generally offer pooled insurance—often around $300 million in coverage—it typically does not address all specific risks. We've found that exploring private insurance can be appealing, though it is often prohibitively expensive and may still fall short in coverage compared to the risks involved.
Question 12: How do digital assets impact your clients' profit and loss, cash flow, and liquidity?	Digital assets, with their mark-to-market valuation, introduce notable earnings volatility. Clients often report both gains and losses as market conditions fluctuate at quarter-end, making it essential that they manage liquidity carefully and maintain sufficient working capital to avoid forced liquidations.
Question 13: What strategies do you recommend to manage the inherent volatility risks of digital asset holdings?	We generally advise a long-term, buy-and-hold approach, where digital assets are treated as strategic investments rather than transactional commodities. This strategy, combined with maintaining robust operating reserves, helps clients avoid selling under unfavorable market conditions and minimizes the impact of short-term volatility.
Question 14: Have you encountered regulatory or tax challenges when advising clients on digital assets?	Yes, regulatory and tax issues are perennial challenges. For instance, one client's S-3 filing took nearly three months due to extensive SEC review and disclosure requirements. Taxwise, treating digital assets as capital assets introduces complexities, especially since most implications only materialize upon a sale, leaving many tax issues in a state of potential future challenge.
Question 15: Do you see any merit in Bitcoin-backed financing or lending, based on your advisory work?	Our analysis consistently indicates that Bitcoin-backed financing is not attractive at present. The low loan-to-value ratios and high interest rates—often in double digits—mean that the costs significantly outweigh the benefits, making such arrangements largely uneconomic for corporate treasuries.
Question 16: Do you expect companies to increase, decrease, or maintain their digital asset holdings over time?	Most clients we advise are looking to increase their holdings gradually. They are experimenting with innovative financing solutions such as ATM offerings and convertible notes to fund additional purchases. However, they are cautious and tend not to set fixed targets until market conditions and regulatory landscapes become clearer.
Question 17: Besides digital assets, are alternative investments being considered by your clients?	While many companies initially explore various alternative investments, our experience shows that Bitcoin often emerges as the most compelling option. Its inherent scarcity and long-term growth potential frequently outweigh the appeal of other alternatives when viewed through the lens of treasury management and capital allocation.
Question 18: What factors do you believe will shape the future digital asset strategies of corporations?	Several factors influence future strategies, including the ongoing price dynamics of Bitcoin, the availability of capital, and evolving regulatory environments. Changes in any of these areas can significantly alter the risk–reward calculus, and we continuously monitor these trends to ensure our clients are well-positioned for future developments.
Question 19: On a personal level, do you engage with digital asset investments or related vehicles?	While our firm maintains a conservative advisory stance and does not hold digital assets directly, I have chosen to invest personally. This personal commitment not only reflects my confidence in digital asset fundamentals but also enhances my ability to provide informed, practical advice to clients navigating this complex market.

Appendix G: Interview with Ricardo Martins Head of Crypto of Bison Bank (I6)

Question	Answer
Question 1: When did you first start advising clients on digital asset strategies, and what trends initially caught your attention?	I began noticing significant interest in digital assets several years ago. In our bank, we saw an early trend when a mix of high-net-worth individuals and corporates started asking about dedicated crypto solutions. We observed that funds and some corporates were exploring crypto allocations—even if only as a minor percentage of their treasury—while high-net-worth clients were increasingly inquiring about tokenized assets and stablecoins for liquidity management.
Question 2: What do you see as the primary purpose for clients in incorporating digital assets into their portfolios?	For our clients, the primary purpose varies by profile. Many corporates see digital assets as a modern treasury tool to complement traditional cash reserves, especially when conventional instruments aren't preserving value after inflation and taxes. Meanwhile, high-net-worth individuals are attracted to the diversification and tokenization aspects, such as using stablecoins like USDC for liquidity and cross-border transactions.
Question 3: In your opinion, do digital assets offer clients a competitive advantage, and if so, how?	Definitely. Clients who integrate digital assets—whether as a small allocation within a corporate treasury or as part of a diversified personal portfolio—can signal innovation and forward-thinking. For instance, funds that allocate a portion of their capital to crypto not only hedge against traditional risks but also position themselves to capture growth in tokenized markets, which is increasingly important as traditional financial benchmarks evolve.
Question 4: What are the biggest challenges your clients face in accounting for digital assets?	A major challenge is the lack of widespread expertise—many accountants, especially in smaller firms, still aren't comfortable with crypto's unique accounting requirements. Clients must contend with the volatility of digital assets, which creates fluctuations in earnings under fair value accounting. This is compounded by the necessity to track tokenized assets accurately, which remains a steep learning curve for many traditional financial professionals.
Question 5: How do current accounting standards affect your clients' ability to accurately report their digital asset holdings?	Under U.S. GAAP, the use of fair value accounting forces clients to recognize market fluctuations immediately, leading to earnings volatility. By contrast, companies operating under IFRS might use impairment methods that, frankly, don't capture real-time market conditions as accurately. This discrepancy can impact transparency and complicate comparisons, making it essential for our clients to adapt their reporting methods accordingly.
Question 6: What methods do you see your clients using to acquire digital assets, and what recommendations do you offer?	Our experience shows a strong preference for using established third-party custodians over self-custody. We work closely with clients—both corporates and high-net-worth individuals—to facilitate acquisitions through trusted partners. Currently, our platform supports major cryptocurrencies like Bitcoin, Ethereum, and Solana, as well as stablecoins, primarily USDC, because these assets balance liquidity, security, and regulatory compliance.
Question 7: Why might a client choose direct digital asset ownership rather than investing in a Digital Asset ETF?	Direct ownership is often preferred because it provides actual control over the assets, something that many sophisticated clients require. An ETF, while convenient, doesn't confer the same level of transparency and can inadvertently subject the holder to regulatory constraints such as classification under the 1940 Act. Clients who value direct exposure also appreciate the clarity in risk management and asset tracking that direct ownership provides.
Question 8: Which custody solutions do you recommend, and what makes them suitable?	We recommend using custodians that are well established and regulated—such as those offering cold-storage solutions. Our current offerings include custodians who primarily support Bitcoin, Ethereum, and Solana, along with stablecoins like USDC. Their secure, compliant infrastructure is crucial for our high-net-worth and corporate clients who require robust risk management and diversification in custody arrangements.
Question 9: Are your clients' internal policies open to trading digital assets on exchange platforms, and what does that process look like?	Yes, clients often have internal policies that permit trading on exchanges—but only after rigorous due diligence and board approval. We guide them through a comprehensive evaluation of the platforms they intend to use, ensuring that operational and security standards are met before any trading is conducted.
Question 10: What hurdles do clients typically encounter when securing and documenting digital asset custody?	One of the key hurdles is meeting extensive regulatory and filing requirements, which can be time-consuming. The insurance for digital assets also poses challenges; available coverage is usually pooled and not tailored to individual exposures, which complicates both risk management and documentation. Clients must therefore work closely with custodians and advisers to ensure robust internal controls and clear regulatory disclosures.
Question 11: How do you address insurance or risk management strategies for digital asset custody with your clients?	We emphasize the importance of comprehensive risk management. Although our recommended custodians typically offer pooled insurance coverage—which may be around $300 million—it often does not fully address the specific risks individual clients face. We advise exploring additional coverage where possible, but we also stress that strict internal controls and diversification remain fundamental components of any effective risk management strategy.
Question 12: What impact do digital assets have on a client's profit and loss, cash flow, or liquidity?	Because digital assets are marked to market, they naturally introduce volatility into earnings. Clients may see both gains and losses on a quarterly basis, depending on market conditions. This volatility requires careful liquidity management, especially when digital assets are used as part of a broader transactional strategy, such as with stablecoins that facilitate day-to-day operations.
Question 13: What strategies do you recommend for managing the inherent volatility risks of digital asset holdings?	Our primary recommendation is a disciplined, long-term buy-and-hold strategy. Clients are encouraged to maintain ample working capital reserves so that market fluctuations do not force premature sales. The goal is to view digital assets as a strategic allocation that, over time, can enhance overall portfolio performance without jeopardizing the client's liquidity needs.
Question 14: What regulatory or tax challenges have you observed in advising clients on digital assets?	Regulatory challenges remain significant. Even with frameworks like MiCA in Europe, many accountants and small firms are still catching up with the new standards. Tax challenges are also persistent—since digital assets are treated as capital assets, it can be difficult for clients to accurately plan for and manage taxable events. These issues underscore the importance of continuous education and specialized advisory services.
Question 15: Have you seen any practical use of Bitcoin-backed financing or lending products among your clients?	In our experience, Bitcoin-backed financing and lending products have not yet become attractive. The low loan-to-value ratios and high, often double-digit, interest rates make these products uncompetitive when compared with traditional financing options. We advise clients to focus on direct acquisitions or controlled trading strategies that offer clearer benefits and lower relative costs.
Question 16: Do you anticipate that clients will increase, decrease, or maintain their digital asset holdings over time?	Most of our clients appear inclined to gradually increase their digital asset exposure. Whether it's through dedicated crypto funds, treasury allocations, or as part of a diversified portfolio, the trend is toward gradual, measured growth—using financing tools like ATM offerings or convertible notes where applicable—but always with a strong emphasis on risk management.
Question 17: Are alternative investments besides digital assets part of your clients' strategies?	While clients certainly continue to invest in traditional asset classes, many increasingly view digital assets—especially Bitcoin and stablecoins—as a compelling addition. Their unique features, such as tokenization and liquidity advantages for certain transactions, make them a complementary option for those looking to diversify beyond conventional investments.
Question 18: What key factors do you believe will shape the future digital asset strategies for your clients?	Future strategies will be driven primarily by regulatory developments. As regulations mature—both in Europe and globally—it will become easier to integrate digital assets within standard investment frameworks. Additionally, advances in tokenization, the stablecoin ecosystem, and overall market innovation will influence strategic allocations, ensuring that clients remain competitive in a rapidly evolving financial landscape.
Question 19: On a personal note, do you engage with digital assets, and how does that influence your advisory perspective?	Yes, I do invest in digital assets personally. That personal involvement deepens my understanding of the asset class and its practical challenges, which in turn enriches the guidance I provide to our clients. It allows me to combine my day-to-day professional expertise with real-world experience, helping to bridge the gap between traditional banking practices and the evolving dynamics of the crypto space.

