

POLICY BRIEF

Digital Gold

Evaluating a Strategic Bitcoin Reserve for the United States



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About the Bitcoin Policy Institute

The Bitcoin Policy Institute (BPI) is a non-partisan, non-profit think tank. It is dedicated to educating policymakers and the public on Bitcoin and disruptive digital technologies, providing research-based insights to inform sound policy in the United States.

The BPI team comprises experts in economics, law, philosophy, energy, and environmental science, working together to explore the impacts of new technology on existing US public policy interests. The views expressed in this publication do not necessarily reflect the views of Bitcoin Policy Institute management or its affiliated scholars.



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Table of Contents

Executive Summary	1
Overview	2
Strategic Imperative	2
Relationship with U.S. Interests	2
Strategic Bitcoin Reserve – Policy Framework	3
Objections and Replies	4
Conclusion and Recommendations	4
1 The Strategic Imperative: Why Bitcoin Matters	5
1.1 Introduction	5
1.2 Understanding Bitcoin: Origin, Functionality, and Key Features	6
1.3 Bitcoin’s Market Evolution: From Niche Technology to Global Asset	7
2 Strategic Relationship between U.S. Government Interests and Bitcoin	9
2.1 Technological and Economic Leadership	9
2.2 National Security and Geopolitics	11
2.3 Grid Stability, Climate Goals, and Energy Development	16
2.4 Human Rights and Financial Inclusion	19
3 Strategic Bitcoin Reserve – A Policy Framework	22
3.1 Overview	22
3.2 Why Does the U.S. Government Have National Reserves	23
3.2.1 Market Buffers/Economic Resilience	23
3.2.2 Emergency Preparedness	24
3.2.3 Geopolitical Leverage	24
3.2.4 Promoting Domestic Industry	25
3.2.5 Historical Reasons	26

3.3	Strategic Objectives for a Bitcoin Reserve	26
3.3.1	Reinforcing American Monetary Dominance	28
3.3.2	Enhancing Financial System Credibility	29
3.3.3	Countering Geopolitical Adversaries	30
3.3.4	Building Long-Term Economic Resilience	31
3.4	Implementation Considerations	33
3.4.1	Acquisition Methods	34
3.4.2	Storage and Security Protocols	35
3.4.3	Legal and Regulatory Framework.....	36
3.4.4	Size and Accumulation Strategy	36
3.4.5	Integration with Existing Financial Systems	37
4	Objections and Replies	38
4.1	An SBR would expose the U.S. Government to vulnerability by triggering a loss of confidence in the sustainability of the dollar system.	38
4.2	An SBR would enrich cybercriminals, terrorists, and Bitcoin whales while undermining the integrity of the global financial system.	39
4.3	An SBR would transform the U.S. government into a proprietary hedge fund, unduly risking public money and encouraging speculation.	39
4.4	An SBR would encourage more environmentally harmful mining and run counter to U.S. climate policy objectives.	40
4.5	An SBR would prematurely pick one cryptocurrency as a ‘winner.’	41
4.6	An SBR would require the U.S. government to protect against market manipulation and potentially lose out to other nations or bad actors.	42
4.7	Bitcoin is too volatile for a national reserve asset.	42
5	Conclusions and Recommendations	43
	Endnotes	44

Executive Summary

Bitcoin's emergence as a decentralized digital asset has reshaped the global financial landscape, and its potential as a national reserve asset is now being seriously considered by policymakers. From its inception in 2008, Bitcoin has evolved from an experimental technology into a globally recognized digital commodity with growing implications for economic strategy, geopolitical power, and financial innovation.

The maturity of Bitcoin presents the United States with a unique opportunity to reinforce its economic leadership, accelerate its energy dominance, counter its rivals, and promote core democratic values in the digital age. This report examines the potential for establishing a strategic Bitcoin reserve (SBR), weighing its benefits against potential risks and implementation considerations.

As the U.S. navigates the complexities of 21st-century digital acceleration and strategic competition, establishing a strategic Bitcoin reserve represents a forward-thinking move that could advance U.S. interests across four key domains:

- 1. Economic and Monetary Stability:** An SBR could provide option value against monetary devaluation and debt instability, diversifying the nation's reserves and strengthening the credibility of the U.S. fiscal position, financial system, and global influence. Bitcoin's fixed supply and decentralized nature offer a unique complement to traditional monetary reserve assets such as gold and Treasury securities.
- 2. Geopolitical Competition:** By embracing Bitcoin, the U.S. could gain a strategic advantage over adversaries exploring alternative digital currencies and financial systems to undercut dollar dominance and bypass dollar sanctions. At the same time, an SBR could reinforce U.S. influence on emerging global financial standards for digital assets that align with our democratic values and counter U.S. adversaries' digital authoritarianism.
- 3. Energy and Climate:** Contrary to common criticisms, Bitcoin mining could be leveraged to drive investment in renewable energy and support grid stability, and thus help achieve U.S. climate and energy security goals.
- 4. Financial Inclusion and Human Rights:** Bitcoin's decentralized nature also aligns with core U.S. values of individual freedom and financial inclusion, offering potential benefits both domestically for underbanked populations and globally for people facing political or economic instability.

Implementation of an SBR would require careful planning, including the development of a comprehensive legal and regulatory framework, a phased acquisition strategy, and robust security protocols.

While challenges and risks exist – including price volatility, potential market manipulation, and the need for public education – the strategic benefits of an SBR likely outweigh these concerns. As the global financial landscape continues to evolve, Bitcoin offers the U.S. a powerful tool to maintain its economic leadership and promote its values on the world stage.

Overview

Bitcoin's evolution from an experimental technology to a globally recognized asset has thrust it into the policy spotlight. This report examines the potential of a U.S. Strategic Bitcoin Reserve (SBR), analyzing its implications for economic stability, national security, technological leadership, and the promotion of democratic values. The following summarizes the organization of core sections of this report and our key findings.

Strategic Imperative

Bitcoin's decentralized nature, cryptographic security, and fixed supply set it apart from traditional reserve assets. As of 2024, Bitcoin has achieved significant milestones in adoption, enhancing its status within the financial sector.

Bitcoin has matured as a neutral reserve asset as the global financial system faces growing systemic risk, geoeconomic fragmentation, and an unsustainable growth in debt. Meanwhile, adversarial nations are stockpiling gold

while exploring digital currencies and settlement systems to resist U.S. financial hegemony. While U.S. adversaries acquire traditional gold from a position of relative financial weakness, the U.S. can countermove by stockpiling digital gold in a way that amplifies its incumbent financial strength.

