



CRYPTOCURRENCIES AND INVESTMENT BANKING: A NEW ASSET CLASS OR BUBBLE?

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ABSTRACT

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Background: Since Bitcoin's launch in 2009, cryptocurrencies have evolved from a fringe technology to instruments that global financial institutions list, trade, custody, and more recently package into exchange-traded products. Yet the central question remains unsettled: are cryptocurrencies an emerging asset class with distinct risk-return properties and institutional uses, or a recurring bubble propelled by speculation and market frictions?

Methods: This meta-review synthesizes evidence from peer-reviewed finance and economics studies, regulatory standards, and high-quality policy reports (2013–2025). We follow best practices for meta-reviews and systematic reviews to scope, appraise, and thematically synthesize findings on (i) return and diversification characteristics, (ii) market efficiency and manipulation, (iii) valuation and adoption dynamics, (iv) institutionalization in investment banking (IB), and (v) regulatory and societal implications.

Results: The literature documents (a) persistently high volatility and episodic bubbles, alongside (b) low average correlations with traditional assets and, at times, measurable diversification benefits. Evidence on safe-haven behavior is mixed and time-varying. Regulatory milestones (e.g., 2024 U.S. approval of spot Bitcoin ETPs; phased EU MiCA application in 2024–2025) and the growth of tokenized funds signal increasing institutional integration. However, manipulation risks, energy externalities, and prudential constraints temper the asset-class narrative.

Conclusions: Cryptocurrencies exhibit characteristics of a nascent, high-beta alternative asset class whose investability hinges on robust market microstructure, regulation, and risk controls. They are not purely bubbles but bubble dynamics recur frequently. For investment banks, the prudent stance is adjacent adoption (custody, structured access, tokenization, and market-making within regulatory guardrails) rather than balance-sheet risk-taking.

KEYWORDS: Cryptocurrency; Investment Banking; Asset Class; Bubble; Regulation

INTRODUCTION

Over the last decade, cryptocurrencies have cycled through booms, busts, and institutional acceptance. Bitcoin's market capitalization, once negligible, became large enough to motivate custody offerings from systemically important banks and the launch (January 2024) of U.S. spot Bitcoin exchange-traded products (ETPs). These regulatory developments coexist with evidence of extreme price volatility, recurrent bubbles, and market manipulation. The core research question driving this review is whether cryptocurrencies, viewed through the lens of empirical asset pricing, market microstructure, and institutional adoption, merit classification as a new asset class or whether they are better understood as episodic bubbles with limited long-term investment merit.

The answer matters for investment banks on several dimensions: balance-sheet exposure and capital rules; client demand and product shelves (ETPs, structured notes, derivatives); custody and prime services; trading revenues and market-making; and strategic bets on tokenization and on-chain market infrastructure. Regulatory regimes (Basel prudential treatment of crypto exposures; the EU's Markets in Crypto-Assets, MiCA; FSB and IOSCO cross-border

recommendations) shape the feasible perimeter of bank activity and the cost of risk-taking.

This article provides a meta-review of the academic and policy literature to answer four practical questions for investment-bank decision-makers:

1. Are the return, risk, and correlation properties of cryptocurrencies consistent with a distinct asset class?
2. How pervasive are speculative bubbles, inefficiencies, and manipulation?
3. What does institutional adoption look like in practice (ETPs, custody, tokenization), and what are the regulatory constraints?
4. What societal externalities and policy trade-offs accompany wider integration?

REVIEW OF LITERATURE

Return, Volatility, and Diversification

Early portfolio studies documented exceptionally high returns and volatility for Bitcoin, alongside low correlations with traditional assets, features consistent with potential diversification benefits in small allocations (e.g., 1–5%). Brière, Oosterlinck, and Szafarz (2015) find that adding Bitcoin

to a diversified portfolio improved risk-adjusted performance for a U.S. investor during 2010-2013, though with pronounced tail risk. Subsequent replications and extensions emphasize Bitcoin's unique volatility process and limited correlation to gold, the U.S. dollar, and global equities, albeit with structural breaks over time.

Katsiampa (2017) compares GARCH-family models and confirms the unusually high and time-varying volatility of Bitcoin, reinforcing that any diversification benefits are conditional and horizon-dependent. More broadly, systematic reviews covering 100+ studies conclude that cryptocurrencies can serve as diversifiers in specific windows, but safe-haven properties are weak and unstable.

Hedge or safe haven?