Appendix H: Interview with Julia Henning, Head of Treasury of Syntegon (I7)

Question	Answer
Question 1: Has your company ever considered holding digital assets? If yes, what led to the decision not to proceed?	No, we have not considered holding digital assets. Our company is a manufacturer of packaging machinery for the food and farming sectors, and our structure is very much oriented toward traditional financing. We operate under a private equity model, where our shareholders and financing agreements expressly prohibit investments in non-core assets such as digital currencies. While we recognize that digital assets like Bitcoin can be viewed as innovative and carry high growth potential, particularly in signaling forward-thinking strategies in other industries, such considerations are outside the scope of our financial governance. From the very beginning, our focus has been on supporting industrial production and long-term asset durability rather than exploring speculative or highly volatile asset classes.
Question 2: What are the key reasons your company has chosen not to hold digital assets?	The main reasons are both strategic and structural. First, our core business is machine manufacturing, and our treasury is designed to ensure we remain liquid to support production, supply chain continuity, and operational expansion. Our shareholders expect us to follow a conservative, risk-averse treasury policy. Our financing arrangements reinforce this by requiring us to stick to traditional, stable investment instruments like term deposits or money market funds. Although we are aware that some companies use digital assets as part of a broader innovation strategy or to align with emerging trends, this approach is fundamentally incompatible with our financial principles, operational priorities, and stakeholder commitments.
Question 3: Do you believe digital assets could offer a competitive advantage for companies in your industry? Why or why not?	In our specific industry, the competitive advantage is grounded in engineering precision, supply chain reliability, and production efficiency—not in asset allocation. While digital assets may provide signaling value or even balance sheet leverage in technology-forward sectors, they offer limited strategic relevance in heavy industry or machinery manufacturing. We do acknowledge that holding digital assets can signal innovation and attract attention from forward-looking investors or tech-savvy partners. However, the risks—especially price volatility and regulatory uncertainty—far outweigh the potential upside in our case. Our growth strategy depends on stable cash flows and reliable capital deployment, which are not compatible with the characteristics of crypto assets.
Question 4: From your perspective, what are the major challenges in accounting for digital assets that discourage adoption?	One of the biggest challenges is that digital assets require entirely different accounting processes due to their high volatility. Our current systems are set up for traditional financial instruments and asset classes. To handle digital assets, we would need extensive retraining, new software, and a complete restructuring of how we document and audit our finances. This change isn't practical for a company focused on manufacturing where stability is paramount.
Question 5: How do current accounting standards or audit requirements influence your company's stance on holding digital assets?	Our existing accounting and audit frameworks are built around conventional financial instruments. Since digital assets would demand a shift—such as adopting fair value measurement in a volatile market—this would introduce fluctuations into our financial statements that our stakeholders are not willing to accept. Additionally, our auditors and internal controls are not geared toward the complexities of crypto accounting, reinforcing our commitment to the traditional methods that are proven and predictable.
Question 6: If your company were to consider digital assets, what would be the preferred method of exposure?	Hypothetically speaking, if we were ever to consider exposure, it would have to be an indirect one. For example, through a regulated fund or an intermediary product that complies with our conservative framework. However, given our current financing and shareholder requirements, we see no immediate need or possibility to alter our strategy from a traditional treasury perspective.
Question 7: Would your current internal policies allow you to hold and trade digital assets on an exchange?	No, our internal policies strictly prohibit holding or trading digital assets on any exchange. Our treasury is dedicated to ensuring operational liquidity through conventional means, and our financing agreements and shareholder mandates do not permit deviation into speculative asset classes like crypto.
Question 9: What concerns does your company have regarding custody and security of digital assets?	Custody and security represent significant concerns. Our systems are designed to protect traditional assets through timetested methods. The digital asset space, however, involves risks such as cyber threats and a lack of established, regulated custodial solutions. Introducing those risks would jeopardize the financial stability we require to support our manufacturing operations.
Question 10: What are the key hurdles you foresee in documenting or auditing digital asset custody arrangements?	The key hurdles lie in the complexity and evolving nature of blockchain-based record-keeping. Our audit processes are well-established for standard financial instruments but would need to be completely overhauled to accommodate digital asset transactions, custody proofs, and regulatory filings. Such a process would be both timeconsuming and resourceintensive, which is not justifiable given our current priorities.
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	Not at all. The insurance market for digital assets is still very much in its infancy, and available coverage—typically provided on a pooled basis—does not meet the tailored, high–risk management standards we require. For a company like ours, which values certainty and stability, this lack of robust, dedicated insurance is a major deterrent.
Question 12: What are your main financial concerns about holding digital assets?	Our primary financial concerns stem from the extreme volatility of digital assets, which could disrupt our liquidity and financing structures. The unpredictable price swings would introduce risk into our capital that our shareholders and funding partners simply cannot accommodate. Maintaining a stable, predictable cash flow is essential for supporting our production and growth, and digital assets do not contribute to that goal.
Question 13: Are volatility and market cycles a major reason for not holding digital assets? Absolutely. The inherent volatility and cyclicality of digital assets are completely at odds with our conservative treasury model. The potential for drastic price fluctuations poses too great a risk for a company that depends on stable cash flows to support its core operations, making digital assets an unsuitable option for us.	
Question 14: What regulatory or tax uncertainties most influence your company's current position? Our position is heavily influenced by both regulatory restrictions and tax implications. Our financing agreements and shareholder policies are based on established regulatory frameworks that do not accommodate digital assets. Furthermore, the tax treatment of crypto remains uncertain and could lead to unforeseen liabilities. These factors, combined with our need to adhere to strict financial discipline, reinforce our decision not to engage with digital assets.	
Question 15: Would your company consider Bitcoin-backed financing or lending products in the future? Why or why not?	No, we would not consider Bitcoin-backed financing or lending products. Such instruments come with low loan-to-value ratios and high interest rates, making them unsuitable for our business. Our financing is structured to support tangible asset growth, and relying on volatile, speculative products would undermine our conservative financial strategy.
Question 16: Under what conditions would you consider changing your position on digital assets? To consider changing our position, we would require a fundamental shift in our operating environment. This would include a clear, stable regulatory framework; revised shareholder policies; and financing agreements that allow for a broader range of asset classes. Only if digital assets were to demonstrate stability and become comparable to traditional instruments would we even entertain such a discussion.	
Question 17: Are alternative investments (e.g., gold, private equity, real assets) used or preferred in place of digital assets? Yes, alternative investments like gold, private equity, and real assets are well-established components of our financial strategy. They have a proven track record in preserving value and supporting growth in a way that aligns with our conservative approach. In our view, these alternatives offer the stability and predictability that digital assets currently cannot.	
Question 18: Do you personally hold digital assets or invest in any crypto-related financial products?	No, I do not hold digital assets or invest in any crypto-related financial products. Given ourcompany's conservative approach and strict financing conditions, I adhere to a traditional investment strategy that has reliably supported our growth over the years.
Question 19: What's your personal outlook on the future of digital assets in corporate finance?	While digital assets are an exciting emerging class, I do not see them playing a central role in the treasury management of companies like ours—manufacturing firms that rely on stable, predictable financing. They may have a niche in more speculative or technology-focused sectors, but for a company firmly rooted in physical production and traditional finance, the risks and uncertainties associated with crypto make them an unattractive proposition for the foreseeable future.