Relationship with U.S. Interests

Bitcoin offers several strategic advantages for the United States:

- 1. Technological and Economic Strength:** The U.S. can maintain and extend its global leadership in technological innovation and financial services, attract capital, and strengthen its position as the dominant global financial hub while ensuring continued dollar dominance and debt demand via stablecoins.
- 2. National Security and Geopolitics:** Bitcoin provides a counterbalance to adversaries' efforts to undermine U.S. monetary dominance, offering

new tools for economic statecraft while the global financial system geopolitically fragments.

- 3. Energy and Climate Goals:** Bitcoin mining's unique electricity demand characteristics can contribute to grid stability and incentivize renewable energy development, aligning with U.S. climate objectives.
- 4. Human Rights and Financial Inclusion:** Bitcoin's decentralized nature resonates with core U.S. values, promoting financial freedom domestically and supporting democratic principles globally.

Strategic Bitcoin Reserve – Policy Framework

An SBR could leverage Bitcoin's unique properties to serve national interests, complementing existing strategic reserves. This report provides analysis and considerations regarding:

- 1 SBR Strategic Objectives:**
 - 1. Reinforce American monetary dominance:** By adopting Bitcoin as a strategic reserve asset, the U.S. can signal its adaptability to emerging financial technologies, potentially cementing its leadership and global influence before autocrats and entrepôts in the Middle East and Asia seize the initiative.

- 2. Enhance financial system credibility:** With the long-run stability of the U.S. financial system strained by growing debts and geopolitical instability, integrating Bitcoin into national reserves could serve as a hedge against systemic risk in the Treasury market and fears of currency devaluation in a crisis.
- 3. Counter geopolitical adversaries:** A Strategic Bitcoin Reserve could help the U.S. reinforce Bitcoin and dollar-based stablecoins emerging as a counter to adversary digital currency and clearing/settlement systems that bypass the dollar network, while promoting open financial systems in the Global South that resist autocratic control and exploitation.
- 4. Build long-term economic resilience:** As concerns about inflation and fiscal sustainability grow, an SBR can provide option value to reduce these risks, giving the U.S. government financial flexibility and a source of potential future revenue to pay down debt through asset appreciation.

- 2 Implementation Considerations:**
 - 1. Acquisition Methods**
 - 2. Storage and Security Procedures**
 - 3. Legal and Regulatory Frameworks**
 - 4. Size and Accumulation Strategy**
 - 5. Integration with Existing Financial Systems**

Objections and Replies

This section identifies the most salient criticisms of an SBR and provides responses to each.

- 1. Impact on dollar confidence:**
An SBR would diversify, not replace, existing reserves.
- 2. Association with illicit activities:**
Proper regulation can mitigate risks while leveraging Bitcoin's transparency.
- 3. Government speculation:** An SBR represents a strategic holding, not a speculative investment.
- 4. Environmental impact:** Bitcoin can incentivize and finance renewable energy development.
- 5. Premature technology selection:**
Bitcoin's track record distinguishes it from other digital assets.
- 6. Market manipulation vulnerability:**
Transparent policies and gradual implementation can address this concern.
- 7. Volatility concerns:** Long-term trends support Bitcoin's value proposition despite short-term fluctuations.

Conclusion and Recommendations

Establishing an SBR represents a forward-thinking approach to the challenges and opportunities of the digital age. The time has come for the United States to consider Bitcoin not just as an asset, but as a pillar of the nation's strategic resilience.

We recommend that U.S. policymakers:

- 1.** Develop a comprehensive legal and regulatory framework for an SBR.
 - 2.** Implement a phased, transparent acquisition strategy to minimize market impact.
 - 3.** Establish robust security protocols and governance structures.
 - 4.** Integrate Bitcoin mining strategies with renewable energy initiatives.
 - 5.** Conduct ongoing research to adapt the SBR strategy as the digital asset landscape evolves.
-

1

The Strategic Imperative: Why Bitcoin Matters

1.1 Introduction

Bitcoin's emergence in 2008 marked a significant development in digital finance and monetary systems. Created by an entity using the pseudonym Satoshi Nakamoto, Bitcoin introduced a novel concept of decentralized digital currency at a time when the global financial system was experiencing significant instability. Since its inception, Bitcoin has evolved from an experimental technology to a globally recognized asset, prompting serious consideration of its potential role in national economic strategies.

The decision to establish a Strategic Bitcoin Reserve would represent a major shift in how the U.S. approaches digital assets.

Yet, as we enter a perilous era defined by geopolitical, economic, social, and technological disruption, the promise of Bitcoin as a novel anchor for strategic stability and strength must be explored seriously.

This report provides a comprehensive framework for evaluating a U.S. SBR, one that will inform policymakers and spark a dialogue about the role of Bitcoin in America's financial future. The decisions made today regarding Bitcoin may well shape the economic and strategic landscape for generations.

1.2 Understanding Bitcoin: Origin, Functionality, and Key Features

Bitcoin was conceived as a revolutionary approach to digital currency—one that could function without the need for traditional financial intermediaries or governmental management. It operates on a decentralized network of computers distributed across the globe. This network collectively maintains and secures a public ledger of all transactions, known as the blockchain. The integrity and security of this ledger are ensured through a consensus mechanism called Proof of Work (PoW).

This Proof of Work process, often referred to as mining, creates new bitcoins and is integral to the system's security and functionality. Bitcoin miners, utilizing specialized high-performance computers, compete to solve a particular mathematical problem. This competition serves a dual purpose: it validates new transactions and introduces new bitcoins into circulation. The difficulty of these problems is dynamically adjusted every two weeks to maintain a consistent rate of bitcoin issuance, regardless of fluctuations in the network's total computational power.

This mining process can be likened to a lottery, in which the probability of success is proportional to the computational power employed. As the value of Bitcoin has increased over time, mining has evolved into a resource-intensive industry, characterized by substantial energy consumption and the use of specialized hardware. Given the zero-sum and globally competitive nature of this activity, miners are incentivized to seek out the cheapest sources of energy.

Several key features distinguish Bitcoin from other digital assets and cryptocurrency systems:

- 1. Fixed Supply:** The total number of bitcoins that will ever exist is capped at 21 million.
- 2. Pre-programmed Issuance:** The rate at which new bitcoins are created is predetermined by the mining protocol. A halving event, which reduces the issuance rate by 50%, occurs approximately every four years.
- 3. Cryptographic Security:** Bitcoin employs verified cryptographic techniques to ensure the security of transactions and the integrity of the blockchain.
- 4. Pseudonymous Transactions:** While all transactions are recorded on the public blockchain, user identities are not directly linked to transactions, offering a degree of pseudonymity within a transparent system.

