Deutsche Bank
Research Institute

Bitcoin vs. Gold: The Future of Central Bank Reserves by 2030

September 22, 2025

— **Gold demand remains strong in 2025, with prices reaching a new all-time high of $3,703 per ounce in September.** Strength has been supported by geopolitical uncertainty, continued central bank buying, expectations of further Fed rate cuts, and questions around Fed independence, reinforcing gold's role as a safe-haven asset and core reserve diversifier.

— **In parallel, Bitcoin has also demonstrated remarkable resilience,** trading close to its all-time high after surpassing **$123,500 in August**. Its price strength highlights growing institutional adoption and its emerging status as a potential macro hedge.

— **This paper assesses whether Bitcoin can qualify alongside gold as a reserve asset by 2030,** and under what conditions. We evaluate both assets across key reserve criteria such as volatility, liquidity, strategic value and trust. We conclude **there is room for both gold and Bitcoin to coexist on central bank balance sheets by 2030.**

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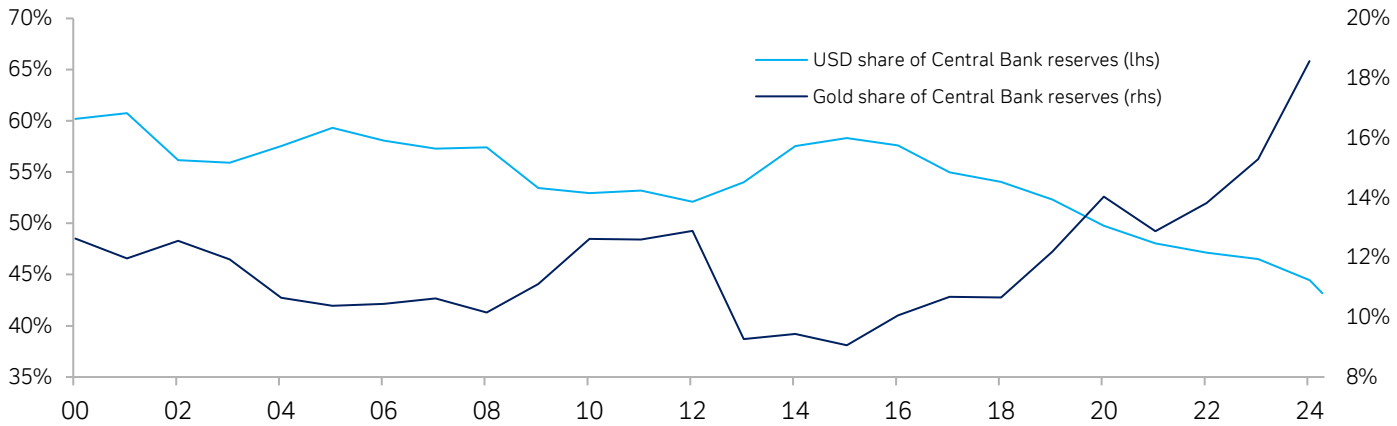
Introduction: Reserve assets at a crossroads

2025 is proving to be an excellent year for both Bitcoin and gold demand. A **declining dollar, fresh geopolitical** and **tariff uncertainty,** and **questions of Fed independence have led both asset classes to outperform.** Gold has continuously hit new highs, hitting an all-time high in real terms this month, exceeding their inflation-adjusted peak from 1980. Central bank demand for gold has continued to stay elevated despite reserves rising, with a 2025 World Gold Council survey of central bank managers showing highest-ever proportions expecting both their own institution (43%) as well as global central banks collectively (95%) to increase their gold reserves over the next 12 months.[1]

Meanwhile, rising adoption helped Bitcoin surge past $109,000 in January and, after a few muted months, **break a record high of $123,500 in August at a time when its volatility simultaneously reached historic lows.** Bitcoin's price now hovers around $113,000-$118,000 and we believe the crypto has more room to run and will **rise back up to $120,000 levels by the end of this year.**

These evolving market dynamics raise a critical question: what will the composition of central bank reserves look like by 2030, as the USD's share of central bank reserves continue to decline (falling from 60% in 2000 to 43% in 2024). While gold has long been the standard alternative, the Trump Administration's landmark decision to establish a US Strategic Reserve this past March **reignites the argument for central banks to hold Bitcoin as a reserve asset.** Plans for a US Bitcoin Reserve have been in the works since last summer**.**

Figure 1: The USD's share of central bank reserves has been falling



Source: Deutsche Bank Research, Haver Analytics, World Gold Council. Central Bank reserves include gold at market prices.

Widely considered the safest and most liquid of financial assets, **central bank reserves have historically consisted of gold and "safe-haven" currencies. High inflation, geopolitical instability and dollar independence** combined with **pro-crypto regulation efforts**, however, have made authorities increasingly re-evaluate their reserve compositions. A **national Bitcoin reserve** could **signal confidence in crypto's future and set international financial standards**, **much as US gold reserves do today.**

In this paper, we examine **Bitcoin as a credible alternative or complement to gold.** We first provide a **brief history of Bitcoin** before **charting the rise of gold throughout the 20th century** to show how the precious metal also went through periods of volatility in comparison with today. We then draw **similarities between the two assets' intrinsic properties** as measures of reserve function:

[1] Central Bank Gold Reserves Survey 2025 | World Gold Council

stability, liquidity, trust, and **strategic value.** Finally, we **analyse the US plans for a Bitcoin reserve,** looking at its aims and proposed funding mechanisms.

Part 1: Bitcoin following in gold's footsteps

Today, gold is universally recognised for its scarcity, liquidity, and lack of counterparty risk. It tends to exhibit a negative correlation with risk assets, especially during systemic crises. As of Q1 2025, central banks held ~36,000 tonnes of gold, comprising around 20% of overall annual gold demand.[2]

Bitcoin shares several characteristics with the precious metal, including high liquidity, limited supply, lack of counterparty risk and limited correlation to traditional assets.

Below, we provide a brief history of Bitcoin before turning to gold.

1.1 Bitcoin's youth

Figure 2: Early Bitcoin price

Source: Deutsche Bank Research, Bloomberg Finance LP.

Following its launch in 2009, Bitcoin initially gained traction as an online and in-game payment system conducted over the dark-web market Silk Road.[3] At the time, Bitcoin was not considered investible due to its high volatility and limited use cases, and in the early 2010s people held tokens for only short periods.

However, as the cryptocurrency grew in prominence, so did calls for more scrutiny. The 2010s saw a rise in other dark-web markets using Bitcoin, despite Silk Road's shutdown by the FBI in 2013. China's regulatory crackdown on mining Bitcoin in 2013 further tarnished its fledging reputation. With confidence in the token very low by 2013, Bitcoin experienced its first "Crypto Winter" before its price began to appreciate towards the end of the year amidst heightened speculative trading.[4] The 2014 collapse of the world's first crypto exchange, MT Gox, set off another sharp correction.