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Appendix I: Interview with CFO of an American Crypto Mining Company (I8)

Question	Answer
Question 1: When did your company start holding digital assets, and what was the main driver?	We've held digital assets since the company was founded, as mining is our core business. We produce Bitcoin directly and hold it temporarily as part of our operational flow. While we understand the broader market appeal of holding digital assets for signaling innovation or tapping into high growth potential, that's not our strategic focus. For us, the decision to hold is functional rather than speculative. It's about managing the conversion of mined Bitcoin into liquidity to fund ongoing operations and expansion.
Question 2: What is the primary purpose of holding digital assets?	The purpose is purely operational. We mine Bitcoin and temporarily hold what we produce before converting it to cash. We're well aware that other companies may hold digital assets for diversification or long-term investment purposes, and there are cases where that can make sense. But in our case, it's about maintaining liquidity and avoiding overexposure to price swings. We treat Bitcoin as inventory, not as a balance sheet play.
Question 3: Do digital assets provide your company with a competitive advantage?	In our case, the competitive advantage doesn't come from holding the assets but from how efficiently we produce them. That's where we differentiate, through cost per coin, uptime, and operational scalability. That said, we do understand that holding digital assets can create a perception of forward-thinking strategy or alignment with the crypto economy, especially in more capital-markets-focused environments. But for us, managing risk and maintaining stable liquidity outweigh those signaling benefits.
Question 4: What are the biggest challenges your company faces in accounting for digital assets?	The major challenge is dealing with extreme volatility. Under current accounting practices, our digital asset holdings are marked to market, which leads to significant swings in reported earnings. Additionally, tracking and reconciling various mining outputs (often segmented by coin lots) introduces complexity into our financial reporting processes that traditional accounting systems aren't optimized to handle.
Question 5: How do current accounting standards impact your ability to report the true financial position of your digital asset holdings?	U.S. GAAP requires us to use fair value accounting for our cryptocurrency holdings, so every price fluctuation is immediately reflected in our financial statements. This method causes notable earnings volatility, which can obscure our underlying operational performance. Consequently, our strategy focuses on minimizing long-term exposure by converting production into fiat or stable assets to present a more stable financial position.
Question 6: How does your company acquire digital assets?	We acquire digital assets through our mining operations. Investing heavily in advanced mining infrastructure, we generate Bitcoin as our core product. While we occasionally make small strategic purchases on exchanges if needed, our primary method of acquisition is direct production.
Question 7: Why didn't your company just buy a Digital Asset ETF?	A Digital Asset ETF would offer only indirect exposure, which doesn't align with our business model. We focus on mining and producing Bitcoin directly, which provides us with a cost advantage and control over our production process. Moreover, an ETF approach would add extra regulatory overhead and abstract the value we generate directly through mining.
Question 8: What custody solutions do you use?	For any Bitcoin we retain—typically only for short-term liquidity management—we rely on secure, regulated custodial services that offer cold storage and multi-signature security. Our aim is to quickly convert our mining output into liquid assets, but when custody is required, we ensure it is handled with the highest level of security available.
Question 9: Would your company policies allow you to hold and trade at an exchange platform?	Yes, our policies do allow us to actively trade on regulated exchange platforms. We use these platforms to sell a controlled portion of our mined Bitcoin. This trading activity is an integral part of managing our liquidity and hedging against volatility, although we purposefully avoid holding excessive amounts for long periods.
Question 10: What are the main hurdles your company faces in securing and documenting digital asset custody arrangements?	The main hurdles are reconciling on-chain data with our internal records and dealing with the evolving nature of blockchain technology. Auditing digital asset custody requires specialized tools and expertise, which increases both the cost and complexity of compliance compared to traditional assets.
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	Not yet. Although some custodians offer pooled insurance products, these solutions aren't yet tailored to the unique needs of high-volume mining operations like ours. The market for dedicated crypto insurance is still emerging, so we rely primarily on robust internal security measures, such as cold storage and multi-signature protocols, to mitigate risk.
Question 12: What impact have digital assets had on your P&L, cash flow, or liquidity?	Due to the nature of mark-to-market accounting, our financial statements reflect significant volatility from our digital asset holdings. This can lead to periodic gains or losses on earnings, depending on market conditions at the close of each reporting period. To safeguard our operations, we regularly convert a portion of our production into stable liquidity.
Question 13: How do you manage volatility risks?	Our strategy is fundamentally built on avoiding prolonged exposure. We implement a disciplined sell strategy whereby we convert a set portion of our mined Bitcoin into fiat or stable assets on a regular basis. This buy-and-hold approach is focused on maintaining liquidity and minimizing the impact of price swings on our balance sheet.
Question 14: Have you faced regulatory or tax challenges with digital assets?	Yes, regulatory and tax uncertainties are ongoing challenges. U.S. regulations require us to mark our crypto to market, leading to volatile earnings reports, while the tax treatment of mined Bitcoin remains complex and evolving. These challenges reinforce our approach of minimizing long-term holdings and focusing on production and strategic conversion.
Question 15: Have you used Bitcoin-backed financing or lending products?	We have not pursued Bitcoin-backed financing as an option. The available products typically come with low loan-to-value ratios and high, often double-digit, interest rates. Such financing solutions don't provide economic benefits comparable to our current strategy of reinvesting funds generated from mining back into scaling our operations.
Question 16: Do you plan to increase, decrease, or maintain your holdings?	Our strategy is not about accumulating Bitcoin as a speculative asset; it's about efficient production. We focus on expanding our mining capacity and then selling a portion of the output to fund growth. Essentially, rather than increasing our holdings, we aim to optimize production efficiency and liquidity conversion.
Question 17: Are other alternative investments (e.g., gold, private equity, real assets) used or preferred in place of digital assets?	Our core business is centered on Bitcoin mining, so our primary asset is the Bitcoin we produce. Traditional investors might diversify into gold or equities, but our model is singularly focused on generating digital assets. We concentrate on scaling and optimizing our mining operations rather than diversifying into completely different asset classes.
Question 18: What factors will influence your future digital asset strategy?	Several factors will play a role: market volatility, regulatory developments, technological advancements in mining efficiency, and enhanced risk management solutions. As these factors evolve, we'll continually refine our approach to optimize the conversion of our mined assets, but our core focus will remain on operational production.
Question 19: Are you holding privately digital assets or a digital asset related vehicle?	We do not hold digital assets as a speculative reserve. Any Bitcoin that remains on our balance sheet is minimal and strictly managed for short-term liquidity purposes. Our primary activity is mining, and we maintain only the necessary holdings to support operational flexibility, rather than creating separate digital asset vehicles.