These features result in a digital asset system with several distinctive characteristics:

- Resistance to centralized control or manipulation;
- Prevention of double-spending without the need for a central authority;
- A predictable and unalterable supply schedule;
- Transparency and auditability of all transactions without intermediaries; and
- A security model that leverages the system's energy-intensive nature as a deterrent against attacks.

As we consider the prospect of a Strategic Bitcoin Reserve, it is crucial to understand these fundamental aspects of Bitcoin's design and functionality, and why it is **fundamentally unique and different from any other digital asset**.

1.3 Bitcoin's Market Evolution: From Niche Technology to Global Asset

The trajectory of Bitcoin's market development provides important context for understanding its economic significance. Bitcoin has undergone several distinct phases of adoption and market integration, each characterized by unique dynamics.

Niche Experiment: In its nascent stage (2009 - 2013), Bitcoin remained largely confined to a niche audience of technology enthusiasts and early adopters. This period was marked by limited public awareness and minimal institutional involvement, with Bitcoin primarily serving as an experimental technology rather than a widely recognized financial asset.

Widening Interest: Bitcoin's public profile underwent significant changes between 2013 and 2017. Increased media coverage and the emergence of a broader cryptocurrency ecosystem contributed to growing public awareness. This period also saw the first instances of significant price volatility, attracting the attention of both retail investors and financial analysts. But despite Bitcoin's growing public profile, mainstream financial institutions largely remained on the sidelines.

Mainstream Flirtation: Between 2017 and 2020, Bitcoin began to garner interest from traditional financial institutions. The introduction of Bitcoin futures contracts on established exchanges marked a significant step toward integration with mainstream financial markets. Still, widespread adoption had not yet materialized.

Pandemic Inflection: The COVID-19 pandemic in 2020 coincided with a pivotal moment in Bitcoin’s development. As governments and central banks implemented expansionary monetary policies to address economic challenges, Bitcoin’s institutional adoption surged and its price appreciated, reaching a then all-time high of nearly \$69,000 in November 2021.

Policymaker Attention: The collapse of major entities within the cryptocurrency ecosystem, notably the Terra/Luna project and the FTX exchange, led to significant market downturns during 2022 and 2023. This period was marked by intensified scrutiny from regulatory bodies and efforts by policymakers to grapple with the challenges of overseeing a rapidly evolving asset class.

Mainstream Acceptance:

The approval of Bitcoin Exchange Traded Funds (ETFs) by the U.S. Securities and Exchange Commission (SEC) in January 2024 represented a landmark development in Bitcoin’s integration with traditional financial markets. This regulatory decision provided a framework for mainstream investors to gain exposure to Bitcoin through familiar investment vehicles, broadening its accessibility and acceptance within conventional finance. Blackrock’s physical bitcoin ETF (IBIT) hit \$10bn assets under management (AUM) within 7 weeks of approval, the fastest ETF ever to reach that milestone. At this point, Bitcoin can no longer be viewed simply as an obscure experiment in digital currency.

Figure 1: Bitcoin has undergone a volatile but dramatic monetization over the last 15 years.



Image from: BlackRock. (2004). Bitcoin: A unique diversifier. BlackRock. <https://www.blackrock.com/us/financial-professionals/literature/whitepaper/bitcoin-a-unique-diversifier.pdf>

2

Strategic Relationship between U.S. Government Interests and Bitcoin

As discussed below, the emergence of Bitcoin as a decentralized digital currency and global financial network presents both opportunities and challenges for U.S. national interests.

2.1 Technological and Economic Leadership

Bitcoin offers a unique opportunity for the U.S. to reinforce and extend global leadership in technological innovation and financial services.

Fostering a supportive environment for Bitcoin in the U.S. could attract top talent and investment, fueling innovation and economic growth. As China has stepped back from Bitcoin mining and now treats the industry with hostility, the U.S. has solidified, and stands to maintain,

its lead in global hash power. The U.S. now has a plurality (~37%) of global hash rate, followed by China (21%), Kazakhstan (13%), Canada (6.5%) and Russia (4.7%).ⁱ Further, many African nations are looking to repurpose excess power generation (some even funded by Chinese BRI loans) for Bitcoin mining (including operations run by or with U.S. firms).

Bitcoin and dollar-based stablecoins have a mutually reinforcing and positive relationship with U.S. economic interests. No less an authority than the former Vice Chair for Supervision at the Federal Reserve Randal K. Quarles noted in 2021 that 'a global U.S. dollar stablecoin network could encourage use of

the dollar by making cross-border payments faster and cheaper, and it potentially could be deployed much faster and with fewer downsides than a CBDC'.ⁱⁱ **The strategic benefits the U.S. accrues from increased global dollarization via a Bitcoin-stablecoin synergy are highly significant.** Given that the global economy suffers from a chronic 'Eurodollar' shortage, stablecoins provide another rail to satisfy demand for dollars around the world, especially in places where access to the dollar system is constrained.

While 'crypto-Eurodollar' issuers must come under some form of regulatory framework and risk management supervision, stablecoin issuers are currently holding a large portion of their reserves in highly liquid, cash-equivalent instruments such as Treasury bills, just as money market funds do. As a result, **increased demand for dollar-based stablecoins will drive increased demand for U.S. debt.**

At a time in which foreign demand for U.S. debt is drying up, stablecoin growth is serving as another source of government financing, even as the Treasury increases issuance of bills. Note that while the foreign official sector is broadly trying to de-dollarize or

diversify their FX exposure on the margin, the populations in these countries often prefer dollars to local currencies.

The fact that ~99% of stablecoinsⁱⁱⁱ are dollar-denominated appears to demonstrate that, absent government forces, the high salability of the dollar will win against other currencies.^{iv} Thus, **even as some governments may seek to de-dollarize, stablecoins represent a way to maintain the reach of the dollar-system by going directly to individuals,** presenting a stable and accessible alternative to local currencies, unprotected property rights, and weak banking institutions. Further, countries often use capital controls to make it harder for their citizens to flee local currencies and access dollars. Stablecoins allow individuals, at least those with some technological skills, to circumvent such controls more easily.