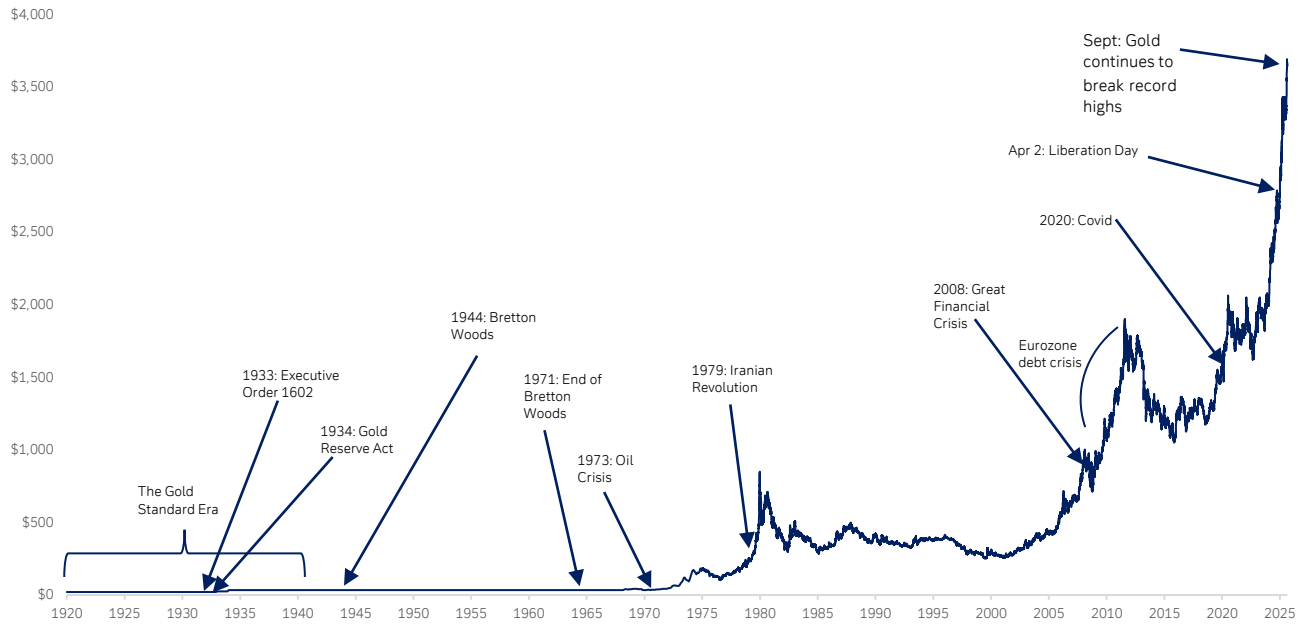
Bitcoin's rise continued to be troubled by a series of frauds, as hackers took advantage of the crypto's anonymity and inability to cancel or revert transactions. Still, market participation increased as investors took interest in the new asset. Bitcoin's volatility was persistent: on Dec. 17, 2017, the crypto hit a new all-time high of $19,800; five days later, it was trading at $11,000 – and a

[2] Gold's key attributes - 1. Return | World Gold Council
[3] Silk-Road-and-Bitcoin.pdf
[4] FBI shuts alleged online drug marketplace, Silk Road | Reuters

year later it hit a bottom of $3,100. Cryptocurrencies collapsed by 80%, making the 2018 cryptocurrency crash worse than the dot-com bubble's 78% collapse.[5]

While Bitcoin still faces many critics, it has increasingly become a household name. The market value of outstanding Bitcoins has risen to over $2.3tn, representing more than 56% of total crypto market cap, while its daily transactions average 499,000, and deepening liquidity has led to outperformance that peaked at ~$123,000 on July 14, and then past $123,500 on August 14.[6] Governments, corporations, university endowments, and institutional investors have all been involved in the pursuit of Bitcoin as "Digital Gold", as regulatory clarity and growing market depth make the asset class increasingly desirable. This trend is widely expected to continue, especially once the US establishes a strategic Bitcoin reserve and cements the token as a store of value. With this in mind, we now turn to gold's history to illustrate the similarities in volatility and public acceptance between the two asset classes.

Figure 3: History of gold



Source: Deutsche Bank Research, Bloomberg Finance LP. Data as of September 19 2025.

[5] Theorizing the 2017 blockchain ICO bubble as a network scam - Lana Swartz, 2022
[6] Latest figures taken as of August 28 2025. Bitcoin Transactions Per Day - Real-Time & Historical Trends

1.2 Gold's historical evolution

Delegates at the Bretton Wood Conference, 1944.
Source: Getty Images

Gold has long anchored central bank balance sheets and – like Bitcoin – witnessed periods of volatility. The US today holds the record for owning the world's largest amount of gold at 8,133 tonnes (78% of its total reserves).[7] Prior to the early 2000s, however, gold was simply a means to stabilise payments under the 20th century fixed exchange rate regime. It was only after the 2008 crisis that central banks began to officially regard gold as a worthy safe-haven asset.

1870s - 1933: The Gold Standard

Between the late 19th and early 20th century, many central banks held sufficient reserves to back their currencies and allow convertibility of those currencies into gold. These reserves were used to stabilise currencies and support international trade under fixed exchange rate systems.

1920s: Gold accumulation begins

During the first world war, many countries began to stockpile gold to build their war chests. Three thousand tonnes of gold coins moved from circulation to central banks.[8]

In 1922, major countries agreed to "economise in the monetary use of gold through the maintenance of reserves in the form of balances in foreign currencies."[9] This led to many central banks shifting most of their reserves into sterling or dollars, used interchangeably with gold. By the late 1920s, 70% of all official gold stocks lay with France, Britain, and the US. The US alone ended up

[7] World official gold holdings, international financial statistics, Feb 2025. Taken from the IMF.
[8] Rs23.pdf
[9] Rs23.pdf. 1922 Genoa Conference: International Gold Standard and U.S. Monetary Policy from World War I to the New Deal

owning 45% of all stocks by the end of 1925. By 1929, central banks held an estimated 92% of all monetary gold.

1933: US exit from the Gold Standard

The 1929 crash significantly weakened the international Gold Standard system. Britain suspended convertibility in 1931, prompting other countries such as Portugal, Sweden, and India to follow. In the US, concerns about inflation and recession triggered mass gold hoarding, putting pressure on the dollar peg. To stabilize the system, the government required citizens to surrender their gold holdings in 1933, and the 1934 Gold Reserve Act went further when President Roosevelt prohibited private ownership, allowing the Federal Reserve to expand currency issuance beyond its gold reserve.

1944 - 1973: The Bretton Woods era

The demise of the Gold Standard set the stage for the postwar multinational Bretton Woods agreement, which pegged the dollar to gold at $35/oz and fixed international currencies to the dollar within +/- 1% bands. Thus, the USD became the primary reserve asset for many countries. During this period, Allied nations also established the International Monetary Fund (IMF) to monitor and assist in adjustments.

Bretton Woods was initially successful, but by the late 1960s, a combination of foreign aid, military spending, and foreign investment caused a surplus of US dollars. This threatened the Bretton Woods system due to the lack of gold to cover at the fixed rate, and in 1971, US President Nixon suspended the US convertibility of the dollar into gold, spelling the end of the Bretton Woods system.