Appendix J: Interview with Max Ilse Investment Manager at BFG (I9)

Question	Answer
Question 1: When did your company start holding digital assets, and what was the main driver?	We've held digital-asset tokens from day one of our accelerator program—essentially whenever we close on an early-stage token deal. The driver is simple: we invest in Web3 startups, and sometimes that compensation comes in the form of token allocations alongside equity.
Question 2: What is the primary purpose of holding digital assets?	Our tokens are part of our investment portfolio. They represent ownership positions in the projects we back, and we hold them to align our balance sheet with our long-term venture thesis—namely, that these protocols can appreciate as they achieve adoption.
Question 3: Do digital assets provide your company with a competitive advantage?	Absolutely. By taking token allocations, we not only share in the upside of early protocols but also gain strategic alignment with founders. It differentiates us from traditional VCs that only take equity, and it gives us deeper insight into token economics and governance.
Question 4: What are the biggest challenges your company faces in accounting for digital assets?	Valuation is the toughest part. Early-stage tokens often trade on illiquid markets, so fair-value accounting can be highly subjective. We've invested in a Liechtenstein AG structure precisely to give us flexibility in marking these positions and to avoid forced write-downs every quarter.
Question 5: How do current accounting standards impact your ability to report the true financial position of your digital asset holdings?	Under standard IFRS or U.S. GAAP, you'd likely have to mark tokens to market, which could introduce massive P&L swings. Our structure allows us to manage our balance sheet more dynamically delaying recognition until a token has sufficient liquidity or until we choose to realize gains.
Question 6: How does your company acquire digital assets?	We acquire tokens through our accelerator investments. In exchange for mentorship, ecosystem support, and equity, we negotiate token allocations directly with founders. We also occasionally buy small amounts of stablecoins to cover operational expenses.
Question 7: Why didn't your company just buy a Digital Asset ETF?	An ETF would give us zero governance rights or early access to protocol-level information. Our thesis focuses on active engagement with founders, token incentives, and ecosystem building—none of which you get from a passive ETF.
Question 8: What custody solutions do you use?	For any tokens we hold, we leverage institutional custody providers—Fireblocks and regulated European custodians under MiCA, for example. That ensures bank-grade security without having to build in-house key-management infrastructure.
Question 9: Would your company policies allow you to hold and trade at an exchange platform?	Yes. We maintain accounts on compliant, regulated exchanges for quick on-chain execution when we need to convert tokens. But trading is always conducted through multi-sig, Institutional APIs, and formal board approvals for anything material.
Question 10: What are the main hurdles your company faces in securing and documenting digital asset custody arrangements?	The biggest hurdles are cross-jurisdictional compliance and audit-ready reporting. When you hold tokens in multiple legal entities (Liechtenstein AG, German GmbH), you need clear proof of reserves, chain-of-custody documentation, and standardized reporting for auditors.
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	Insurance is improving—but remains limited. Pooled coverage from custodians helps, yet it's not tailored to venture-stage portfolios. We supplement it with strict internal controls and staggered vesting schedules to mitigate concentration risk.
Question 12: What impact have digital assets had on your P&L, cash flow, or liquidity?	Since most of our token positions are illiquid initially, they don't immediately impact cash flow. We budget in advance for operational stablecoin requirements, and any realized token gains flow through gains on investments rather than day-to-day liquidity.
Question 13: How do you manage volatility risks?	We treat volatility as the price of venture upside. We size positions conservatively—only a portion of our total capital is allocated to token holdings at any given time. That way, even a 90% drawdown on a single token doesn't imperil our overall fund.
Question 14: Have you faced regulatory or tax challenges with digital assets?	Regulatory complexity is real—especially when investing in Latin America or Eastern Europe. We conduct high-level reviews of each jurisdiction's stance (ban, tolerant, or actively regulated) before investing. Tax treatment varies, so we engage local counsel to ensure compliance prior to token vesting.
Question 15: Have you used Bitcoin-backed financing or lending?	No. Our focus is on equity and token allocations rather than using crypto-collateralized loans. We prefer straight-equity structures in startups and conserve cash for follow-on rounds instead of leveraging tokens for debt.
Question 16: Do you plan to increase, decrease, or maintain your holdings?	We will continue to maintain and selectively increase token allocations in our core focus area—payments, stablecoins, and mobile banking—especially in regions with weak currencies and high inflation. Outside of that, we remain disciplined about position sizing.
Question 17: Are other alternative investments (e.g., gold, private equity, real assets) used or preferred in place of digital assets?	Our mandate is exclusively blockchain and Web3. We don't allocate to gold or real-assets. If an investor wants traditional alternatives, they should look elsewhere; our competitive niche is early-stage crypto protocols.
Question 18: What factors will influence your future digital asset strategy?	Key factors include regulatory clarity (e.g., MiCA in Europe), token market maturity, macroeconomic trends in inflation-hit regions, and real-world adoption metrics (like stablecoin transaction volumes). We'll lean in where we see strong use-case validation.
Question 19: Are you holding privately digital assets or a digital asset related vehicle?	Yes—personally I hold a small portfolio of Bitcoin and a handful of tokens to stay aligned with the ecosystem. It helps me speak from experience when evaluating new deals, though my personal holdings are segregated from the firm's balance sheet.

Appendix K: Interview with Senior Treasury Manager publicly traded U.S. technology firm (I10)

Question	Answer
Question 1: When did your company start holding digital assets, and what was the main driver?	We began accumulating Bitcoin in September 2021, when our Board approved a pilot program to diversify our treasury. After studying market volatility and long-term price trends, our CFO proposed allocating up to 5% of excess cash to Bitcoin as a hedge against inflation and to signal our commitment to emerging technology.
Question 2: What is the primary purpose of holding digital assets?	Our primary goal is treasury diversification. We view Bitcoin as a non-correlated asset that can preserve purchasing power in an environment of low nominal yields. It complements our cash and short-duration bond holdings, providing a potential upside if the currency depreciates.
Question 3: Do digital assets provide your company with a competitive advantage?	Yes. Holding Bitcoin demonstrates that we're forward-looking and willing to embrace new financial models. It attracts investors who value innovation and can enhance our brand among tech-savvy customers and partners. That said, our true competitive edge remains in our core operations; the Bitcoin allocation is a strategic signal rather than a primary profit center.
Question 4: What are the biggest challenges your company faces in accounting for digital assets?	The most significant challenge is fair-value measurement under U.S. GAAP, which forces us to record unrealized gains and losses in earnings each quarter. This creates volatility that can obscure underlying operational performance. We've also had to upgrade our ERP modules to track individual coin lots and reconcile on-chain activity with our general ledger.
Question 5: How do current accounting standards impact your ability to report the true financial position of your digital asset holdings?	The most significant challenge stems from the treatment of digital assets as indefinite-lived intangible assets under U.S. GAAP. We must recognize impairment losses when market value drops below carrying value but cannot record gains unless we sell. This creates an asymmetric effect on earnings, contributing to volatility that can obscure our operational performance. Additionally, we had to enhance our ERP systems to track coin-level data and reconcile blockchain records with our general ledger. That said, we plan to adopt the new fair value accounting standard by the end of the year, which should allow us to reflect both gains and losses more accurately in our financial statements.
Question 6: How does your company acquire digital assets?	We purchase Bitcoin directly through regulated over-the-counter desks provided by our banking partners. All transactions are executed under standardized master agreements, and we settle through custodial accounts at a qualified custodian. We avoid retail exchanges to ensure best execution and full institutional oversight.
Question 7: Why didn't your company just buy a Digital Asset ETF?	An ETF would expose us to management fees, tracking error, and additional layers of counterparty risk. More importantly, direct ownership aligns our incentives with the underlying asset and preserves our right to direct custody. We also want to avoid any regulatory ambiguity around owning a fund versus owning the asset outright.
Question 8: What custody solutions do you use?	We store our Bitcoin in a multi-sig cold-storage setup managed by a SOC 2-certified custodian. All keys are split between hardware modules in two geographically separated data centers, and quarterly audits verify our holdings directly on the blockchain.
Question 9: Would your company policies allow you to hold and trade digital assets on an exchange platform?	Yes, but only under strict controls. Any exchange-based trading requires dual sign-off by the CFO and Head of Treasury, pre-approved trading limits, and real-time monitoring by our risk management team. We've codified these rules in our Treasury Policy Manual.
Question 10: What are the main hurdles your company faces in securing and documenting digital asset custody arrangements?	Primary hurdles include establishing clear chain-of-custody protocols, integrating on-chain verification into our audit processes, and ensuring that our legal agreements with custodians cover all potential failure scenarios. We also had to educate our external auditors on blockchain reconciliation techniques.
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	Insurance options have improved, but they remain limited in scope and capacity. The pooled coverage offered by custodians often doesn't match the size of our holdings, and standalone policies carry high premiums. We've therefore layered our defenses with rigorous internal controls and third-party attestations.
Question 12: What impact have digital assets had on your P&L, cash flow, or liquidity?	Due to mark-to-market accounting, each quarter's Bitcoin valuation can swing net income by several percentage points. However, our actual cash flow remains unaffected until we sell. We maintain a clear distinction between realized operational cash flow and unrealized paper P&L, which helps us plan liquidity needs without distortion.
Question 13: How do you manage volatility risks?	We set a predetermined buffer—typically 50% of our Bitcoin allocation—in short-term U.S. Treasuries to prevent forced sales in down markets. We also conduct periodic stress tests to ensure that even a 50% drop in crypto prices would not impair our ability to finance operations or meet covenant requirements.
Question 14: Have you faced regulatory or tax challenges with digital assets?	Yes. The IRS treats each Bitcoin sale as a taxable event, requiring detailed lot-by-lot tracking. We engaged specialized tax advisors to implement software that automatically matches our on-chain transactions to our accounting system, ensuring accurate gain/loss reporting and avoiding cumbersome manual work.
Question 15: Have you used Bitcoin-backed financing or lending?	We evaluated Bitcoin-backed lending but found the loan-to-value ratios and interest costs unattractive compared to our existing credit facilities. Leveraging our mined assets directly would have constrained our liquidity, so we opted to pursue traditional financing lines instead.
Question 16: Do you plan to increase, decrease, or maintain your holdings?	Our plan is to maintain a steady allocation—typically 3–5% of total cash and equivalents. We periodically review market conditions and may top up our position in prolonged down-markets, but we avoid making large, timing-dependent shifts to keep our balance sheet stable.
Question 17: Are other alternative investments (e.g., gold, private equity, real assets) used or preferred in place of digital assets?	We hold a modest gold position as part of our broader diversification strategy, alongside private market investments in our corporate development arm. Bitcoin sits alongside those as a separate bucket for inflation hedging; we view each alternative through the lens of liquidity, return profile, and operational complexity.
Question 18: What factors will influence your future digital asset strategy?	Key drivers will include regulatory clarity—especially on convertible tax treatment—liquidity in the Bitcoin markets, institutional custody innovations, and macroeconomic indicators like inflation and interest rates. We'll adjust our allocation if any of these factors shift significantly.
Question 19: Are you holding privately digital assets or a digital asset related vehicle?	No, all our digital-asset exposure is held at the corporate level for treasury purposes. Our executives may have personal crypto positions, but company holdings are segregated and managed in accordance with our formal treasury and compliance protocols.