Monetization of Bitcoin (alongside or outpacing gold), would also disproportionately benefit the U.S. (whose citizens and firms hold potentially a majority of all Bitcoin, and whose businesses and capital markets would grow in tandem). **That is, while China and Russia double-down on analog gold, the U.S. can countermove to digital gold.**

The U.S. has already shown it can leverage the nation's deep and liquid capital markets to strengthen its economic position through Bitcoin-related financial instruments like the ETF.

Facilitating the listing of Bitcoin-related companies and developing regulated Bitcoin-based financial products will further attract international capital, maintaining America's position as the global financial hub.

Further, the open-source nature of Bitcoin and the development of 'Layer 2' and 'side chain' technologies are driving innovation in payment systems, digital identity solutions, smart contract applications, and AI-agent-based financial activities. **Nurturing these innovations within our borders can help the U.S. maintain its technological edge. And exporting technological solutions globally will reinforce our soft power and economic influence.**

2.2 National Security and Geopolitics

Geopolitical competition in the 21st century is fundamentally a competition over and through global technology networks.

The U.S. has enjoyed decades of dominance over networks of trade, finance, critical technology supply

chains, and digital infrastructure. China, however, now is implementing a long-term strategy to displace, co-opt, and undermine U.S. power over these networks.

The competition with China will determine how the geopolitical order evolves during this decade. This escalating competition is a principal risk facing the U.S.'s global position, and humanity at large.

U.S. policymakers must analyze every aspect of this dynamic network power competition, hedge every downside scenario, and explore every possible advantage, even those, like Bitcoin, that at first blush might seem counterintuitive or even radical.

Intelligence collection on global communications,^v generation of suspicious activity reports on banking transactions,^{vi} and end-user inspections on semiconductor technology are all forms of surveillance power from which the U.S. derives immense geopolitical advantage.^{vii} More overtly, the U.S.'s ability to conduct global cyber operations, apply blocking financial sanctions, and restrict technology exports to adversary nations is a chokepoint power of increasing strategic importance. **Monitoring and controlling global networks is modern power.**

We see this strategic game (between the G7 and China and, to a lesser extent, Europe) over network influence playing out most visibly in the trade, critical technology, and telecommunications domains. For example, US and China trade competition,^{viii} semiconductor export controls,^{ix} sanctions on Chinese tech firms,^x and subsea cable rivalry,^{xi} have drawn much attention.

Another key locus of strategic network competition is the **dollar-based global monetary system** and its interrelated network of correspondent banking, shadow banking, cross-border payments systems, and sovereign balance sheets. While economists and policymakers are familiar with the macroeconomic implications of this system,^{xii} the fragility of this system (and its exploitation by a principal foreign adversary) is an underappreciated source of strategic vulnerability.

Digital networks are dynamic, self-healing systems; they respond to interruption by forging alternative paths. For example, the U.S. might be concerned that broad-scale financial sanctions (e.g., on Russia's FX reserves^{xiii}) and payment system exclusions (e.g., on Russian banks' SWIFT access^{xiv}) **could trigger changes to sovereign reserve**

manager behavior and stimulate alternative financial arrangements that result in a global structure in which its incumbent network power is attenuated.^{xv}

The short-term effect may be to impose higher costs and frictions on bad actors, but the long-term consequence may be that other network participants forge alternate arrangements that bypass the legacy (tightly surveilled and controllable) corresponding banking system. This effect may be amplified by network participants (namely China and its key Eurasian and Middle Eastern 'friends'^{xvi}) accelerating digital, cross-border clearing and settlement systems,^{xvii} while shifting the marginal unit of bilateral trade to non-dollar currencies^{xviii} and changing reserve strategies.^{xix}

These changes are occurring in the context of a geopolitical dynamic that is generating increasing stress across the three key pillars of the global system: the 'frenemy' relationship that was previously obtained between financial capital (dominated by the G7), energy/commodities (dominated by OPEC Plus), and goods production (dominated by China). Each leg of this tripartite order is undergoing significant stress, from G7 sanctions on Russia

Figure 2: A simplified view of the geoeconomic relationships between key power centers shows how sanctions, economic warfare, strategic capital flows, and technological ‘decoupling’ interact to place strain on the current global system.

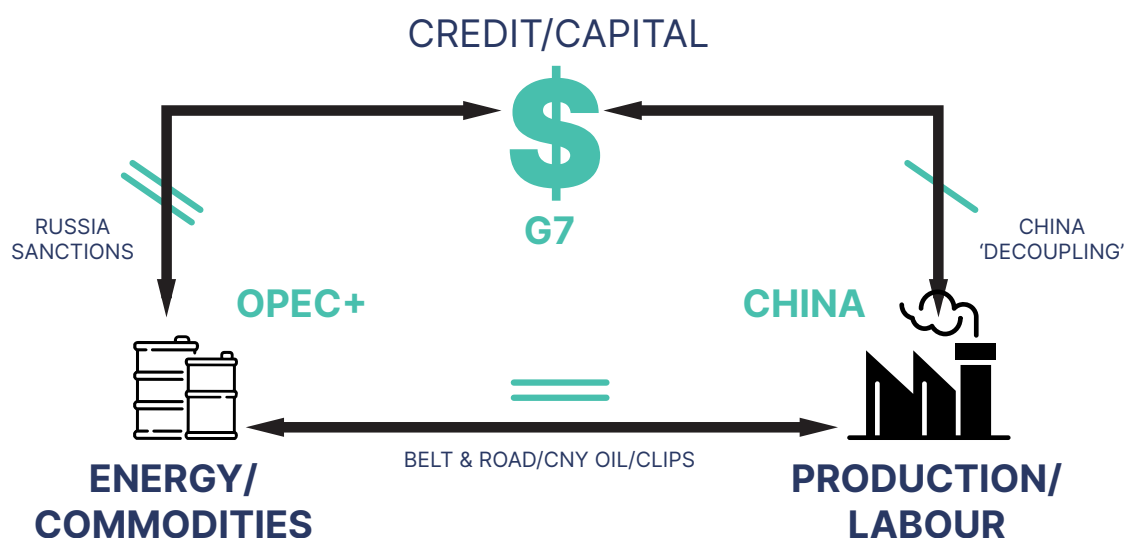


Image from: Pines, M. (2023). Great power competition network strategy. Bitcoin Policy Institute. https://cdn.prod.website-files.com/627aa615676bdd1d47ec97d4/651ad53f164bc8c400070add_Great%20Power%20Network%20Competition_Final.pdf

(and an attempted oil price cap), to tech controls and ‘decoupling’ of western supply chains in China, all while China and OPEC Plus build increasingly tight digital, economic, trade, military, and diplomatic relations. This is a recipe for global instability and presents an unprecedented challenge to the U.S.-led world order.