1970s - 2000s: The institutional gold sell-off and the rise of fiat currencies

The late 20th century saw a central bank gold sell-off. Many authorities removed gold from their reserves due to its volatile performance (for example, in 1979, the price of gold was 1,385% higher than it was in 1926) and desire to modernise their economies by replacing gold with fiat currency reserves.[10]

Backed by the US, the IMF formally ended gold's role in the international monetary system in 1978, barring members from fixing exchange rates to gold. In a series of auctions between 1976 and 1980, the IMF sold around 730 tonnes worth of gold. Several central banks followed, including the US, UK, the Netherlands, Belgium, and Australia.[11]

The mass sell-off caused gold's spot price to decline more than 61% from 1980 to 2001.[12] To stabilise the ensuing market disruption, in 1999 the US, UK and several Central European countries mandated central banks to limit their collective gold sales to 2,000 tonnes over the following five years (400 tonnes per year).[13] Additional versions of the agreement were later signed in 2004 and 2009, stabilising gold's price and increasing transparency around central bank gold sales.

2010s - 2020s: A resurgence in central bank demand

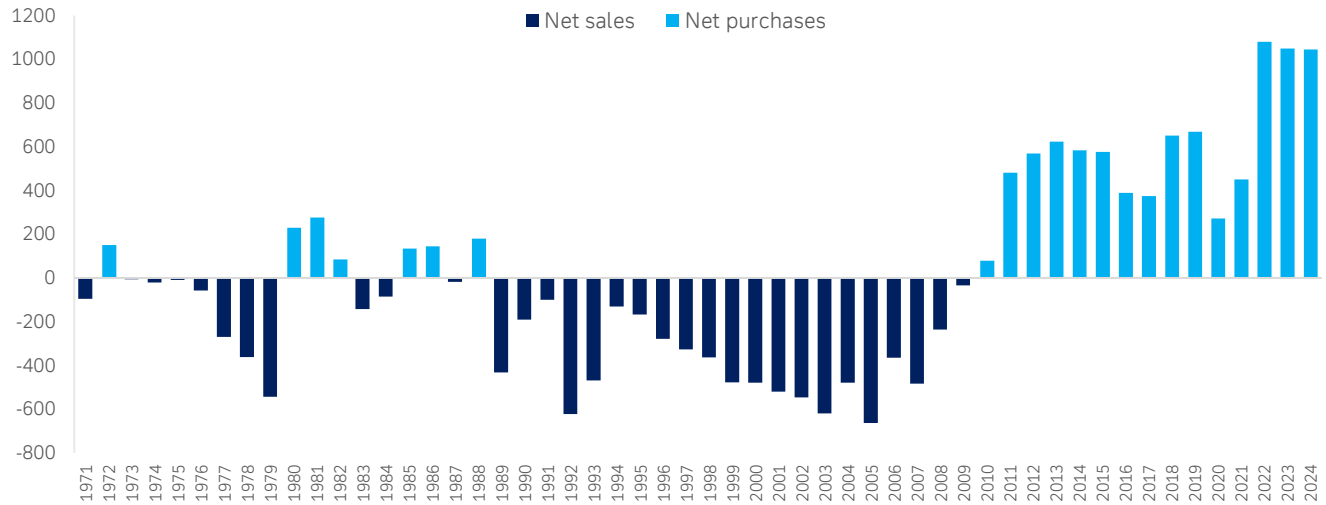
By the mid-2000s, however, a deteriorating global outlook turned the tide in gold's favour. The 2008 crisis triggered a "flight to safety" from traditional stocks and investments, sending institutions in search of gold as authorities increasingly recognised its diversification benefits. In 2010 central banks became net purchasers of gold for the first time since 1988, acquiring 79

[10] The changing gold market, 1978-80: A view of the volatile, mostly upward.movements in the real price of gold in: Finance & Development Volume 17 Issue 004 (1980)
[11] foi_goldsales_1999-2002.pdf
[12] Bloomberg Finance LP.
[13] Joint statement on Gold

tonnes.[14] Central banks reached record gold purchases again in 2018, with 651 tonnes, the highest since Bretton Woods, and 2022, with 1,080 tonnes, the highest since 1950.[15]

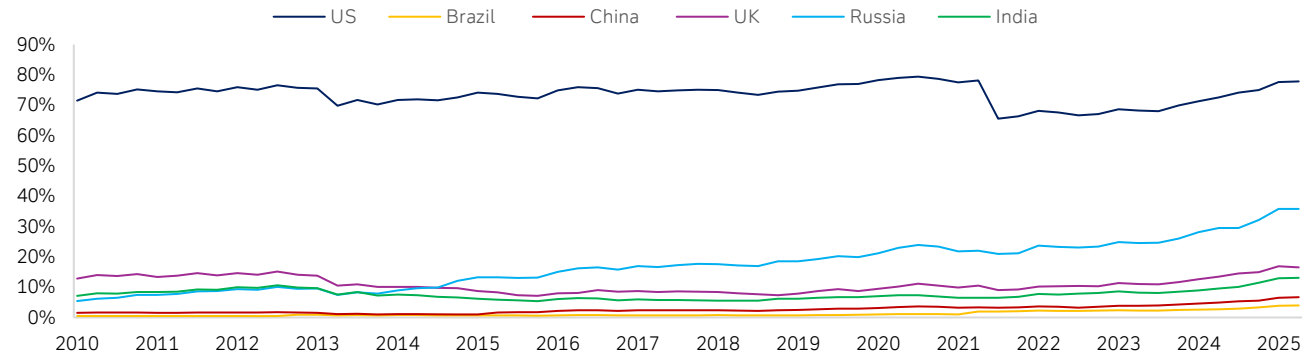
1.3 Central bank gold holdings today

Figure 4: Central bank gold sales vs. purchases (tonnes)



Source: Deutsche Bank Research, World Gold Council.

Figure 5: Percentage of gold holdings relative to the strategic reserve



Source: Deutsche Bank Research, World Gold Council. Data as of September 2025.

Today, gold is back, with an estimated ~36,359 tonnes held globally in central bank reserves.[16] The precious metal has risen ~40% since the start of 2025, reaching a historic high of $3,703 per ounce on September 16.[17]

The largest reserves are held by the US (8,133 tonnes), followed by Germany (3,350 tonnes), Italy (2,451 tonnes) and France (~2,437 tonnes). Russia has 2,329 tonnes and China ~2,300 tonnes.[18] The National Bank of Poland and China have been the most active buyers in the last two years.

