

Capital Market Assumptions: The Case for Store of Value

TL;DR: As institutional investors navigate a transformative era in global monetary systems, store-of-value assets—gold and bitcoin—are emerging as a critical capital market category for strategic asset allocation.

Projected to grow from \$20T to \$53T with 6% real returns in the medium term, gold (~\$4.4k) and bitcoin (~\$840k) are diversifiers that stabilize portfolio returns.

This paper outlines their integration framework.

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INTRODUCTION

Capital market assumptions (CMAs) are the cornerstone of institutional investing. Like supertankers, large portfolios rely on long-horizon assumptions for returns, volatility, and correlations to navigate markets. Macro forces—economic growth, inflation, interest rates, and policy—shape these horizons, challenging managers to chart the course.

Yet, CMAs must remain agile amid profound change. A global race to dominate technologies—like artificial intelligence, digital assets, and energy—is driving policy shifts redefining the financial order, impacting both return expectations and investment categories. Store-of-value assets, absent from conventional CMAs, signal these shifts—and it's time to "mine" this glaring gap.

We define a store-of-value asset as one without intrinsic yield whose high monetary value crowds out its industrial use case. Gold is a prime example, defined by its centuries-long monetary history. A terrific conductor, its cost makes it uneconomic for industrial use, driving users to alternatives like copper. Gold and copper return characteristics are vastly different as a result.

Gold acts as collateral, guarding against monetary shifts that erode purchasing power. Indeed, if an idle piece of gold outperforms brilliant asset managers, it's a signal of change critical to the CMA process. Gold sets a precedent that bitcoin, though nascent, seeks to follow as digital collateral. Its volatility reflects its speculative nature—a risk but also an opportunity for outsized returns. Its monetary value has surged, crowding out its institutional infrastructure use case in favor of other blockchain protocols like Ethereum.

Store-of-value assets—valued for monetary rather than industrial use—capture shifts in global monetary systems that equities, bonds, and other commodities only implicitly reflect. As a standalone choice, store-of-value assets provide a nominal anchor to diversify portfolios, hedge against systemic change, and enhance portfolios by stabilizing risk-adjusted returns through a separate allocation.

Such seismic shifts, though rare, demand proactive attention. Evaluating store-of-value assets is essential to redefining CMAs for the future.

METHODOLOGY¹

To develop robust capital market assumptions for store-of-value assets, a comprehensive methodology is employed, drawing on historical analysis, macroeconomic projections, and probabilistic scenario analysis, consistent with the frameworks of leading institutions such as BlackRock, and JPMorgan Wealth Management.^{II}

Historical data provide a foundation, capturing gold's price trends and volatility from 1900 to 2025 and bitcoin's performance since its inception in 2009. These data are particularly informative during periods of monetary disruption, such as the 1934 Gold Act, which devalued the U.S. dollar by nearly 70% against gold, and the 1971 termination of the U.S. gold standard, which saw gold's real value increase by fivefold over a decade.

Macroeconomic forecasts incorporate projections of inflation, interest rates, and U.S. dollar dynamics, with a particular focus on the risks posed by unsustainable government debt levels, which may precipitate currency regime shifts. Supply-demand dynamics are critical, with gold's stable supply contrasted against bitcoin's fixed cap of 21 million coins, where adoption and reserve accumulation—such as the proposed 2025 Bitcoin Act—drive the removal of 15% of bitcoin's permanent supply from circulation.^{III}

Scenario analysis forms a cornerstone of the methodology, evaluating store-of-value assets under three economic scenarios:

- -a baseline scenario of gradual monetary transition;
- -an overshooting scenario where government debt adjustments are more front-loaded leading to a faster price adjustment like the 1970s; and
- -an orthodoxy scenario where global governments proactively pursue strict fiscal discipline, and store-of-value follows historical norms.

These scenarios can be weighted to reflect their relative probabilities, though exact weightings remain subject to refinement pending additional model specifications. Risk premia adjustments account for liquidity constraints in gold markets, regulatory uncertainties surrounding bitcoin, and geopolitical factors that may influence currency regimes.

This approach ensures that assumptions are forward-looking yet grounded in historical precedent, aligning with the probabilistic and data-driven methodologies of conventional CMAs.

ASSUMPTIONS

The assumptions for store-of-value assets are crafted to provide a 10-year outlook (2025–2034) and a 30-year long-term horizon, integrating projections from top-down and bottom-up estimates.

Our exercise starts from the top down with macro assumptions centered in the rebalancing of global government debt. As a baseline, a substantial 40-50% decline in the developed-country trade-weighted U.S. dollar elevates nominal GDP and inflation, stabilizing government debt ratios through a nominal lift. Afterwards, store-of-value returns revert to their longer-term norms (Table 1).