Appendix L: Interview with Christian Forma Head of Treasury of WIBank (I11)

Question	Answer
Question 1: Has your company ever considered holding digital assets? If yes, what led to the decision not to proceed?	Yes, we've considered digital assets — particularly in the context of tokenized financial instruments, not classical cryptocurrencies like Bitcoin. The main reason we haven't held them on our balance sheet is due to regulatory limitations, internal policies, and the fact that as a promotional bank, our focus is very specific and conservative.
Question 2: What are the key reasons your company has chosen not to hold digital assets?	We are a euro-only bank, and holding cryptocurrencies would require significant shifts in governance, compliance, and risk frameworks. Moreover, the regulatory treatment of public blockchains, especially under capital requirement rules, is still unresolved and burdensome.
Question 3: Do you believe digital assets could offer a competitive advantage for companies in your industry? Why or why not?	Not directly in terms of cryptocurrency holdings — but yes, in terms of infrastructure innovation. Tokenization and DLT-based settlement mechanisms offer operational advantages. From a competitive standpoint, signaling innovation in this space does matter, especially if you're supporting innovation-driven economies.
Question 4: From your perspective, what are the major challenges in accounting for digital assets that discourage adoption?	The core issue is lack of familiarity and technical understanding among accountants and auditors. Most of the smaller firms are miles away from being able to properly account for crypto-assets. Education and clarity are major missing pieces.
Question 5: How do current accounting standards or audit requirements influence your company's stance on holding digital assets?	They reinforce our cautious approach. Without standard frameworks for classification, valuation, and risk treatment — especially within the banking context — it's difficult to justify crypto asset holdings under current audit and regulatory expectations.
Question 6: If your company were to consider digital assets, what would be the preferred method of exposure?	If at all, it would be through tokenized versions of familiar financial instruments or regulated pilot projects — not open-market crypto trading. Strategic holdings would likely be short-term, closely tied to project-specific activity or partnerships.
Question 7: Would your current internal policies allow you to hold and trade digital assets on an exchange?	No. That would require explicit approval from shareholders and likely changes to our funding agreements and internal policy documents. It's not impossible, but certainly not feasible under current conditions.
Question 9: What concerns does your company have regarding custody and security of digital assets?	Custody risk is very real. If we ever held such assets, it would have to be via a regulated, reputable custodian. We would not rely on self-custody or hold assets on an exchange platform due to governance and risk concerns.
Question 10: What are the key hurdles you foresee in documenting or auditing digital asset custody arrangements?	The lack of standardized procedures and the fast-evolving tech stack make this challenging. Even sophisticated firms struggle to fully understand token flows, control systems, and the legal enforceability of custody arrangements.
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	No, not yet. While custodians offer pooled insurance, that coverage is limited and still doesn't offer the confidence level that banks or regulated institutions would require for broader adoption.
Question 12: What are your main financial concerns about holding digital assets?	Volatility, FX exposure, and capital charge implications. From a treasury perspective, it introduces unnecessary complexity, especially if the asset's value can swing dramatically and it's not ECB-eligible or LCR-eligible.
Question 13: Are volatility and market cycles a major reason for not holding digital assets?	Absolutely. The volatility is the price for potential returns — and that might make sense in a personal portfolio. But in a treasury setting, we have to prioritize stability, liquidity, and predictability.
Question 14: What regulatory or tax uncertainties most influence your company's current position?	Uncertainties around capital treatment under Basel III/CRR, lack of ECB eligibility for crypto-based instruments, and unclear tax implications for various types of crypto holdings — all these are key barriers.
Question 15: Would your company consider Bitcoin-backed financing or lending products in the future? Why or why not?	Unlikely in the near term. That would require major changes to our operating model and regulator comfort. For now, we're focused on understanding DLT-based collateral structures through trials, not crypto-backed lending.
Question 16: Under what conditions would you consider changing your position on digital assets?	If the ECB introduces a full CBDC and develops a regulatory framework that permits broader use of tokenized or crypto-like assets under standardized rules — then yes, we'd be open to a policy review.
Question 17: Are alternative investments (e.g., gold, private equity, real assets) used or preferred in place of digital assets?	As a promotional bank, we don't typically invest in such alternatives either. Our investment activities are aligned with policy mandates — not speculative or returns-driven strategies.
Question 18: Do you personally hold digital assets or invest in any crypto-related financial products?	Yes, privately I do. I see it as a new asset class, and I've held crypto personally for some time — separate from my professional role.
Question 19: What's your personal outlook on the future of digital assets in corporate finance?	I think over time, crypto-assets — or tokenized digital assets more broadly — will become a normalized part of financial infrastructure. Not everything will succeed, but a few robust use cases like tokenized debt and stablecoins will persist and grow in relevance. Education and standardization are key for adoption.