Gold's rise has come in tandem with de-dollarisation

A ramp-up in central bank purchases amid dollar weakness, market volatility and rising trade uncertainty since Trump's Liberation Day tariffs is driving gold's

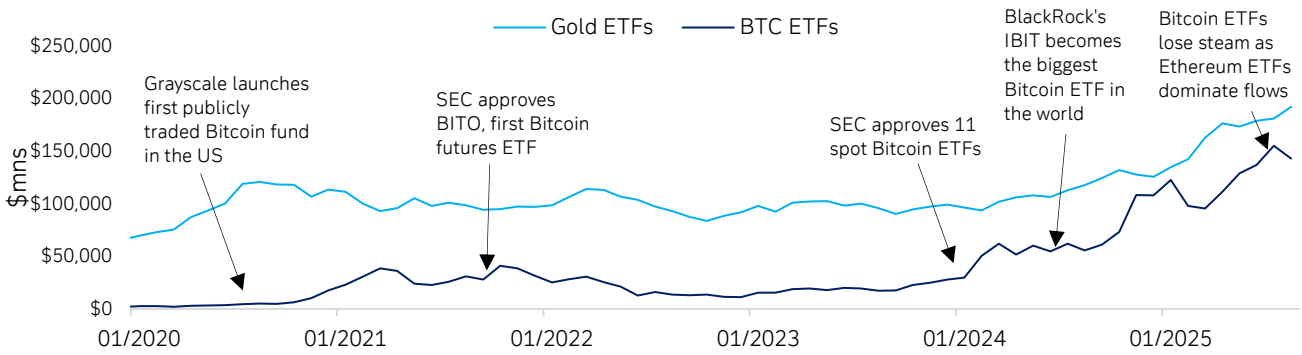
[14] Central Banks and other institutions | World Gold Council
[15] Central Banks | World Gold Council
[16] Central Banks Gold Reserves by Country | World Gold Council
[17] Bloomberg Finance LP
[18] Central Banks Gold Reserves by Country | World Gold Council. Russia's reserves are taken from Q1 2025.

record levels. The World Gold Council estimates that trade concerns account for around 10-15% of gold's return year to date.[19]

A key factor behind gold's run is increasing de-dollarisation, since gold typically rises when the dollar declines. As of Q1 2025, the USD's share in Central Bank reserves is ~43% as important antagonists to the US, such as China (6.8% of gold in reserves) and Russia (37.1% of gold in reserves), accelerated their gold buying.[20] Russia, which bought 274 tonnes in 2018, funded the purchase by almost completely selling its US treasuries portfolio. Until 2022, when the Bank of Russia announced it would halt its gold purchases, Russia was among the largest central banks intensively accumulating gold reserves.

De-dollarisation has also helped Bitcoin, as retail and institutional investors look for a liquid alternative to their cash and treasuries portfolios. A weaker USD, for example, brought record spot inflows into gold and Bitcoin ETFs, increasing their total net flows to a record $5bn and $4.7bn in June. Cryptocurrencies have overall rallied significantly since Trump's election, with Bitcoin rising 75% between November 2024 and July 2025, largely fueled by expectations that the US administration will be more inclined to wider cryptocurrencies adoption.[21]

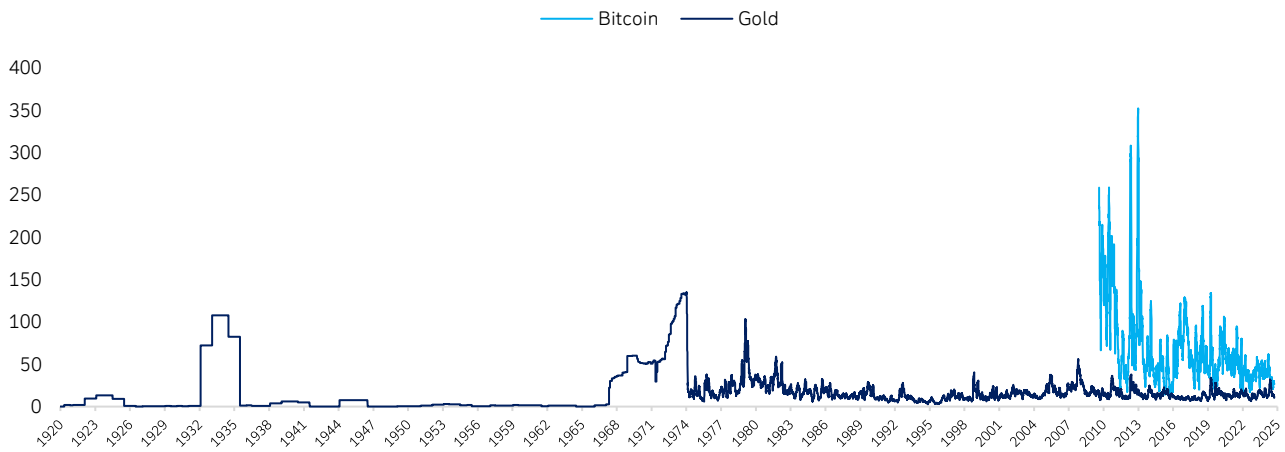
Figure 6: Gold vs Bitcoin ETFs (AUM in $mn)*



Source: Deutsche Bank Research, Bloomberg Finance LP. Data updated September 19 2025.

1.4 Volatility

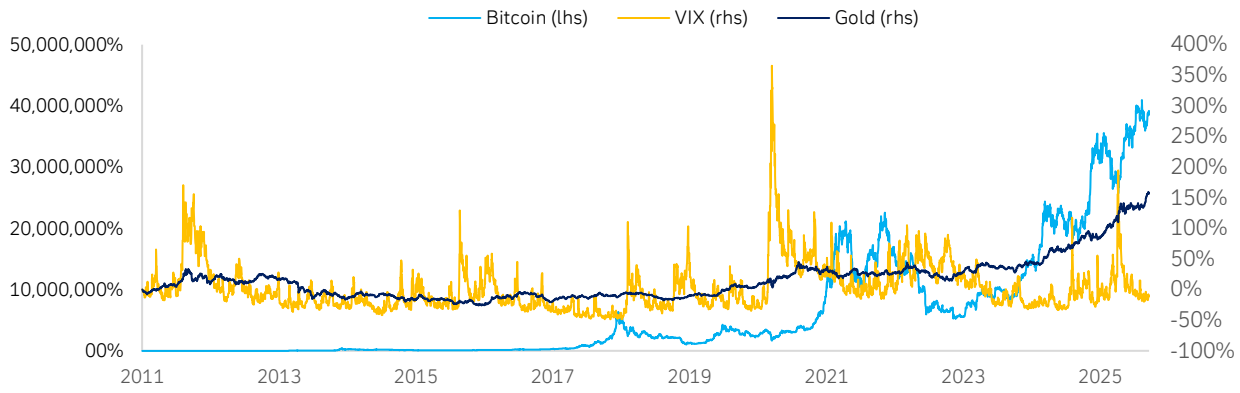
Figure 7: Gold and Bitcoin 30-day volatility



Source: Deutsche Bank research, Bloomberg Finance LP. Data as of September 19 2025.

[19] Gold Market Commentary: A risk-induced premium that may linger | World Gold Council
[20] Total central bank reserves take into account gold at market prices. China and Russia gold % of reserve holdings taken from the World Gold Council. June 2025 data.
[21] Bloomberg Finance LP

Figure 8: Gold, Bitcoin and VIX return analysis



Source: Deutsche Bank research, Bloomberg Finance LP. Data as of September 19 2025.

Although gold behaves differently from equities and bonds, like Bitcoin it has faced significant volatility. Gold prices surged more than threefold between 1978 and 1980 amid geopolitical turmoil in the Middle East and oil shocks, before falling more than 60% in the two decades that followed.[22] More recently, gold dropped nearly 30% in 2013 after a long bull run, prompting some to declare the end of the 'age of gold'.[23] Gold as a safe-haven asset also disappointed during the COVID-19 pandemic. Although it initially performed its role amidst widespread uncertainty and market turbulence, fears of reduced supply due to mining disruptions and the stronger-than-expected US dollar led to the gold price seeing its worst year-end level in 2021 since 2015. In 2020, central bank buying also hit the lowest annual total since the trend began in 2010. Part of this was due to Russia's suspension of its gold buying programme on April 1 (until 2020, Russia had been the largest gold buyer since the end of 2005).[24]

Today, gold is hitting record highs, even in real terms. Although tariff uncertainty has stabilised since April's Liberation Day, its effects are still filtering through into economic data. Rising fiscal worries in France, the US and UK, combined with heightened geopolitical risks in Europe and the Middle East this year has also led investors to price in a growing risk premium to assets such as gold. Against that backdrop, and with the Federal Reserve expected to cut rates further this year, gold could rise as much as $4,000/oz by next year.