In this environment of strategic challenge, the U.S. is in a unique position to use Bitcoin’s emergence as a potential global reserve asset to its strategic advantage. China has exploited the dollar system to finance its Belt & Road Initiative and Digital Silk Road Initiatives while buying up strategic assets and corrupting western democracies.

As China attempts to construct alternative financial and digital networks, the U.S. can counter by embracing Bitcoin and dollar-based stablecoins. These instruments can help preserve American financial influence by satisfying global demand for dollar liquidity and providing a ‘crypto-eurodollar’ system that extends the reach of dollar-denominated transactions. Stablecoins, with a market cap exceeding \$170 billion,^{xx} already play a significant role in this regard.

Rather than reconstruct the complex, hierarchical network of correspondent banking relationships that took the West decades to develop for G7 fiat settlement,

Figure 3: The BRI and China's International Trade. The belt and road initiative is the centerpiece of China's geoeconomic influence and security strategy, which was largely financed by re-directing dollar surpluses accumulated from -China's structurally imbalanced trade with the west.

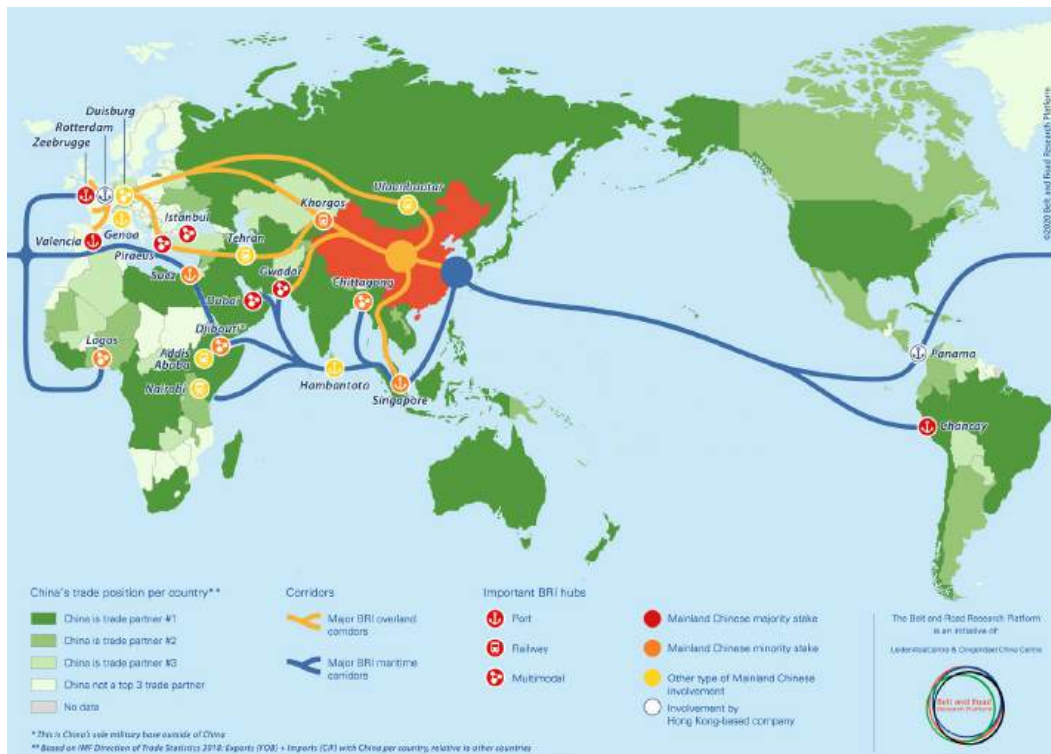


Image from: Clingendael Netherlands Institute of International Relations. (2022). The new map of the Belt and Road Initiative <https://www.clingendael.org/publication/new-map-belt-and-road-initiative>

China is leading efforts like Project mBridge (now rebranded BRICS Bridge) and expanding its Cross-Border Interbank Payment System (CIPS) to connect national banking systems.^{xxi} The potential of these non-western digital platforms to host real-time, peer-to-peer, cross-border payments and foreign exchange transactions on systems that are fully compliant and surveilled by these national authorities is very attractive to authoritarian-inclined governments that seek more control over their financial systems.

For China, scaling these non-dollar-based systems with its major commodity and trading partners is a desirable mechanism to bypass the need to go through dollar-dominated intermediate foreign exchange markets that its massive international trade activities. Currently, most foreign exchange transactions use the dollar as a bridge currency in each leg of the swap.

China has continued to expand its extension of CNY swap lines with more countries, opened its onshore markets via Stock

and Bond Connect, and further internationalized the Shanghai Gold Exchange to establish a weak quasi-peg between the yuan, oil, and gold. Cross-bridge CBDC arrangements would enable China and its partners to broaden and deepen these financial links and conduct more efficient currency swaps and financial settlement activities that bypass the dollar system. These are all elements of **China's deliberate 'Block, Build, Expand' strategy to block western financial coercion** (via independent, 'fail-over' monetary networks) and build RMB-based trading and settlement networks that improve the security of its critical

energy and commodity inputs (via close strategic and technical links with major trading partners).

This digital infrastructure lays the foundation for longer-term geoeconomic ambitions by Beijing to shift the denomination of (some of) its import bill from dollars to yuan. For example, paying just 10% of its commodity imports with yuan would free up ~\$100-150 billion per year of its USD liquidity. As part of an integrated diplomatic and technical development strategy, **China is constructing alternative financial and digital network rails that act as a 'systems bypass' to the incumbent western-dominated financial infrastructure.**

Figure 4: Project mBridge is a strategic effort to connect the Asian and Middle-Eastern economies via cross-bridged CBDCs.