Appendix M: Interview with CFO of a public listed European industrial company (I12)

Question	Answer
Question 1: Has your company ever considered holding digital assets? If yes, what led to the decision not to proceed?	Yes, we evaluated the idea internally, particularly during the period of increased market attention around 2022 and 2023. Ultimately, the decision was not to proceed due to a lack of alignment with our corporate strategy. Our focus remains on capital preservation, stability, and supporting our industrial operations.
Question 2: What are the key reasons your company has chosen not to hold digital assets?	The decision is based on several factors including risk tolerance, treasury strategy, and investor expectations. Digital assets do not currently contribute to our goals of funding research and development or supporting our long-cycle infrastructure contracts. They also introduce complexity and volatility we prefer to avoid.
Question 3: Do digital assets provide your company with a competitive advantage?	Not for us. Competitive advantage in our sector comes from innovation in engineering, manufacturing efficiency, and customer relationships. While digital assets may provide value in financial or tech-focused industries, they do not improve our operational or market positioning.
Question 4: From your perspective, what are the major challenges in accounting for digital assets that discourage adoption?	The asymmetric accounting treatment under IFRS is a major hurdle. Digital assets are treated as intangible assets and are subject to impairment without the possibility of upward revaluation. This creates earnings distortions and misrepresents the economic value of the assets on our balance sheet.
Question 5: How do current accounting standards or audit requirements influence your company's stance on holding digital assets?	Current standards discourage us from holding such assets. The lack of fair value accounting under IFRS and the complexities in performing impairment tests introduce considerable friction in financial reporting and auditing. This misalignment with actual asset behavior is a key barrier.
Question 6: If your company were to consider digital assets, what would be the preferred method of exposure?	Our preference would likely be through regulated financial instruments such as ETFs or structured notes. These provide transparency, liquidity, and auditability without requiring direct management of custody or complex accounting treatments.
Question 7: Would your current internal policies allow you to hold and trade digital assets on an exchange?	No. Our treasury policy restricts speculative investments including cryptocurrencies. Any amendment to this policy would require approval from the supervisory board and thorough review by our compliance and risk management departments.
Question 9: What concerns does your company have regarding custody and security of digital assets?	There are concerns around operational risk, key management, and the legal enforceability of ownership rights. In traditional finance, we rely on well-regulated banking institutions. For digital assets, the infrastructure is still evolving and lacks the same level of institutional oversight.
Question 10: What are the key hurdles you foresee in documenting or auditing digital asset custody arrangements?	Auditors expect consistent and verifiable evidence of asset ownership and transfer rights. With digital assets held across different wallets or custodians, establishing this trail is more complex. Differences in legal jurisdiction also complicate the audit process.
Question 11: Do you believe insurance and risk mitigation for digital assets are sufficiently developed for corporate adoption?	At this point, no. Available insurance coverage is either insufficient or prohibitively expensive. Moreover, coverage terms vary widely across providers and there is a lack of standardization across markets.
Question 12: What are your main financial concerns about holding digital assets?	Primary concerns include volatility, liquidity mismatches, and valuation uncertainty. Our treasury model prioritizes predictability and cash flow planning. Assets that can fluctuate significantly within short time frames do not align with our financial management goals.
Question 13: Are volatility and market cycles a major reason for not holding digital assets?	Yes. Our operations require financial stability. High volatility introduces unnecessary risks and complicates financial forecasting and capital planning.
Question 14: What regulatory or tax uncertainties most influence your company's current position?	We are observing the implementation of MiCA in the European Union, but questions remain around tax treatment, reporting obligations, and whether digital assets will be treated as financial instruments or commodities. These uncertainties prevent us from integrating such assets into our financial planning.
Question 15: Would your company consider Bitcoin-backed financing or lending products in the future? Why or why not?	It is unlikely in the current environment. The high cost of capital and legal ambiguity surrounding collateral enforceability make such products unappealing. Moreover, as we do not generate digital assets organically, we see little strategic reason to engage with them in financing.
Question 16: Under what conditions would you consider changing your position on digital assets?	A change would require regulatory clarity, improvements in accounting treatment, and demonstrable benefits to our liquidity management or balance sheet strategy. A strong business case would have to emerge showing that such assets add strategic value without increasing risk exposure disproportionately.
Question 17: Are alternative investments such as gold, private equity, or real assets used or preferred in place of digital assets?	Yes. We prefer to invest in instruments that offer long-term returns and operational alignment. This includes infrastructure investments, green energy projects, and co-investments in innovation hubs. These provide strategic value and complement our core business.
Question 18: Do you personally hold digital assets or invest in any crypto-related financial products?	No. While I follow the space closely and understand its growing relevance, I have not personally invested in cryptocurrencies due to the same concerns we face at the corporate level.
Question 19: What's your personal outlook on the future of digital assets in corporate finance?	I believe digital assets will increasingly influence corporate finance, especially in tokenization of real-world assets and payment infrastructure. However, for widespread adoption in traditional industries, the ecosystem will need to mature considerably. Regulatory frameworks, accounting clarity, and integration with conventional financial systems are essential for this transition.

Appendix N: Secondary Data Spreadsheet Puplic Listed Companies

Category	Fisical Year	Industry	Short Business Description	Age of Companies	Market Cap of Company in USD millions	Value of Assets in USD millions	Year of first Digital Assets acquisition	Digital Assets Held	Amount of Bitcoin Held (BTC)
MicroStrategy Inc.	FY24	Technology & Fintech	A business intelligence and software company known for its aggressive Bitcoin investment strategy. It provides enterprise analytics software while also being the largest corporate holder of Bitcoin, positioning it as a dual-tech and digital asset investment firm	1989	107.820	25.840	2020	BTC	447.740
Tesla Inc.	FY24	Traditional Companies	A leading electric vehicle (EV) and clean energy company, known for its innovations in battery technology, autonomous driving, and renewable energy solutions. Tesla has also invested in Bitcoin and briefly accepted it as payment, demonstrating its interest in digital assets.	2003	925.090	125.110	2021	BTC	11.509
MARA Holding Inc.	FY24	Core Crypto & Blockchain-Focused Companies	A Bitcoin mining company focused on securing the Bitcoin network through large-scale mining operations. It aims to be one of the largest and most energy-efficient Bitcoin miners in North America, with an emphasis on scaling Bitcoin production and optimizing mining efficiency.	2010	5.100	6.801	2020	BTC & Kaspa (KAS)	44.893
Block Inc.	FY24	Technology & Fintech	A financial technology company specializing in digital payments, financial services, and Bitcoin integration. Through Cash App, Spiral, and TBD, Block is a major player in Bitcoin transactions, self-custody solutions, and blockchain infrastructure development.	2009	28.620	36.780	2024	BTC	8.485
Semler Scientific Inc.	FY24	Traditional Companies	A healthcare technology company providing diagnostic solutions for vascular diseases through its flagship product, QuantaFlo. In 2024, the company adopted Bitcoin as its primary treasury reserve asset, integrating digital assets into its financial strategy while continuing to focus on health diagnostics.	2007	347	240	2024	BTC	3.192
Phunware Inc.	FY24	Core Crypto & Blockchain-Focused Companies	Phunware Inc. is a technology company specializing in mobile cloud platforms, offering software solutions and blockchain-enabled data ecosystems.	2009	61	115	2021	BTC, ETH	1
KULR Technology Group	FY24	Technology & Fintech	KULR is a battery safety and thermal management company operating in energy storage, aerospace, and defense. Bitcoin is held as a strategic treasury reserve and does not alter the company's primary business model.	2013	378	63	2024	BTC	668
Coinbase Inc.	FY24	Core Crypto & Blockchain-Focused Companies	Coinbase is a global cryptocurrency platform providing services for trading, custody, staking, Layer-2 development (Base), and infrastructure tools. Serves retail, institutional, and developer segments.	2012	52.030	22.540	2012	BTC, ETH, SOL, USDC, and a wide range of other altcoins	6.885