Part 2. Bitcoin: An emerging reserve candidate?

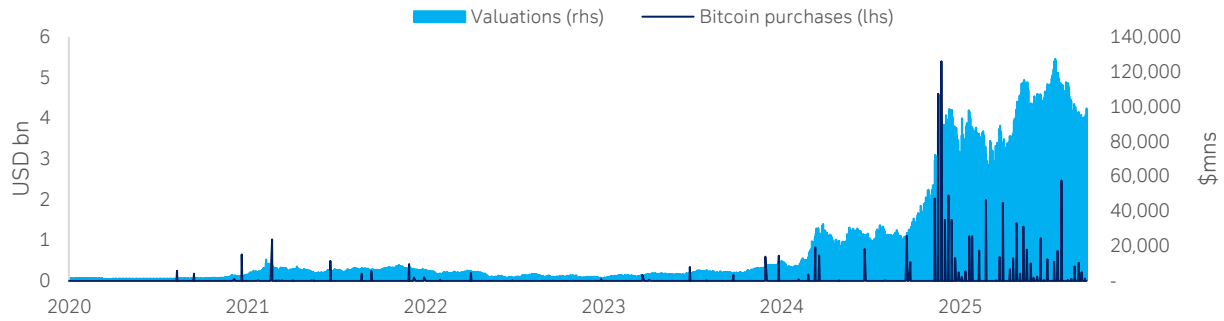
Bitcoin has often been referred to as "Digital Gold" because both assets provide scarcity and durability benefits, acting as a bulwark against inflation and market volatility.

Many companies have outpaced central banks in adopting Bitcoin as a reserve asset – not just established crypto players like Tesla, Strategy (formerly Microstrategy), Square and Stone Ridge but also less conventional consumer companies such as US-based meat and seafood company Beck & Bulow, Japanese hotel service company Metaplanet, and China- and US-based consumer brand and e-commerce company DDC Enterprise. That said, many of

[22] The changing gold market, 1978-80: A view of the volatile, mostly upward movements in the real price of gold in: Finance & Development Volume 17 Issue 004 (1980), Bloomberg Finance LP.
[23] Gold Falls 28% In 2013, Ends 12-Year Bull Run - WSJ
[24] Gold Demand Trends Q1 2020 Central banks | World Gold Council

the corporates storing Bitcoin reserves are motivated by increasing their market capitalisation or profiting from extra cash while maintaining liquidity.

Figure 9: (Micro)Strategy valuation and Bitcoin purchases (in $bn)



Source: Deutsche Bank Research, Bloomberg Finance LP. Data as of September 19 2025.

2.1 Characteristics

Core features

Like gold, Bitcoin has a fixed supply (capped at 21mn). This creates disinflationary benefits, meaning that Bitcoin's value tends to not erode compared to fiat currencies, which lose purchasing power over time due to inflation.

Bitcoin is also independent from any government, which some argue could make it attractive to monetary authorities as a diversification tool. During a period of US dollar softness, there is ongoing debate about whether central banks should broaden the composition of their reserves. In this context, Bitcoin could serve as an additional store of value. Some policymakers believe that if Bitcoin's price were to appreciate significantly, it might bolster public finances and help offset national debt. For example, US Senator Cynthia Lummis, a leading crypto advocate behind the BITCOIN Act of 2025, has suggested that a Bitcoin reserve has the potential to reduce the US $36trn debt by half over the next 20 years.[25]

Another key feature of Bitcoin is its portability and accessibility. If one were to store either 0.001 BTC or 10,000,000 BTC, the cost would be the same: almost zero. This makes a Bitcoin reserve valuable during times of conflict compared to gold, as moving tonnes of gold out of an invaded country would be very difficult and costly. To put this into perspective, the Bank of England charges external central banks 3.5 pence per night for storing one gold bar, so the cost of storing 400,000 bars for a year would equal ~£5,110,000 in staff, security, maintenance and more.[26]

Market cap: Peaked at over $2.3trn

Bitcoin is increasingly being accepted and legitimised by institutions, governments, and corporates. The SEC's crucial greenlight of spot Bitcoin ETFs in January 2024 has helped the crypto move toward becoming a legitimate asset class, although it still has a way to go.

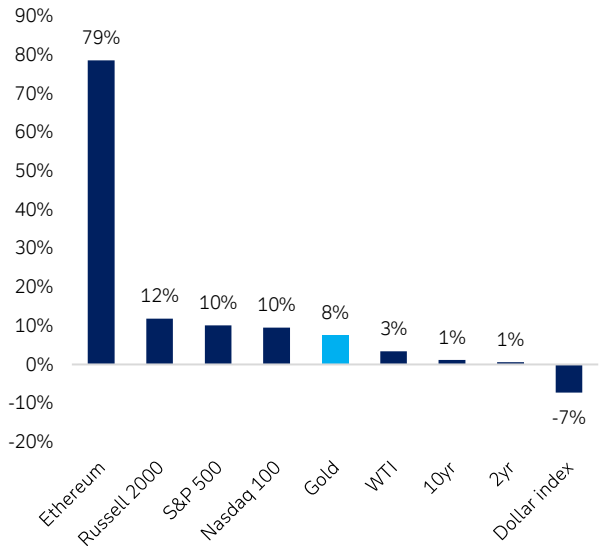
Bitcoin also has the potential to provide both an investment and a consumer-good value. As such, like gold, Bitcoin's long-term performance may also be supported by income growth. This explains why when equities rally strongly, their correlation to Bitcoin can rise.

[25] Senator Lummis Says Trump Supports Her BITCOIN Act That Could Erase U.S. Debt | Nasdaq
[26] https://stonexbullion.com/en/blog/bank-of-england-gold-reserves/

Diversification and low correlation with traditional assets

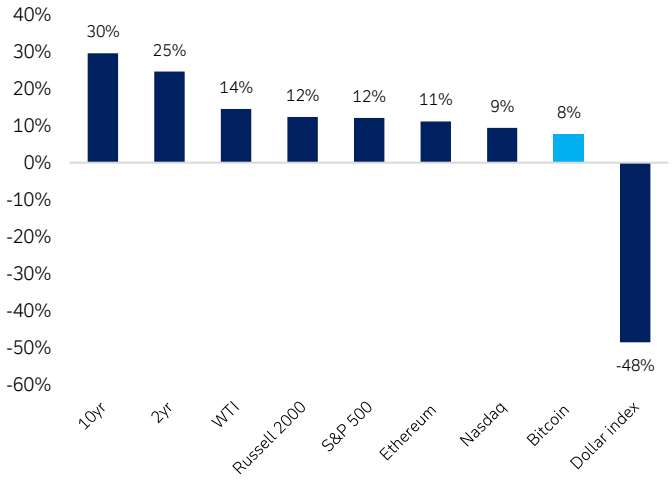
Bitcoin has a low correlation with other asset classes, suggesting it can provide diversification benefits. A 2023 Fed study revealed that Bitcoin's price is unrelated to all types of macroeconomic shifts except those related to inflation.[27] The case for Bitcoin as a reserve asset may be stronger for emerging markets, as studies show that Bitcoin can help holders circumvent capital controls in countries such as Argentina, Egypt and Nigeria.[28] Bitcoin is increasingly seen as a workable alternative to relatively unstable local currencies.