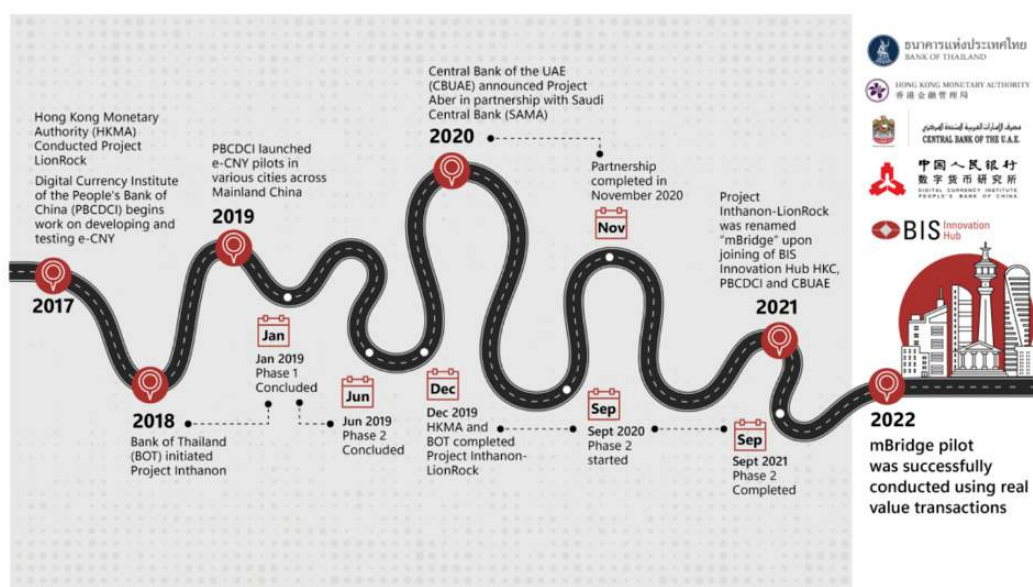


Image from: BIS Innovation Hub. (2022). Project mBridge Connecting economies through CBDC. <https://www.hkma.gov.hk/media/eng/doc/key-information/press-release/2022/20221026e3a1.pdf>

China is exporting (and finding strong demand for) a bundled techno-authoritarian ‘stack’ consisting of dedicated fiber-optic cable networks, cloud hosting, ‘cybersecurity’ services, 5G/Internet of Things digital infrastructure, surveillance equipment, cross-bridged CBDC platforms (built to integrate with the China’s Digital Currency/Electronic Payment (DC/EP)^{xxii} system), and sophisticated AI monitoring software, alongside onsite training, technical assistance, and customer support for would-be autocrats across the globe.

Bitcoin and stablecoins can serve as a counter to China’s malign efforts, particularly in the Global South, where emerging markets and developing countries are choosing between competing models of techno-monetary governance. Bitcoin can function as a **neutral reserve asset ‘for the people’** that complements the U.S. Treasury security in a global monetary system desperate for ‘safe’ assets. At the same time, **Bitcoin offers individuals protection from extractive, authoritarian systems** and can help these populations resist being captured in China’s digital economic sphere of influence.

2.3 Grid Stability, Climate Goals, and Energy Development

Bitcoin mining is a pure commodity business with unique properties that generate positive externalities for power grids and climate goals.

The product of bitcoin mining is a fungible digital asset which can be sold instantly on a global market and delivered digitally over the internet. The primary input to Bitcoin mining is electricity, which powers widely available, mass-produced specialized computers. But the simplicity of Bitcoin mining—turning electricity into money with computers—also makes it highly competitive, as nothing stops new entrants, while the daily production of bitcoin, shared by all Bitcoin miners, remains the same (currently 3.125 bitcoin every 10 minutes, in addition to transaction fees).

Bitcoin miners are driven by this competition to find the cheapest available energy, as energy is roughly 80% of miner’s operating costs.^{xxiii} **For the same reason, Bitcoin miners seek out not only the places, but the times at which electricity is cheapest.** Bitcoin miners have the ability to turn their machines off in seconds, so miners curtail their operations whenever electricity prices spike.

Figure 5: Challenges to building renewable energy grids that can be overcome with Bitcoin mining.

Challenges to building renewable energy grids that can be overcome with Bitcoin mining.		
(1) Investment risk (pre-connection)	(2) Curtailment and negative pricing (disincentives to renewables)	(3) Challenges to the modern grid (grid balancing without fossil fuels)

State of the art machines lose money when using electricity over \$0.12/kWh,^{xxiv} and most machines in the global Bitcoin fleet lose money when electricity costs more than \$0.06/kWh.^{xxiv, xxv} As one report noted, 'despite losing their new-gen luster, ASIC fingerprinting techniques reveal the S19 series still contributes north of 50% of hashrate, indicating they're being redeployed at lower-cost sites rather than retired entirely.'^{xxv}

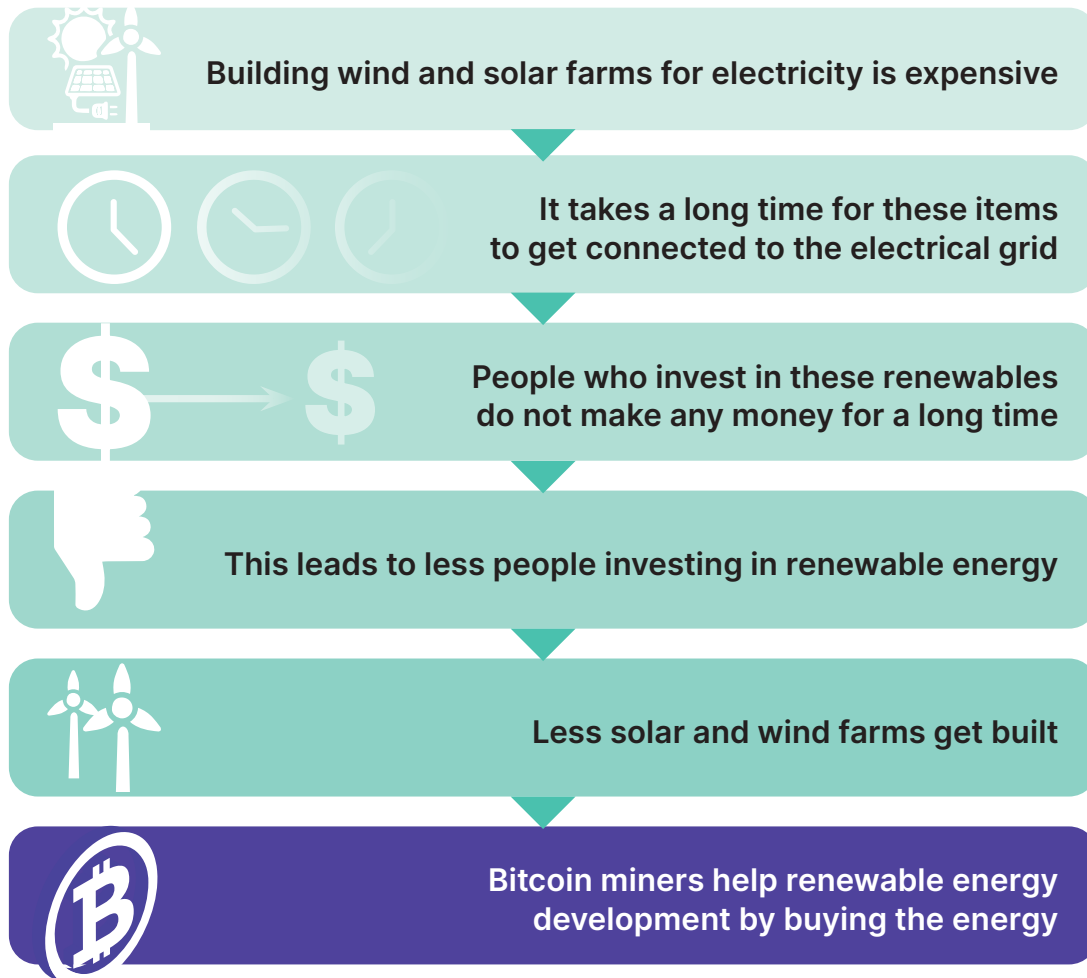
When all of the costs of a mining operation other than electricity are included, only the lowest electricity prices are attractive.