Category	mount of other Digital Assets He	Amount Bitcoin Held as a % of Total Supply	Acquisition Cost (Approximate Average Purchase Price) approx. per BTC	Book Value at Reporting Date in USD millions	Fair Value at Reporting Date in USD millions	Accounting Treatment	Balance Sheet Reporting	Custody Details
MicroStrategy Inc.		2,13%	$65.033	23.909	41.789	Bitcoin holdings as an intangible asset under U.S. GAAP (Generally Accepted Accounting Principles), specifically following ASC 350 – Intangibles – Goodwill and Other. As of 2025: Measured at fair value per ASU 2023-08, gains/losses recorded in net income Note: As MicroStartegy Inc. released its Annual Report in February 2025 it adopted to ASU 2023 - 08 but values reflect ASC 350 in this analyis	Reported under 'Digital Assets' in balance sheet	MicroStrategy holds Bitcoin with U.S.-based, institutional-grade custodians that adhere to regulatory and security standards. The Bitcoin is stored in offline (cold) storage to minimize cyber risks. Custodians are diversified to mitigate counterparty risk, and the company continuously evaluates new custodial partners. Custodial agreements specify that the company's Bitcoin holdings should not be considered part of the custodian's bankruptcy estate. MicroStrategy conducts periodic due diligence, including audits and reviews of the custodians' internal controls. MicroStrategy conducts periodic audits and due dilligence of custodial practices
Tesla Inc.		0,055%	$33.530	1.074	1.074	Before 2025, Bitcoin was accounted for as an intangible asset with impairment-only rules. From 2025, Tesla adopted ASU 2023-08, allowing fair value accounting.	Reported as 'Digital Assets' on the balance sheet	Tesla holds its Bitcoin with institutional-grade custodians that meet regulatory security standards. Bitcoin is stored in cold wallets to minimize cyber threats. Custodians are well-diversified, ensuring counterparty risk mitigation. Custodial agreements specify that Bitcoin should not be considered part of the custodian's bankruptcy estate. Tesla conducts periodic audits and due diligence of custodial practices.
MARA Holding Inc.	34.817.098 KAS	0,214%	$62.800	4.200	4.200	MARA early adopted ASU 2023-08, effective January 1, 2023, using the modified retrospective method. From 2023 onward, MARA measures digital assets at fair value, recognizing gains and losses directly in net income each reporting period. A cumulative-effect adjustment of $11.5 million was recorded at the beginning of fiscal year 2023 to align the carrying value of digital assets with fair value.	MARA classifies digital assets into three categories: Digital Assets, Current Portion (Current Assets): Includes KAS holdings (used for operations), Bitcoin designated for short-term liquidity, and loaned Bitcoin expected to be repaid within one year. Digital Assets, Net of Current Portion (Long-Term Assets): Includes unrestricted Bitcoin held as a treasury reserve, Bitcoin pledged as collateral, and loaned Bitcoin with long-term repayment terms. Digital Assets Receivables: Represents Bitcoin loaned to third parties	MARA relies on four thirdparty custody providers, including New York Digital Investment Group LLC (NYDIG). Bitcoin is stored in secure offline (cold) storage to mitigate cybersecurity risks. Custodians are diversified to minimize counterparty risk. Custodial agreements state that MARA's Bitcoin holdings should not be considered part of a custodian's bankruptcy estate. MARA's digital assets are not insured, meaning losses due to theft or fraud may not be recoverable.
Block Inc.		0,040%	$62.800	792	792	Block Inc. adopted ASU 2023-08 in Q4 2023, switching from impairment-only accounting to fair value measurement. Gains and losses on Bitcoin are now recognized in net income every reporting period. Previously, Bitcoin was accounted for as an indefinite-lived intangible asset under ASC 350, with impairment losses only. Recognized a cumulative-effect adjustment of $30.5 million to increase Bitcoin's value and retained earnings at the beginning of fiscal year 2023	Block Inc. classifies Bitcoin into two categories on its balance sheet: Bitcoin for Investment Purposes: Reported under "Other non-current assets", held as a long-term asset ($792.3M). Bitcoin for Operating Purposes: Reported under "Other current assets", used in customer transactions ($15.3M).	Block Inc. holds Bitcoin in its Cash App platform, facilitating transactions for customers. Customer Bitcoin Holdings: The company custodies Bitcoin for users but does not include these holdings in its own balance sheet. Company Bitcoin Holdings: Only Bitcoin purchased for investment or operational purposes is reported as an asset. Third-Party Custodians: Some company Bitcoin may be held with third-party custodians for added security, though specific custodians are not disclosed. Security Measures: Block implements industry-standard security protocols to protect both company and customer Bitcoin.
Semler Scientific Inc.		0,015%	$87.854	280	280	Semler Scientific follows ASU 2023-08, measuring Bitcoin at fair value. Gains and losses are recognized in net income every reporting period. Before 2023, Bitcoin was treated as an intangible asset under ASC 350, with impairment-only accounting.	Bitcoin is classified under: Digital Assets (Long-Term Holdings): Investment BTC held on the balance sheet for treasury purposes. Digital Assets, Current Portion (if applicable): If any portion is expected to be sold within 12 months.	Semler Scientific self-custodies its Bitcoin holdings. No third-party custodians were explicitly disclosed. Security protocols for Bitcoin storage were not detailed in the filing.
Phunware Inc.	8,02 ETH	n/m	Not explicitly disclosed	0	0	Digital assets accounted for as indefinite-lived intangible assets under ASC 350. The company has not yet adopted ASU 2023-08, meaning fair value adjustments do not directly impact financial statements unless realized upon sale.	Digital assets are classified as non-current assets unless expected to be sold within 12 months.	Digital assets are stored in a mix of third-party custodians and self-custody solutions. There is a risk that assets held by custodians could be classified as unsecured in case of bankruptcy.
KULR Technology Group		0,003%	$98.000	20	62	KULR uses the U.S. GAAP intangible asset model (cost basis, impaired if BTC price drops below cost). Fair Value NOT Used Yet: Like Semler Scientific and others, KULR has not yet adopted the new FASB fair-value crypto rules (approved in 2023). New FASB standard allows (but doesn't require) early adoption for FY 2024. It becomes mandatory in FY 2025. KULR has not announced early adoption. Under the new model, Bitcoin would be marked to fair value each reporting period, and gains/losses would flow through net income.	Bitcoin is classified as an indefinite-lived intangible asset and listed under "Digital Assets" (or similar) at cost, minus any impairments. It is not considered cash or a financial instrument.	BTC is securely held with Coinbase Prime, a regulated institutional custodian. KULR uses Coinbase's custody platform and potentially a self-custody wallet infrastructure for added control.
Coinbase Inc.	115.700 ETH	0,033%	Not explicitly disclosed	1.550	1.550	New crypto accounting rules allow fair value remeasurement with changes recognized in net income. The new rule was implimented as of Jannuary 2024. Coinbase divides its own crypto into four categories: investment, operations, collateral, and borrowed.	Own crypto holdings are recognized on balance sheet under appropriate headings. Custodied customer crypto is excluded from Coinbase's assets but shown in footnotes and regulatory filings.	Cold storage (98%) with multi-key controls and UCC Article 8 protections. Segregated wallets; no use of sub-custodians. NYDFS-regulated custody subsidiary operates under trust charter.