Table 1: Store-of-Value Return Assumptions

	Real Return & Inflation				
	Base	Overshoot	Orthodoxy	Historical	
10-year	6.0% & 4.0%	15.0% & 5.0%	1.3% & 2%	4.9% & 3.2%	
Next 20 years	(1.0)% & 2.0%	(5.5)% & 2.0%	1.3% & 2%		
30-year avg#	1.3% & 2.7%	1.3% & 3.0%	1.3% & 2%	1.3% & 3.2%	

Source: Coinbase Asset Management Calculations. #Historical data starts January 1, 1915. See Endnote (i).

The store-of-value category, encompassing gold and bitcoin, is projected to deliver annualized real returns of 6%, stronger than historical norms. Like the 1930s and 1970s, this return is calibrated to a substantial U.S. dollar decline during monetary transitions that elevate nominal GDP. After that transition, the next twenty years are anchored to long-term norms. This captures an expected

unique performance from a period of excess government debt and monetary transition. The total market size of the category is expected to grow significantly, from \$20 trillion at the end of 2024 to \$53 trillion by 2034 (Figure 1).

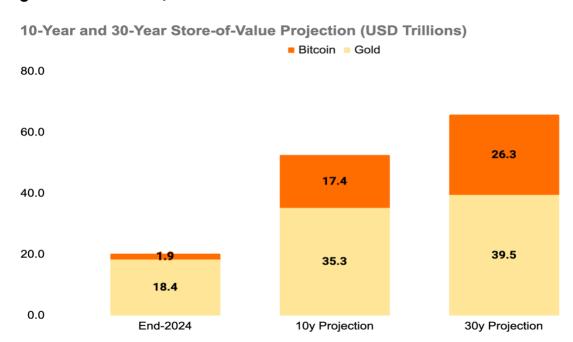


Figure 1: More than \$30T Added to Store of Value in 10 Years

Source: Coinbase Asset Management Calculations. Historical data starts January 1, 1915. See Endnote (i).

This illustration underscores bitcoin's adoption-driven growth, propelled by both private- and public-sector reserve accumulation. Bitcoin's 33% share reflects this reserve accumulation while gold's \$35T projection signals its historical role as a stable hedging demand with less efficacy given competition with bitcoin.

Gold is projected to reach a price of approximately \$4,400 per ounce, implying a compound annual growth rate (CAGR) of 3% from its current level of around \$3,300 per ounce. This growth is underpinned by gold's role as an inflation hedge and potential revaluation, such as the proposed one trillion dollar unlock from adjusting its book value to market prices and directly leveraging gold in the monetary transition.

Bitcoin, in contrast, is expected to reach roughly \$840,000 reflecting a CAGR of 24%. This is driven by bitcoin's fixed supply and rising demand that will require higher prices to entice long-term holders to sell. Behavioral factors are more relevant than statistical ones estimated over a period of early adoption. Models no longer representative of the future would project a far steeper price rise.

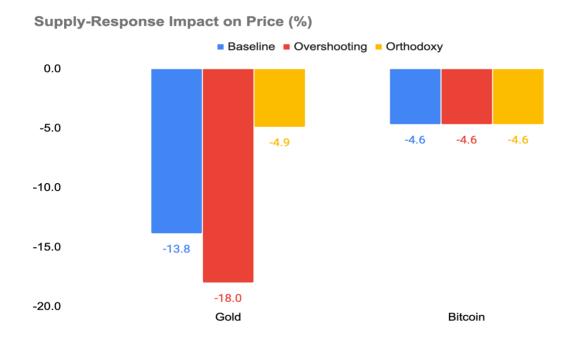
Statistical considerations aside, a rapid rise in prices would dissuade investors, encouraging their substitution into gold or less appreciated store-of-value assets. Thus, we recognize the unique fat-tail price movements in Bitcoin, and their sustainability may be reassessed when the demand-supply dynamics behind the outcome are realized. Onchain data allows for robust analytics.

Volatility assumptions reflect the distinct risk profiles of the two assets. Gold is estimated to exhibit annualized volatility of 15–20%, consistent with its historical stability during monetary crises. Bitcoin, given its speculative nature, is projected to experience significantly higher volatility, ranging from 40–50%, though its long-term holding period suggests investor confidence in its store-of-value potential. The blended volatility for the category is estimated at 20–30%, balancing gold's stability with bitcoin's dynamism.

Supply considerations bring a unique source of volatility. Figure 2 highlights gold's pro-cyclical supply restraining long-term prices by 20%, contrasting bitcoin's discrete price gains driven by hoarding behavior. That bitcoin miners hold supplies rather than selling to the market translates to substantial upside volatility potential in bitcoin with more discrete, rapid price gains.