Bitcoin mining is playing a positive and innovative role in U.S. energy policy and the transition to renewable energy sources.

Electricity grids are fragile. When there is too little or too much electricity in the grid, a blackout can occur. The unique characteristics of Bitcoin mining as a flexible, interruptible load contributes significantly to grid stability. Miners provide demand response services, helping balance supply and demand in real-time, and act as a 'controllable load resource' that can be quickly adjusted to maintain a stable grid frequency.

Moreover, Bitcoin mining improves the economics of renewable energy development by consuming excess generation during low-demand periods. Bitcoin mining also contributes to reducing climate change - as buyers of energy before solar and wind farms are

Figure 6: How Bitcoin mining helps the buildout of wind and solar farms.



connected to the grid, and when there is more energy than the grid can hold, mining incentivizes the development of renewable power production.^{xxvi} This alignment of economic incentives with environmental goals represents a market-driven approach to achieving climate objectives.

Bitcoin mining monetizes stranded or wasted energy resources, such as flared natural gas in oil fields, turning an environmental liability into a productive asset.^{xxvii}

Mining not only supports the transition to cleaner energy, but also contributes to U.S. energy independence by reducing reliance on foreign energy sources and stimulating investment in domestic energy infrastructure.

The intense free market competition in the Bitcoin mining industry is driving innovation in energy-efficient computing and cooling technologies, with potential positive effects in other sectors of the economy.

Figure 7: Bitcoin miners can flare methane from remote locations with no power grid such as:



Oil and gas wells



Landfills



Agricultural waste (manure)

Bitcoin mining has the potential to revitalize the U.S. nuclear energy industry, particularly through partnerships with companies developing advanced small modular reactors. And Bitcoin miners have developed synergies with the rapidly growing AI industry, helping keep this vital technological capability within our country.

2.4 Human Rights and Financial Inclusion

Bitcoin's decentralized and censorship-resistant nature aligns closely with core U.S. values of individual liberty and financial freedom. Within the U.S., Bitcoin can foster greater financial inclusion by providing a savings vehicle accessible to anyone with a smartphone. This is particularly important for individuals who face barriers to accessing traditional financial services. As an open system with no biased gatekeepers or middlemen, Bitcoin doesn't (and can't) discriminate against or discourage anyone from participating.

For immigrant communities, Bitcoin and integrated stablecoin solutions offer low-cost remittance services, allowing for more efficient cross-border payments.^{xxviii} This capability not only benefits individuals, but also strengthens economic ties between the U.S. and other nations, and mitigates the comparatively high costs of using existing wire and money transfer businesses.

Bitcoin is a powerful tool for promoting human rights and democratic values. In countries with oppressive regimes or collapsing economies, Bitcoin offers a financial lifeline, allowing individuals to store value in an asset that can't be easily seized or devalued by malign actors. Dissidents and activists can receive funding without government interference, supporting the cause of freedom and democracy worldwide.

By supporting Bitcoin adoption, the United States can demonstrate its commitment to global financial freedom and technological innovation.

Human rights activists speak at the Bitcoin Policy Summit, 2023



Félix Maradiaga, Human Rights Defender & 2024 Nobel Peace Prize Nominee, speaks at the Bitcoin Policy Summit, 2024



Adoption serves as a counterweight to the spread of authoritarian financial surveillance systems such as China's digital yuan, which threaten individual privacy and autonomy. Through Bitcoin, the U.S. can extend the reach of its soft power, promoting a global, open financial network

that aligns with American values of freedom, innovation, and individual empowerment.

Pro-Bitcoin U.S. policy would symbolically support and materially advance American values at home and abroad.

To see why, we must focus less on Bitcoin the asset and more on Bitcoin's network. The network facilitates transactions of the asset and has two notable features. First, the network is permissionless—anyone can transact with Bitcoin, run a network node to verify transactions, or mine to publish blocks of transactions without permission from a central authority. Second, the network is censorship-resistant. Under good security practices, seizing someone's self-custodied Bitcoin remains extremely difficult. And, under normal circumstances, blocking or reversing a Bitcoin payment is cost-prohibitive.

These features are valuable to the U.S. for several reasons. First, whistleblowers, journalists, and minorities in authoritarian regimes can transact freely. Second, because Bitcoin is a scarce asset, acquiring it can act as a protest

vote against irresponsible monetary policy. Third, the ledger can serve as a secure time-stamping service to help protect the integrity of elections abroad, a use recently highlighted in Guatemala.^{xxix} Finally, thanks to recent upgrades, Bitcoin's ledger can store data that authoritarians might prefer disappear—websites, documents, speeches, and so on.

A Strategic Bitcoin Reserve Aligns With U.S. Interests

For the reasons discussed above, developing a coherent national strategy regarding Bitcoin should be a priority for policymakers. A Strategic Bitcoin Reserve, the focus of the remainder of this report, should be a component of this strategy.



Strategic Bitcoin Reserve – A Policy Framework

3.1 Overview

This section first provides a review of the SBR concept, including management and oversight considerations, acquisition methods, and protocols for secure storage. We analyze an SBR's alignment with the purposes served by existing national reserves. We then detail four strategic policy objectives an SBR could serve. Finally, we offer some implementation considerations for policymakers.