Empirical tests of safe-haven behavior (co-movement during market stress) generally reject a gold-like role for Bitcoin. Using dynamic conditional correlation models, studies find Bitcoin is at best a diversifier and only occasionally a hedge, with "safe haven" episodes rare and time-varying; during acute stress (e.g., COVID-19 onset), Bitcoin often moved in lockstep with risk assets. The literature also explores whether stablecoins can function as a "safe haven against Bitcoin," showing that large stablecoins (e.g., USDT) dampen extreme moves in high-frequency data, an insight relevant to market plumbing but not a substitute for macro hedging.

Market efficiency, bubbles, and manipulation

A large strand of research diagnoses speculative bubbles using right-tailed unit-root tests (GSADF) and related techniques. Cheah and Fry (2015) conclude that Bitcoin prices contain a "considerable speculative component," even arguing the fundamental value could be zero, an extreme view but one that captures repeated bubble dynamics observed across cycles. Later work strengthens the bubble narrative by documenting manipulation episodes: Gandal et al. (2018) show how coordinated activity on Mt. Gox affected prices; Griffin and Shams (2020) report tether-related flows consistent with systematic price support in 2017-2018. These findings imply that market microstructure and offshore venues can amplify bubbles, challenging a pure asset-class interpretation.

Valuation and adoption dynamics

In formal models, token value arises from transactional demand and network effects rather than discounted cash flows. Cong, Li, and Wang (2021) model tokenomics with S-curve adoption, where price and user growth reinforce each other until saturation; empirical asset-pricing tests (e.g., Liu & Tsyvinski, 2021) identify crypto-specific risk factors distinct from equities, bonds, and commodities. These frameworks help reconcile coexisting observations: (i) bubble-like overshooting in early adoption phases and (ii) emergent factor structure consistent with an embryonic asset class.

Regulation and institutionalization

Policy architectures have matured rapidly. In July 2023 the Financial Stability Board (FSB) finalized a global regulatory framework for crypto-asset activities, "same activity, same risk, same regulation" followed by IOSCO's 18 policy recommendations for crypto and digital asset markets (and DeFi-specific recommendations). In the EU, MiCA (Regulation

(EU) 2023/1114) entered into force in June 2023 with application in two phases: rules for asset-referenced and e-money tokens applying from 30 June 2024, and broader rules for crypto-asset service providers (CASPs) applying from 30 December 2024, with transitional arrangements (to as late as 1 July 2026, depending on member-state grandfathering). In the U.S., the SEC on 10 January 2024 approved exchange rule changes enabling 11 spot Bitcoin ETPs, catalyzing on-exchange, regulated exposure for institutions and retail.

Parallel to policy, institutional integrations have accelerated: large custodians (e.g., BNY Mellon) launched digital-asset custody; banks like Goldman Sachs operate crypto derivatives desks; and incumbents are piloting tokenization of traditional instruments, e.g., BlackRock's tokenized U.S. dollar liquidity fund (BUIDL) on Ethereum (2024) and Franklin Templeton's on-chain U.S. Government Money Fund (FOBXX) with tokenized share representation ("BENJI"). These moves reflect demand for infrastructure-grade services (custody, settlement, repo, cash management) rather than speculative risk-taking on bank balance sheets.

Societal externalities

The environmental footprint of proof-of-work (PoW) networks is a persistent concern. The Cambridge Bitcoin Electricity Consumption Index (CBECI) provides methodology and updated estimates of Bitcoin's power demand, with a 2023 methodology revision that lowered prior estimates. Peer-reviewed work (e.g., Stoll, Klaaßen, & Gallersdörfer, 2019) estimates sizable CO₂ emissions, though large, headline-grabbing projections are sensitive to contested assumptions. The energy debate is thus empirically alive, with trajectories dependent on mining geography, grid decarbonization, and efficiency gains.

METHODOLOGY

Approach and reporting standard

We conducted a meta-review (review of reviews plus high-quality primary studies) focused on finance/economics evidence and policy documents relevant to investment banking. Reporting is guided by PRISMA 2020 (for transparency in identification, screening, eligibility, and synthesis) and established typologies of evidence syntheses (Grant & Booth's review typology). While AMSTAR 2 targets health-intervention reviews, we adopt its spirit to appraise methodological rigor (search reproducibility, bias assessment, protocol transparency) when evaluating systematic reviews in finance.

Sources and Timeframe

We searched Web of Science, Scopus, SSRN, NBER, and key journal portals (Elsevier/ScienceDirect, Wiley, Springer, Taylor & Francis) for studies between 2013 and August 2025 using combinations of keywords (e.g., cryptocurrency, Bitcoin, portfolio diversification, safe haven, bubble, GSADF, manipulation, tokenization, custody, MiCA, FSB, IOSCO, Basel). We also included policy and regulatory documents from BIS/BCBS, FSB, IOSCO, SEC, ESMA/EU, and the Cambridge Centre for Alternative Finance. (Specific documents are cited throughout.)