Correlation assumptions further underscore the category's diversification benefits. Gold typically exhibits low to negative correlations with equities (-0.2 to 0.1), performing well during market stress. Bitcoin shows moderate positive correlations with equities (0.3 to 0.5), though it may decouple during monetary disruptions. The correlation between gold and bitcoin is estimated at 0.1 to 0.3, reflecting their distinct drivers—gold by inflation and bitcoin by adoption. These correlation estimates align with the category's role as a portfolio stabilizer.

Figure 2: Gold Supply Response More Cyclical



Source: Coinbase Asset Management Calculations. Gold supply response is estimated at 1.5% per annum in the baseline scenario, 2% in overshooting, and 0.5% in orthodoxy. The "price drag" is estimated as the percentage difference in prices under the different supply assumptions.

STRATEGIC ROLE IN PORTFOLIOS

Store-of-value assets offer institutional investors a unique opportunity to enhance portfolio resilience in an era of monetary and economic uncertainty. Their strategic importance is rooted in their ability to capture shifts in global monetary systems that traditional asset classes—equities, fixed income, and commodities—only implicitly reflect.

Historical precedents, such as the 1934 Gold Act and the 1971 end of the gold standard, illustrate their value during currency regime transitions. Figure 3, adapted from historical data, underscores gold's performance during such a period where private demand generated enormous volatility.

Gold saw a fivefold real increase and tenfold nominal increase from 1972 to 1980, driven by the protracted revaluation following the 1971 end of the U.S. gold standard. Such performance emphasizes the category's potential to protect purchasing power during monetary disruptions, a role bitcoin is poised to complement in the digital era.

In modern portfolios, store-of-value assets serve as a nominal anchor, offering diversification through low correlations with traditional assets and preserving future investment purchasing power. A modest allocation, typically 5–10% of a portfolio, can significantly enhance risk-adjusted returns by balancing gold's stability with bitcoin's growth potential.

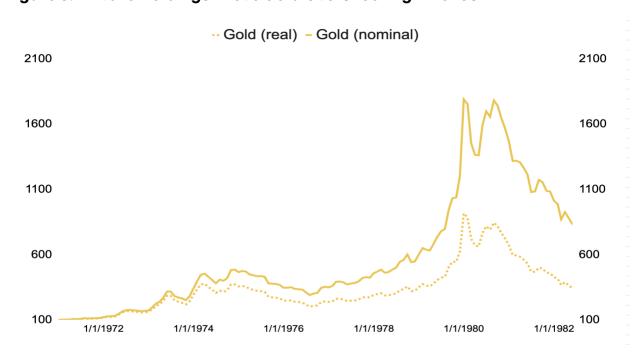


Figure 3: Private Holdings Drove Gold Overshooting in 1970s

Source: Jan 1, 1970 = 100. Coinbase Asset Management Calculations. See Endnote (i).

This allocation hedges against systemic risks, such as dollar devaluation or policy shifts, as evidenced by the proposed 2025 Bitcoin Act, which could unlock nearly one trillion dollars through gold revaluation and drive bitcoin reserve accumulation.

Additionally, the category provides inflation resilience, with gold's historical track record and bitcoin's fixed supply countering the risks of high-debt regimes. Institutional investors should integrate store-of-value assets into their Investment Policy Statements and Strategic Asset Allocations, recognizing their unique performance characteristics during economic transitions.

RISKS AND CONSIDERATIONS

Despite their strategic benefits, store-of-value assets carry inherent risks that require careful management. Gold's lack of yield poses a challenge, as it relies solely on price appreciation, and historical patterns—such as the stagnation following the 1970s gold surge—suggest potential underperformance after sharp revaluations.

Bitcoin's high volatility, currently around 50% annualized, and short history introduce significant portfolio risk, compounded by regulatory uncertainties that could hinder adoption. Liquidity constraints, such as gold's physical storage requirements and bitcoin's dependence on exchange infrastructure, further complicate implementation. Geopolitical risks, including abrupt currency regime shifts, may also trigger heightened volatility across the category.

We run two scenarios to simulate a range of outcomes, illustrated in Table 2. The overshooting scenario follows the 1970s: rapid real price gains in the store-of-value category of 15% per annum, and 5% inflation. The orthodoxy scenario foresees staunch fiscal policy limiting growth in store-of-value assets to their longer-term norms, with 1% real growth and 2% inflation. In the longer horizon, returns converge to historical norms.