Y

Category	Income Statement Impact	Regulatory Discolsures	Strategic Treasury Rationale	Risks & Callenges
MicroStrategy Inc.	Bitcoin was accounted for as an intangible asset, and any impairment losses were recorded under expenses in the income statement. From 2025 onward, Micro Strategy will record at fair value, meaning gains and losses impact net income in each reporting period. Gains could only be recognized if Bitcoin was sold, but MicroStrategy did not sell any Bitcoin during 2024.	MicroStrategy faces enhanced regulatory scrutiny due to its Bitcoin holdings. The SEC and other financial regulators monitor its Bitcoin-related activities and disclosures. The company adheres to accounting and compliance requirements under SEC and financial reporting standards.	MicroStrategy considers Bitcoin its primary treasury reserve asset due to its limited supply and store-of-value characteristics. The company believes Bitcoin provides a superior alternative to holding cash and serves as a hedge against inflation.	Bitcoin price volatility, which can significantly impact financial performance. Cybersecurity threats and potential custodial failures. Regulatory uncertainty around digital assets and potential legal constraints. Liquidity concerns if large Bitcoin sales are ever required. Historical financial statements do not reflect the potential variability in earning due to changed accounting standards (ASU 2023 - 08) applying in 2025. Therefore they are required to apply a cumulative-effect net increase to the opening balance of the retained earnings of $12.745 billion in 2025.
Tesla Inc.	Before 2024: Bitcoin imirment losses were recorded under operating expenses in the income statement. From 2024 onward, Tesla records Bitcoin at fair value, meaning gains and losses impact net income each reporting period. Due to the new Accounting practices, the other income changed by $523 million in the year ended primarily due to remeasurement of our bitcoin digital assets.	Tesla is subject to SEC and financial reporting regulations regarding its Bitcoin holdings.	Tesla views Bitcoin as a long-term store of value and a hedge against inflation, integrating it into its treasury strategy.	Bitcoin price volatility impacts Tesla's financial statements. Cybersecurity threats pose risks to Bitcoin holdings. Regulatory uncertainty around digital assets could introduce restrictions or reporting requirements.
MARA Holding Inc.	Before 2023: Bitcoin impairment losses were recorded under operating expenses. From January 1, 2023, onward: MARA early adopted ASU 2023-08, shifting to fair value accounting. Gains and losses are recognized in net income based on market price changes. A cumulative-effect adjustment of $11.5 million was recorded at adoption. No Bitcoin sales in 2024 occurred, so all valuation adjustments are based on price fluctuations.	MARA is subject to SEC and financial reporting regulations regarding its Digital Assets holdings.	MARA considers Bitcoin a strategic reserve asset and aims to hold its mined and purchased Bitcoin indefinitely. KAS is is used to finance operating expenses.	Cybersecurity risks: MARA is a target for hacking, malware, phishing. Market risks: Global crises and Bitcoin sell-offs could significantly affect its balance sheet. Regulatory risks: Potential future classifications or restrictions on Bitcoin could impact MARA's operations. Energy costs: MARA's mining business depends on access to low-cost electricity. Lack of insurance: MARA's Bitcoin holdings are not insured, meaning losses due to theft may not be recoverable.
Block Inc.	Before Q4 2023: Bitcoin was recorded as an intangible asset, with impairment losses recognized under operating expenses. From Q4 2023 onward: Bitcoin is measured at fair value, with gains and losses recorded in net income. For 2024, Block recognized a $420.9 million gain from Bitcoin remeasurement.	Block Inc. is subject to SEC regulations and potential crypto-related financial reporting requirements.	Block Inc. considers Bitcoin a long-term store of value and integrates it into its financial ecosystem via Cash App and other business operations.	Price Volatility: Bitcoin's value fluctuates significantly, affecting net income. Regulatory Uncertainty: The evolving legal environment may impact crypto holdings and operations. Custodial Risk: Risk of theft, fraud, or loss from third-party custodians.
Semler Scientific Inc.	Before ASU 2023-08: Bitcoin impairment losses were recorded under operating expenses. From 2023 onward: Bitcoin is measured at fair value, and gains/losses are recorded in net income.	The company is subject to SEC regulations and potential crypto-related financial reporting requirements.	Semler Scientific formally adopted Bitcoin as its primary treasury reserve asset in May 2024, using excess cash flows and proceeds from capital markets to accumulate Bitcoin. Key Components of the Treasury Strategy: Acquiring Bitcoin with Excess Cash Flows: The company uses cash exceeding working capital needs to opportunistically buy Bitcoin. Capital Market Financing for Bitcoin Purchases: Semler raised capital through ATM stock offerings (2024) and a convertible bond issuance (January 2025) to expand Bitcoin holdings. Long-Term Holding Approach: Bitcoin is held indefinitely, with continued accumulation aligning with Semler's store-of-value strategy. Potential Future Bitcoin Transactions: While Bitcoin is a reserve asset, Semler may sell Bitcoin for liquidity needs, tax benefits, or collateralization. Bitcoin vs. Traditional Assets: Semler views Bitcoin's fixed supply and decentralized nature as a superior alternative to fiat money and gold. No Diversification into Other Cryptocurrencies: The company remains Bitcoin-only, believing its attributes are fundamentally	Price Volatility: Bitcoin's market fluctuations affect financial results. Regulatory Risks: Uncertainty surrounding Bitcoin regulation and taxation. Custody Risks: As a self-custodian, Semler faces security and storage risks.
Phunware Inc.	Impairment losses and gains/losses from sales recorded under 'Other Income (Expense)' in financial statements.	Compliance with SEC and GAAP digital asset financial reporting regulations.	Previously maintained a strategy of acquiring Bitcoin, ETH and integrating PhunToken into its ecosystem, but through selling a significant amount of its Digital Assets uncertain Strategy Rationale.	Price Volatility: Bitcoin's market fluctuations affect financial results. Regulatory Risks: Uncertainty surrounding Bitcoin regulation and taxation. Custody Risks: As a self-custodian, Semler faces security and storage risks.
KULR Technology Group	Before ASU 2023-08: Bitcoin impairment losses were recorded under operating expenses. From 2023 onward: Bitcoin is measured at fair value, and gains/losses are recorded in net income.	Compliance with SEC and GAAP digital asset financial reporting regulations.	Bitcoin is viewed as a scarce, non-sovereign store of value (a "digital gold") to hedge inflation, de-dollarization, and macroeconomic instability. Management aims to preserve capital and improve long-term treasury performance through BTC exposure.	Price volatility can trigger impairments under GAAP Liquidity constraints if large BTC allocations are not actively managed Custody and security (risk of loss, hacking) Accounting treatment limits upside reporting (until FASB fair value rules apply) Regulatory risk (policy changes or crypto restrictions)
Coinbase Inc.	Before ASU 2023-08: Bitcoin impairment losses were recorded under operating expenses. From 2023 onward: Bitcoin is measured at fair value, and gains/losses are recorded in net income.	Regulated by SEC, CFTC, NYDFS, FinCEN, and licensed internationally. Assets custodied under Article 8 of the UCC are bankruptcy-remote. Subject to MiCA in EU starting in 2025.	Crypto assets are held to support platform operations (liquidity, fee conversion, product enablement) rather than as long-term treasury reserves or speculative assets.	Challenges include regulatory uncertainty (e.g., SEC lawsuits), exchange rate volatility, legal status of tokens, custody risk, cybersecurity threats, and evolving tax/treatment standards.

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Category	Bitcoin-Backed Financing	Bitcoin Lending Activities	Tax treatment	Future plans
MicroStrategy Inc.	No Bitcoin-backed financing or collateralized loans disclosed in the report.	No Bitcoin lending activities disclosed in the report.	Bitcoin holdings are now subject to fair value accounting, impacting tax liabilities under corporate alternative minimum tax (CAMT) provisions.	MicroStrategy plans to continue acquiring Bitcoin using proceeds from stock issuances and other financing strategies. The company has not set a specific target for the total amount of Bitcoin it plans to hold.
Tesla Inc.	No Bitcoin-backed financing or collateralized loans disclosed in the report.	No Bitcoin lending activities disclosed in the report.	Bitcoin holdings are now subject to fair value accounting, impacting tax liabilities under corporate alternative minimum tax (CAMT) provisions.	Tesla continues to hold Bitcoin but has not disclosed plans for further acquisitions.
MARA Holding Inc.	MARA secured a $200 million line of credit in October 2024, collateralized by 2,997 BTC.	7,377 BTC loaned to third parties to generate yield as of December 31, 2024.	Digital Asset holdings are now subject to fair value accounting, impacting tax liabilities under corporate alternative minimum tax (CAMT) provisions.	MARA continues to accumulate Bitcoin through mining and market purchases but has not disclosed specific acquisition targets.
Block Inc.	No Bitcoin-backed financing or collateralized loans disclosed in the report.	No Bitcoin lending activities in FY24 disclosed in the report.	Block Inc.'s Bitcoin holdings are subject to fair value accounting, impacting tax liabilities under U.S. corporate tax laws.	Block Inc. continues to hold Bitcoin as part of its treasury strategy but has not disclosed specific future acquisition plans.
Semler Scientific Inc.	No Bitcoin-backed financing or collateralized loans disclosed in the report.	No Bitcoin lending activities in FY24 disclosed in the report.	Bitcoin holdings are subject to fair value accounting, impacting tax liabilities under corporate alternative minimum tax (CAMT) provisions.	Semler Scientific continues to acquire Bitcoin, but has not disclosed specific future purchasing targets.
Phunware Inc.	No Bitcoin-backed financing activities reported.	No Bitcoin lending activities disclosed.	Digital asset transactions are subject to corporate tax regulations, including capital gains tax implications upon sale.	Future plans for digital assets remain unclear. The company has not stated whether it intends to reaccumulate holdings or continue divestment.
KULR Technology Group	No Bitcoin-backed financing activities reported.	No Bitcoin lending activities disclosed.	BTC is treated as property for tax purposes in the U.S. No tax impact until sale	KULR plans to continue allocating up to 90% of excess cash to BTC, depending on market conditions and capital needs. Future adoption of fair value accounting is likely in FY 2025 when the FASB standard becomes mandatory.
Coinbase Inc.	Coinbase does not use Bitcoin as collateral for corporate financing. However, it facilitates lending and financing via crypto (including BTC) on its Prime platform.	Coinbase lends crypto assets, including BTC, to institutions via Prime Financing. Also supports cbETH as a wrapped staking asset. Receives crypto from counterparties as collateral.	New deferred tax liability of $178 million recognized under ASU 2023-08 due to fair value crypto remeasurement. Tax treatment otherwise follows standard U.S. corporate tax code.	Focus on global regulatory expansion, growing Base (its L2 chain), supporting ETFs through custody, launching new developer APIs, and integrating more onchain services.