Figure 10: Bitcoin correlation since 2011



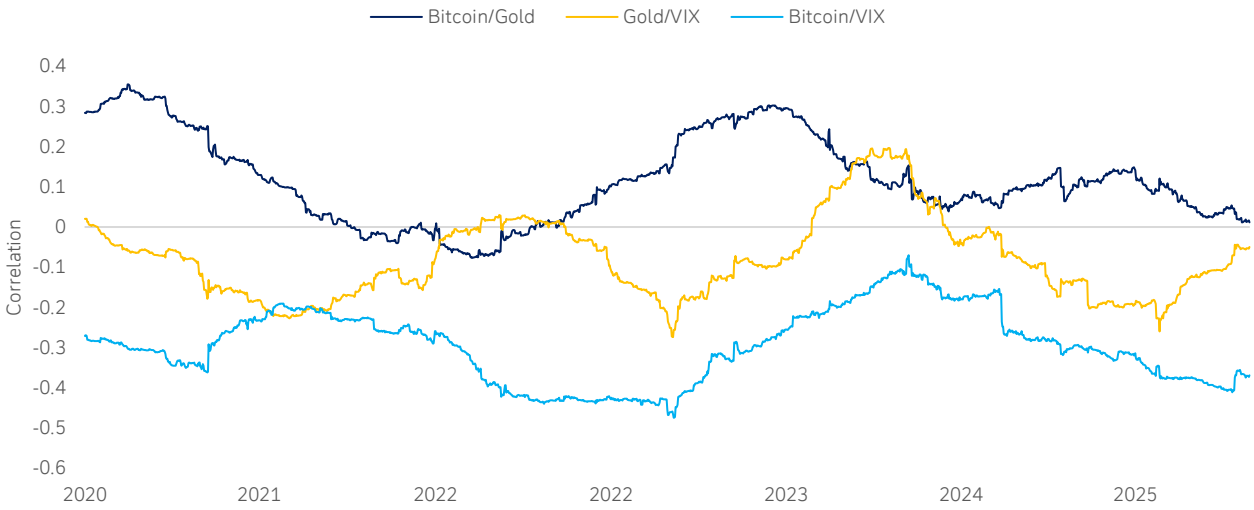
Source: Deutsche Bank Research, Bloomberg Finance LP. Data as of September 19 2025.

Figure 11: Gold correlation since 2011



Source: Deutsche Bank Research, Bloomberg Finance LP. Data as of September 19 2025.

Figure 12: Gold, Bitcoin and VIX correlation analysis



Source: Deutsche Bank Research, Bloomberg Finance LP. Data as of September 19 2025.

Wishful thinking, i.e., the "Tinkerbell effect"

Bitcoin valuations are partly propelled by wishful thinking, or as we call it, the "Tinkerbell effect" (see here). Essentially, Bitcoin's success is largely based on

[27] https://www.newyorkfed.org/research/staff_reports/sr1052
[28] Graf von Luckner, C. M., Koepke, R., & Sgherri, S. (2024). Crypto as a Marketplace for Capital Flight. *IMF Working Papers*, *2024*(133), A001. Retrieved Aug 28, 2025, from https://doi.org/10.5089/9798400279348.001.A001

the economic idea that the more people believe in something, the likelier it is to happen. Although markets have been engaging with Bitcoin for the past few years, the recent combination of macroeconomic and regulatory developments emphasizes the question of whether the Tinkerbell effect can become a self-fulfilling prophecy. This is illustrated in the relationship between volume and return: whenever there is a spike in volume, the price of Bitcoin tends to increase.

2.2 Real cases of early Bitcoin inclusion on balance sheets

In 2021, El Salvador became the first country to adopt Bitcoin as legal tender. As of April 2025, the country held 6,246 BTC worth $705mn. Kazakhstan recently announced that it is considering investing its gold and foreign currency reserves into Bitcoin and that it will move forward with a state Bitcoin and crypto reserve. Ukraine is also working to establish a national strategic Bitcoin reserve with a draft bill in parliament.[29] Since the start of the war, Kyiv has amassed 46,351 BTC.[30]

Less widely known is a special administrative region in Bhutan, which announced plans in January to formally adopt digital assets including Bitcoin, Ethereum and BNB tokens as part of its strategic reserves. The country holds 10,565 BTC and recently cashed in over $59mn as it sold some of its coins amidst the Bitcoin rally in July. The US, China and UK hold 198,012, 194,000 and 61,245 coins respectively, seized through criminal investigations.[31] El Salvador and Bhutan acquired their Bitcoins through mining, with the latter using hydropower to acquire new BTC. Bhutan's case shows that a country with ample energy resources but low manufacturing capacity and high dependency on imports can mine Bitcoin and increase its reserves.

2.3 Case Study: A small step for the US, a giant leap for Bitcoin

The US plan for a Bitcoin reserve warrants a closer analysis, given its potential to make the US the world's largest sovereign Bitcoin holder, and its success might prompt other countries to accelerate their own Bitcoin reserve adoption.

Under Trump's executive order, the reserve will contain over 207,000 BTC seized by the US in criminal and civil actions. Trump's order also authorises the Treasury and Commerce Secretaries to devise "budget-neutral" plans for acquiring additional Bitcoin, meaning that recommendations will be accepted only if they exclude new taxes or spending. In supporting legislation announced on March 11 (BITCOIN Act of 2025), the government also proposed a 1mn-unit Bitcoin purchase programme to acquire a total stake of ~5% of Bitcoin supply. The BITCOIN Act also mandates a 20-year minimum holding period for government-held Bitcoins before they can be sold. Trump has reportedly endorsed the Act, even though it contradicts his order that no government-held Bitcoin should be sold.

According to White House Executive Director for Digital Assets Bo Hines, one of the proposals for Bitcoin buying involves using the revenue from tariffs to fund the government's Bitcoin purchases.[32] Another path suggested via the BITCOIN Act proposes that Federal Reserve banks tender all outstanding gold certificates to the Treasury, which would then re-issue the certificates to reflect the gold's fair

[29] Ukraine plans to create national Bitcoin reserve
[30] https://bitbo.io/treasuries/ukraine/#:~:text=Ukraine%20owns%2046%2C351%20bitcoins%20as%20of%20De.
[31] China - Bitcoin Holdings & Analysis
[32] President Trump Executive Director Says U.S. Could Use Tariff Revenue To Build Strategic Bitcoin Reserve

market value. Funds remitted from this revaluation would then be directed to the Bitcoin Purchase Program.