Inclusion and Exclusion

We included: (i) peer-reviewed empirical studies in finance/economics; (ii) systematic literature reviews or meta-analyses; (iii) primary regulatory/policy sources; and (iv) documented institutional adoptions (e.g., custody launches, ETP approvals, tokenized funds) from official or reputable sources. We excluded non-scholarly opinion pieces and unsourced claims.

Data Extraction and Synthesis

For each study we recorded: sample period, assets, methods, and key findings. We synthesized evidence thematically (return/volatility, diversification, safe-haven tests, efficiency and bubbles, manipulation, valuation/adoption, regulation, ESG externalities). Where findings conflict, we prioritize (a) peer-reviewed studies with robust methodology, (b) recency, and (c) regulator-grade sources for policy facts.

Note: Because finance research is heterogeneous (methods, samples, regimes), quantitative meta-analysis (pooled effect sizes) is not always appropriate. We therefore follow PRISMA-consistent narrative synthesis with methodological appraisal.

RESULTS

RQ1: Do cryptocurrencies behave like a distinct asset class?

Volatility and correlation structure. Across studies, Bitcoin exhibits very high, time-varying volatility that is not well-captured by standard equity/commodity dynamics, with persistent heteroskedasticity and structural breaks. Correlations with equities, bonds, gold, and the USD index are generally low to modest but rise during stress. This pattern is consistent with a high-beta alternative that may diversify idiosyncratic risk at small weights but adds material tail risk.

Portfolio effects. Early results (2010-2013) show sizable diversification benefits (Brière et al., 2015). Later work cautions that benefits attenuate as correlations drift and volatility spikes; allocation windows matter. Systematic reviews (146-study synthesis) conclude that classification as a diversifier rather than a hedge or safe haven is most defensible.

Valuation and factor evidence. Network-adoption models (e.g., Cong et al., 2021) rationalize price dynamics via user externalities, while asset-pricing tests document crypto-specific risk factors, supporting the view that crypto returns are not reducible to standard equity/commodity factors alone. Together, these suggest an emergent asset-class profile distinct, but immature and regime-dependent.

RQ2: How pervasive are bubbles, inefficiencies, and manipulation?

Bubbles. GSADF/related methods detect multiple bubble episodes (2013-2014; 2017-2018; 2020-2021; 2024-2025 peaks and retracements), with rapid expansions and sharp corrections. Cheah & Fry (2015) famously conclude a considerable speculative component and even zero fundamental value; while contentious, their diagnosis of recurring bubble dynamics has been replicated with different datasets and techniques.

Manipulation and microstructure. Gandal et al. (2018) link suspicious trading on Mt. Gox to large price impacts; Griffin & Shams (2020) document flows consistent with tether-based

support. Such findings underscore why regulators emphasize market integrity, custody, and surveillance in ETP approvals and why investment banks limit risk to regulated venues.

RQ3: What is the nature of institutionalization in investment banking?

Regulated access products. The SEC's January 10, 2024 omnibus approval allowed 11 spot Bitcoin ETPs to list on U.S. exchanges, marking a watershed for distribution under securities laws (with surveillance sharing and custody controls). Commissioner statements and the Federal Register notice document the legal basis and conditions.

Custody and trading services. BNY Mellon launched digital-asset custody for select clients in 2022; Goldman Sachs reopened its crypto desk (initially focused on futures/forwards). For investment banks, these offerings monetize client demand while limiting proprietary exposure.

Tokenization of traditional assets. 2024-2025 saw credible tokenization pilots at scale: BlackRock's BUIDL tokenized U.S. dollar liquidity fund on Ethereum, and Franklin Templeton's OnChain U.S. Government Money Fund (FOBXX) with BENJI tokens. These are not "crypto-native" risk assets; rather, they port regulated, yield-bearing instruments onto public chains with institutional on-ramps, an area where banks can provide custody, settlement, distribution, and repo.

Prudential constraints. The Basel Committee's prudential treatment of crypto asset exposures (finalized December 2022) imposes strict capital charges and exposure limits especially for unbacked crypto constraining balance-sheet risk at banks and tilting business models toward agency and infrastructure services.

RQ4: What societal implications accompany wider integration?

Market integrity and consumer protection. Global policy coordination (FSB, IOSCO) addresses conflicts of interest, custody standards, and cross-border supervision. For banks, these standards define operational requirements (e.g., segregation, governance, disclosures) and enable regulated pipelines from fiat to on-chain assets.

Environmental externalities. CBECI's revised methodology and peer-reviewed estimates (Joule) suggest that Bitcoin's footprint is material but path-dependent falling with cleaner grids and more efficient hardware, rising with coal-heavy mining or waste heat reuse assumptions. Policy levers (energy pricing, location-based mining) and protocol choices (PoW vs. PoS) determine trajectories.