Table 2: Gold and Bitcoin Scenario Analyses

	Gold (\$3.3K)		Bitcoin (\$95K)	
	Overshoot	Orthodoxy	Overshoot	Orthodoxy
10-year	\$9.9K	\$2.6K	\$2.0M	\$0.5M
30-year	\$4.6K	\$4.1K	\$1.4M	\$1.0M

Source: Coinbase Asset Management Calculations. Parentheses are the spot price at end-April.

Gold rises to nearly \$10,000 in the overshooting scenario with bitcoin accelerating to \$2 million. Both gold and bitcoin thereafter fall over the longer horizon,

greater for gold given the larger supply response. The overshooting scenario's outsized returns enable rebalancing into undervalued equities thereafter—investment purchasing power is protected. In the orthodox scenario, bitcoin rises moderately by taking share of the category, whereas gold prices fall. Bitcoin's range of outcomes is more than double that of gold, in keeping with its higher volatility.

These risks can be mitigated through prudent allocation strategies and robust risk management. Limiting the store-of-value allocation to 5–10% and dynamically adjusting to the macro environment, ensures diversification without excessive exposure to volatility. Gold's post-1970s dynamics, for instance, suggests prices are cut by roughly one-half as its supply overshoots. The price drawdown in gold is like bitcoin despite its lower historical volatility.

By embedding store-of-value assets within a diversified portfolio, investors can harness their benefits while managing their risks effectively. There is a quiet consideration of digital collateral for the future of finance. Store-of-value assets are notable for their lack of yield. Yet, the flexibility of digital collateral means that as markets deepen, investors may also be able to earn a yield.

CONCLUSION

The \$53T store-of-value opportunity, with 6% real returns, demands immediate integration to Investment Policy Statements, leveraging gold and bitcoin's portfolio stabilization benefits to navigate shifts in the global monetary system.

Endnotes:

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Bitcoin, as a store-of-value reserve asset, has a powerful behavioral component. The 2025 Bitcoin Act would require the U.S. government to purchase 1 million bitcoin over a five-year period. Even if the Act does not become law, the bill's execution details clarify how the U.S. government could acquire bitcoin in a budget-neutral manner. Rather than mandating fixed annual bitcoin purchases, the Act's mechanics could be implemented more flexibly without becoming law. The creation of the Bitcoin Reserve supports this approach. Other U.S. states, sovereigns, and private corporations could reinforce bitcoin's role as a reserve asset following U.S. federal adoption. Fresh demand of three million bitcoin units would remove 15% of its supply from circulation. The emergence of bitcoin's ancillary markets, such as borrowing and lending activities, would maximize the value of digital collateral usage. This is also a conservative estimate. There are nearly \$22 trillion in assets managed by wealth platforms where advisors are not permitted to recommend a bitcoin allocation. A 2% allocation would raise demand for bitcoin by four million units.

iv Projections start from the end of 2024, extending ten and thirty years forward. Capital market assumptions often define the size of markets narrowly by their traded universe. We opt to include the entire stock of gold that has been mined as well as the entire supply of Bitcoin, even though some of these assets are likely unrecoverable. As digital technologies migrate to traditional markets, there can be increased capacity to use collateral more broadly than in the narrowly traded market. Furthermore, supply-demand dynamics alter market structure. For instance, strong demand for gold would lead to jewelry being melted and sold to satisfy demand at higher prices. We prefer working with aggregate market sizes for top-down purposes.

The mechanism draws on monetary history. Gold certificates facilitated interbank settlements in the U.S. until 1933, when Executive Order 6102, issued April 5, 1933, mandated citizens to surrender their gold to the Federal Reserve, followed by a December 1933 ban on private gold ownership. The Federal Reserve then held new gold certificates on behalf of the U.S. Treasury. After the U.S. abandoned the gold standard and devalued the dollar twice, gold's official price was fixed at \$42.22 per ounce in 1973, a valuation still used for accounting purposes. Revaluing gold could enable the U.S. Treasury to access electronic funds from the Federal Reserve, its banker, for sovereign wealth deployment. The gold collateral is leveraged by the Federal Reserve on behalf of the Treasury, a detail inferred in the updated 2025 Bitcoin Act.

¹ Data are compiled from the Federal Reserve Bank of St. Louis, Bloomberg LP, and Coin Metrics. All projections start from the end of 2024 unless otherwise noted, with the ten-year projections ending in 2034 and the thirty-year period ending in 2054. All calculations are performed by Coinbase Asset Management.

ii Comprehensive long-term capital market assumptions include the following: <u>BlackRock</u>; <u>J.P. Morgan Asset Management</u>, <u>BNY Mellon Wealth Management</u>, <u>Invesco</u>, and <u>Amundi Investment</u> Solutions.