The US Bitcoin Reserve has garnered some criticism for posing potential conflicts of interest with the Trump administration. For one, the Bitcoin reserve will be held in the US Treasury rather than in the Federal Reserve and is therefore subject to the control of the administration. Secondly, Trump's dealings through his stake in World Liberty Financial (which debuted its own stablecoin in March) and launch of his own $TRUMP coin in January have sparked public criticism. (The Trump family-owned media business also reported in May that it was raising $2.5bn from investors to create a Bitcoin reserve[33].) On March 13, the late Democratic Congressman Gerry Connolly wrote to Treasury Secretary Scott Bessent, stating that the reserve constitutes "unsound fiscal policy" that offers "no discernible benefit" to Americans, instead acting as a "get rich quick scheme" for Trump.[34] Senator Lummis told the New York Times that Trump's business "does give me pause because it complicates our work here."[35]

Lastly, Trump has also announced plans for a separate fund containing cryptocurrencies (not yet specified) obtained through forfeitures. With any benefits of establishing a second crypto reserve less clear, both reserve plans have faced criticism for being purely marketing tools rather than serving a valuable purpose. Indeed, Bitcoin fell 3.6% after the executive order was made public, its price steadily declining from $109,000 back to $77,000 levels by April as markets grew increasingly dissatisfied by the lack of clarity regarding Trump's announcement.

While plans for a sovereign Bitcoin Reserve is still underway, earlier this month, the US House of Representatives advanced a bill that would give the federal government 90 days to assess the feasibility of establishing both the reserve and digital asset stockpile, including how bitcoin would appear on the federal government's balance sheet.[36]

Meanwhile, state-level adoption of bitcoin reserves is already underway.[37] As of August 2025, Texas, Arizona, and New Hampshire have already passed laws to establish a public Bitcoin reserve. Notably, Texas authorities will actively fund the reserve, drawing $10mn from the state budget to purchase Bitcoin.

2.4 Bitcoin risks

Despite the similarities between Bitcoin and gold, critics have highlighted several negative factors against Bitcoin's case as reserve asset.

The primary argument is that Bitcoin is too volatile for its value to rise in the long term. Since the crypto first gained traction in the 2010s, it has seen huge upswings that were later associated with significant drawdowns.[38] These drawdowns have been frequent: 19 episodes of more than 20% drawdown with an average magnitude of 44% and lasting 123 days (see Bitcoin: Lessons From its Biggest Rallies). Because of this, Bitcoin still struggles to advance into payments for goods or services (we estimate less than 30% of transactional activity is accounted for), and 44% of those surveyed in the US still cite cryptocurrency

[33] https://www.reuters.com/business/trump-media-raise-25-billion-fund-bitcoin-treasury-2025-05-27/
[34] Ranking Member Connolly Urges Treasury to Cease Plans to Establish Strategic Cryptocurrency Reserve, Trump's New Get Rich Quick Scheme | The Committee on Oversight and Accountability Democrats
[35] Auction to Dine With Trump Creates Foreign Influence Opportunity - The New York Times
[36] Text - H.R.5166 - 119th Congress (2025-2026): Financial Services and General Government Appropriations Act, 2026 | Congress.gov | Library of Congress
[37] Arizona Joins New Hampshire in Launching Bitcoin Reserve
[38] Future Payments: Bitcoin: Lessons From its Biggest Rallies - Deutsche Bank Research

being too risky as the main barrier preventing its wider use.[39] Indeed, Bitcoin has a stronger correlation with small-cap equities, furthering the argument that it is a speculative "risk-on" asset.

Secondly, Bitcoin still suffers from cyberattacks. In 2024, stolen crypto funds rose 21% year-on-year to $2.2bn, with Japanese cryptocurrency exchange DMM Bitcoin losing 4,502.9 BTC (worth $305mn) in May 2024.[40] While nowhere near 2021 ($3.3bn) and 2022 ($3.7bn) levels, 2024 marked another year of persistent cyberattacks, underscoring the need for stronger crypto security. This past May, Coinbase reported a $180mn-400mn forecast hit from a cyberattack.[41]

Bitcoin critics also say it is an illiquid asset, compared to gold and other commodities. To gain access to deeper markets, Bitcoin will likely need to see a sustainable run rather than the booms and busts that have long been associated with its price history. Indeed, that pattern may be changing. According to Kaiko Research, Bitcoin liquidity on US-based exchanges reached an all-time high of $290mn in May, adding to a steady rise to 1% market depth since the start of 2025.[42]

In addition, because Bitcoin is unlike Stablecoins (see our recent chartbook), which are largely pegged to the USD, critics argue that it could pose a threat to USD power. In April, BlackRock CEO Larry Fink cautioned the US from prioritising Bitcoin, saying that with confidence in US treasuries waning, investors may turn to decentralised currencies such as Bitcoin instead.[43]

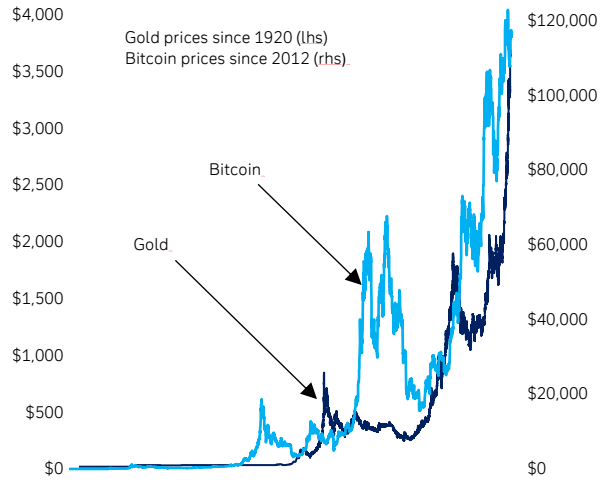
Lastly, some argue that Bitcoin has no intrinsic properties that makes it a hedge against market volatility.

Consequently, Bitcoin continues to be regarded principally as a speculative investment rather than as a store of value. The Swiss, German and European central banks have rejected the idea of a Bitcoin reserve this year. In December 2024, Federal Reserve Chair Jay Powell also shut down prospects of a US Central Bank Bitcoin Reserve, saying that the bank abides by the Federal Reserve Act and therefore is "not allowed to own Bitcoin."

[39] DB Data Insights latest research April 2025.
[40] $2.2 Billion Stolen in Crypto in 2024 but Hacked Volumes Stagnate
[41] Coinbase warns of up to $400 million hit from cyberattack | Reuters
[42] Kaiko research.
[43] Larry Fink letter says Bitcoin could replace U.S. dollar as the world's reserve currency because of national debt | Fortune

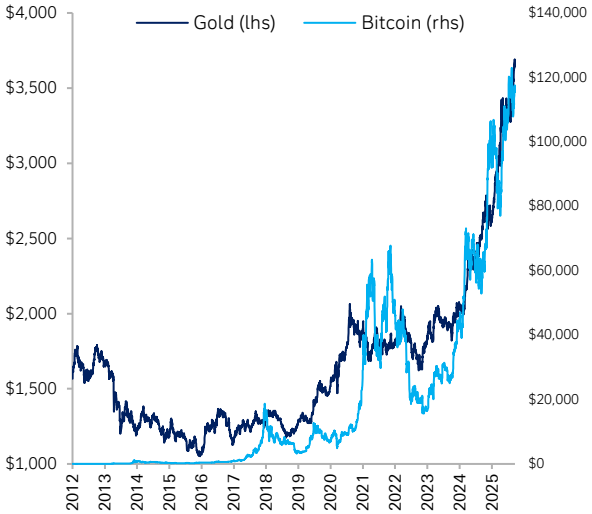
Conclusion: What would make Bitcoin a reserve asset? Getting there...