DISCUSSION

Interpreting the Mixed Evidence

The literature neither fully endorses nor fully rejects the asset-class thesis. Instead, two regularities emerge: (i) High beta + low average correlation: Crypto's return process is unique enough to sometimes improve portfolio efficiency at small weights, especially outside of crisis episodes. (ii) Recurrent bubbles and microstructure fragility: Price surges and crashes

are common; manipulation risks and offshore venues complicate fair-value discovery.

These regularities are not contradictory. They depict a young market with evolving plumbing: diversification benefits can coexist with bubble dynamics, just as in early commodities or frontier markets. Adoption models (tokenomics) predict such volatility in nascent networks, which abates as infrastructure and policy mature.

Implications for Investment Banking

Product architecture. The 2024 U.S. spot Bitcoin ETPs legitimize distribution under securities laws, facilitating compliant access and enabling derivative overlays (covered calls, collars) and structured notes. Yet prudential rules (Basel) and risk committees should limit balance-sheet crypto exposure. Banks can instead monetize agency roles: ETP market-making, delta-one desks, OTC forwards, and prime services anchored to regulated venues and robust surveillance.

Tokenization. Tokenized cash-equivalents and funds (BUIDL; BENJI) illustrate how public chains can host regulated instruments with programmable cash flows and atomic settlement. Banks can provide custody, distribution, and repo financing around these assets with clearer risk/return than unbacked tokens aligning with internal RWA constraints.

Risk governance. Manipulation history and bubble propensity warrant conservative valuation haircuts, venue whitelists, and stringent client onboarding (travel-rule compliance, market-conduct monitoring). The IOSCO/FSB frameworks provide globally consistent guardrails; MiCA advances a comprehensive EU regime with staggered applicability and transition periods through 2026.

ESG and disclosures. For PoW assets, banks should disclose exposure to energy-intensive networks and prefer counterparties with credible renewable sourcing. Use location-based emission factors and sensitivity analyses, reflecting CBECI methodologies and Joule-published estimates.

Societal Implications

Financial inclusion vs. consumer risk. Crypto rails can lower access barriers and enable 24/7 transfers, but custody errors and opaque token economics can disproportionately harm retail investors. ETP wrapping, while improving safeguards, does not eliminate underlying asset risk.

Market integrity and systemic risk. Cross-jurisdiction gaps can transmit stress (e.g., exchange failures) to regulated channels. The FSB/IOSCO templates aim to limit spillovers via governance, segregation, and conflict-of-interest rules. Prudential limits (Basel) cap bank-level contagion.

Energy and climate. Policymakers confront trade-offs between innovation and energy externalities. Even with improving efficiency, the marginal social cost of PoW may justify location-based constraints or differentiated capital treatment. Meanwhile, tokenization of traditional assets shows how blockchain utility can scale without PoW externalities.

Limitations and Future Research Directions

Scope and heterogeneity. This meta-review prioritizes peer-reviewed finance/economics studies and regulator-grade documents. The crypto literature is fast-moving; some results are regime-dependent. Publication bias and data-quality issues (e.g., survivorship, exchange integrity) persist.

Comparability. Studies differ in samples, frequencies, and econometric methods, complicating pooled estimates. Future work should standardize datasets and stress-test results over post-ETF periods (2024-2025) when regulated access and onshore liquidity improved.

Microstructure causal identification. Richer order-level data (across venues) would sharpen inferences about manipulation and price discovery in a post-MiCA/post-ETP world.

Tokenization economics. Empirical studies should quantify cost savings (settlement, collateral velocity), market quality (spreads, fails), and legal risk in tokenized bonds, MMFs, and repos areas where banks are active.

Climate accounting. Improved, transparent methods (aligned with CBECI updates) and audited renewable sourcing claims are essential for credible ESG disclosures.

CONCLUSION

Are cryptocurrencies a new asset class or a bubble? The evidence supports a both/and answer: (i) Asset-class signals: Distinct return dynamics, low average correlations, emergent risk factors, and growing regulated access (ETPs), custody, and tokenization indicate a path toward durable investability—with small, managed allocations and institutional plumbing. And also; (ii) Bubble realities: Episodic exuberance, historical manipulation, and extreme volatility remain endemic; safe-haven claims are weak; ESG externalities persist for PoW assets.

For investment banks, the strategic stance is clear: focus on infrastructure and intermediation, regulated access products, custody/prime, market-making on surveilled venues, and tokenization of traditional assets while maintaining conservative capital treatment and robust conduct controls. Under these conditions, cryptocurrencies function as a speculative but serviceable alternative asset segment rather than a balance-sheet bet.

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