Figure 13: Gold vs. Bitcoin performance since inception



Source: Deutsche Bank Research, Bloomberg Finance LP. Data as of September 19 2025.

Figure 14: Gold vs. Bitcoin performance (in $)



Source: Deutsche Bank Research, Bloomberg Finance LP. Data as of September 19 2025.

Ultimately, Bitcoin and gold will continue to co-exist in the medium term, with gold maintaining its lead in official reserves and Bitcoin expanding in private and alternative reserves. The important question is how much longer gold retains its first-class status as authorities seek alternative currencies to shore up their reserves. The USD remains the No. 1 currency in central bank reserves (57%) but there are signs that countries are seeking to diversify. For example, China's holdings of US treasuries fell by $57bn to $759bn in 2024. Additionally, at a time when crypto legislation and innovation is accelerating in the country where it matters most, Bitcoin seems to be on its way towards mass adoption. By 2030 we predict that Bitcoin will join gold in many central banks' official reserve balance sheets. The following five takeaways support our thesis:

1. Bitcoin and gold are complementary diversifications to central bank portfolios. As we have underlined, Bitcoin and gold are deemed complementary alternatives to traditional safe-haven reserves due to their (i) **low correlation** with other asset classes, (ii) relatively **scarce supply,** and (iii) use as a **hedge against inflation** and **geopolitical volatility.**

2. Bitcoin's volatility should decline. Crucially, Bitcoin still lacks key components of a reserve asset: trust and transparency. However, as history has shown, during the early stages of its adoption gold was also prone to price sensitivity, and gold's volatility has declined over time. With regulatory efforts accelerating – from the US to MICA in the EU and the FCA's crypto roadmap in the UK – we expect Bitcoin's volatility to decline as more transactions are conducted, ensuring deeper liquidity in the markets. Indeed, Bitcoin's volatility dropped to historic lows in August, with its 30-day volatility declining to 23% at a time that Bitcoin's price surpassed a record high above $123,500 on August 15. This combination suggests we may be witnessing the start of a gradual decoupling between Bitcoin's spot prices and volatility as the crypto's integration into portfolios is maturing. It could signal a more sustainable trend beyond previous instances of short-term market speculation.

3. Neither Bitcoin nor gold is likely to replace the US dollar as the primary reserve asset or means of payment. During the 1930s and 1970s, the US led successful measures to reduce the international financial system's reliance on gold when authorities perceived gold's threats to the US dollar. We believe that countries today will also ensure that Bitcoin and other digital assets do not threaten the sovereignty of their currencies.

4. This time is not different. History appears to be repeating itself. Like Bitcoin, gold was once subject to skepticism, suspicion and demand speculation. Like Bitcoin, gold has seen periodic episodes of volatility; its performance has often been marked by the slightest of shifts in public perception. We believe that Bitcoin adoption will continue, as regulatory developments, macroeconomic conditions and – above all – time should enable the public to increasingly embrace Bitcoin as a store of value.

5. So long as we are human, Bitcoin and other alternative assets will likely continue to compete for our attention. The history of financial markets suggests that human nature leads to a desire to break away from traditional assets. The US-led adoption of Bitcoin can facilitate a longer-term transition whereby Bitcoin and other cryptocurrencies evolve from a speculative investment into a legitimised, key component of global finance.

Appendix - OLS Regression[44]

To test our above arguments for Bitcoin as a reserve asset, we ran an OLS regression model using Bitcoin returns as a dependent variable. For our independent variables, we used S&P 500 returns, DXY returns, WTI Oil returns, gold returns, and the change in 10yr Treasury, 1yr inflation swaps, 2yr Sofr, CDX, plus Bitcoin traded volumes. The period investigated was weekly from Jan 1, 2015, to May 30, 2025.

[44] Turning to diagnostics, the Omnibus and Jarque-Bera p-value is less than 0.05, which is concerning as it means that the residuals are not normally distributed and can have an impact on the coefficient p-values. The Durbin-Watson test for autocorrelation suggests a slight negative correlation of residuals, and the 0.073 skewness data suggests that data is symmetrically distributed around the mean. The high Kurtosis result suggests that our model is likely sensitive to outliers and that the residuals are more concentrated around the mean, compared to a normal distribution. The conditional number is also very high, suggesting that the model could have multicollinearity issues, as some variables are correlated with each other. This was expected as our economic indicators are correlated and move in line with market fluctuations and sentiment.

Table 1: OLS Regression Results

OLS Regression Results

Dep. Variable:	R_Bitcoin	R-squared:	0.415
Model:	OLS	Adj. R-squared:	0.404
Method:	Least Squares	F-statistic:	37.72
Date:	Thu, 19 Jun 2025	Prob (F-statistic):	8.06e-56
Time:	09:26:51	Log-Likelihood:	-141.17
No. Observations:	543	AIC:	304.3
Df Residuals:	532	BIC:	351.6
Df Model:	10		
Covariance Type:	nonrobust		

	coef	std err	t	P>|t|	[0.025	0.975]
Intercept	-0.0151	0.051	-0.296	0.767	-0.116	0.085
Delta_VIX	0.0134	0.004	3.785	0.000	0.006	0.020
R_Equity	4.1277	0.359	11.495	0.000	3.422	4.833
Delta_Yield_10Y	-0.1276	0.072	-1.765	0.078	-0.270	0.014
Log_Volume_Bitcoin	0.0017	0.004	0.375	0.708	-0.007	0.010
R_DXY	-3.5837	0.577	-6.208	0.000	-4.718	-2.450
R_Oil	-0.0424	0.147	-0.287	0.774	-0.332	0.247
R_Gold	0.0513	0.272	0.189	0.850	-0.483	0.585
Delta_1Y_Inflation	-0.0767	0.035	-2.209	0.028	-0.145	-0.009
Delta_CDX	-0.0007	0.002	-0.334	0.738	-0.005	0.004
Delta_2Y	0.1486	0.058	2.565	0.011	0.035	0.262

Omnibus:	55.195	Durbin-Watson:	2.830
Prob(Omnibus):	0.000	Jarque-Bera (JB):	339.371
Skew:	0.073	Prob(JB):	2.03e-74
Kurtosis:	6.870	Cond. No.	597.

Source: Deutsche Bank Research, Bloomberg Finance LP.

The model explains 41.5% of the variance in the dependent variable, per the R^2 result.

Our model found that Bitcoin returns are highly positively correlated with equity returns at a statistically significant level, and highly negatively correlated with the value of USD. We found no significant relation between Bitcoin performance and gold, oil, 10yr Treasury, Bitcoin volume or CDX. However, we found a significant small positive relationship between the 2yr SOFR rate and volatility. Inflation, measured using 1yr inflation swaps, has a significant negative coefficient, indicating the non-inflationary characteristic of the cryptocurrency.

Appendix 1

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