The SBR would be a government-held stockpile of Bitcoin, designed to diversify national asset holdings, mitigate potential economic and national security risks, and signal that the United States is at the forefront of financial innovation in the digital age. The concept of the reserve is similar to that of existing strategic reserves, such as

the Strategic Petroleum Reserve or Bullion Depository, but its novel nature requires a distinct approach to implementation.

Unlike traditional reserves, an SBR would capitalize on Bitcoin's characteristics of decentralization, scarcity, and still nascent global adoption. These properties could provide asymmetric benefits to the U.S.'s long-term fiscal sustainability, geopolitical position, and technology leadership at relatively low cost. The SBR concept recognizes Bitcoin not just as a digital asset, but as a transformative monetary technology with important implications for the future global power balance, financial inclusion, and the promotion of democratic values.

3.2 Why Does the U.S. Government Have National Reserves

National reserves are an essential component of a broader strategy to ensure U.S. economic stability, national security, and preparedness in times of crisis. Reserves send market and geopolitical signals that deter or mitigate destabilizing strategic conditions. And whether they consist of physical commodities, financial assets, or critical supplies—they serve a variety of important policy purposes. Below are the key policy objectives that national reserves serve, each contributing to the country's ability to navigate uncertainty, respond to emergencies, and maintain global influence.

3.2.1 Market Buffers/ Economic Resilience

National reserves act as a buffer against market volatility, helping to stabilize prices during periods of extreme fluctuation. This is particularly evident for reserves like the Strategic Petroleum Reserve (SPR)^{xxx} and the Exchange Stabilization Fund (ESF)^{xxxi}

For example, the SPR was established to ensure the U.S. has an emergency stockpile of crude oil that can be released

to the market to mitigate volatile market conditions or diffuse the economic impact of production decisions made by OPEC Plus. By releasing oil from the SPR, the government can help prevent sharp spikes in energy prices, which in turn can have cascading effects on inflations (and potentially can have electoral impacts).

Similarly, the ESF provides the U.S. Treasury with a tool to stabilize currency markets during periods of exchange rate volatility, helping to ensure that the U.S. dollar maintains its value relative to other currencies. This enables the U.S. to intervene in foreign exchange markets, mitigate speculative attacks, and prevent sharp devaluations or appreciations that could disrupt trade balances or financial stability.

In short, national reserves function as shock absorbers, reducing the impact of sudden market movements on the broader economy. The existence of reserves also anchors market expectations and can deter adversaries or competitors from exploiting temporary conditions or financial volatility to disadvantage or hold at risk U.S. economic or security interests.

3.2.2 *Emergency Preparedness*

Reserves play a vital role in national emergency preparedness. Various federal agencies maintain stockpiles of critical supplies to respond to natural disasters, pandemics, or other emergencies. The National Defense Stockpile^{xxxii} ensures that the U.S. has access to essential minerals and metals in the event that international trade is disrupted. The Federal Emergency Management Agency (FEMA) and the Department of Health and Human Services (HHS) maintain disaster mitigation and medical stockpiles, such as the Strategic National Stockpile,^{xxxiii} which include vaccines, medicines, medical countermeasures, and medical equipment that can be rapidly deployed in the event of a public health emergency.

These reserves ensure that the government has the ability to respond to emergencies or disasters swiftly and effectively, reducing the human and economic toll of such events. The COVID-19 pandemic underscored the importance of such preparedness, as the demand for medical supplies, ventilators, and personal protective equipment surged beyond the private sector's capacity to quickly provide. Having national reserves of essential items allows the

government to act as a backstop during crises, ensuring that critical resources are available when they are needed most.

3.2.3 *Geopolitical Leverage*

National reserves provide the U.S. government with geopolitical leverage. The accumulation of valuable assets like precious metals or foreign currencies enables the U.S. to influence international markets and maintain its strategic position on the global stage. For example, gold reserves historically have been an important part of U.S. global financial strategy, supporting confidence in the dollar and serving as a hedge against inflation or currency crises. Additionally, gold reserves serve as a last-resort financial asset that can be quickly re-monetized in extreme circumstances, providing the U.S. with a historically reliable source of liquidity to address severe financial or geopolitical challenges that disrupt the global monetary order.

In addition, holding significant reserves of key commodities or financial assets enhances U.S. negotiating power in international relations. For instance, in times of global energy shortages, having a robust Strategic Petroleum Reserve allows the U.S. to exert influence in energy markets,

offering or withholding supply to shape geopolitical outcomes. Similarly, the ability to intervene in foreign exchange markets through the Exchange Stabilization Fund can help the U.S. protect its economic interests in times of international financial instability. The strategic management of gold reserves enables the U.S. to subtly influence precious metal markets, ensuring price stability during periods of significant monetary or geopolitical upheaval.

In this way, national reserves serve as both an economic safeguard and a tool for exercising soft power on the international stage, ensuring that the U.S. can maintain its global influence even in the face of unpredictable geopolitical events.

3.2.4 *Promoting Domestic Industry*

Another key function of national reserves is to support industries that contribute to critical economic interests and important political constituencies. For example, the U.S. government maintains programs to help farmers through periods of crop failure or fluctuating commodity prices. This includes stockpiling agricultural products and the strategic release of reserves to stabilize prices and ensure that farmers can continue to operate in difficult market conditions.

Reserves of critical industrial materials allow U.S. manufacturers access to needed raw materials, even when global supply chains are under pressure. This helps preserve domestic industrial capacity and protects jobs in key sectors such as manufacturing, defense, and energy. Supporting these industries not only has economic benefits, but also preserves critical infrastructure and capabilities that may come under malign or anti-competitive foreign behavior.

Strategic national reserves can be viewed as an extension of broader industrial policy initiatives, such as the CHIPS Act, aimed at fostering innovation and protecting strategic industries. By ensuring access to essential resources and stabilizing key sectors during disruptions, national reserves help to bolster the domestic economy's resilience, promote technological leadership, and reduce reliance on foreign suppliers. This strategic support is crucial as the U.S. seeks to maintain competitiveness in critical industries like semiconductor manufacturing, green energy, and advanced technologies, ensuring that innovation and economic growth are supported by domestic capacity.

3.2.5 *Historical Reasons*

The U.S. government's practice of maintaining national reserves has deep historical roots, dating back to the Bretton Woods Agreement and the country's rise as a global superpower. The Bretton Woods Agreement^{xxxiv} established the U.S. dollar as the world's primary reserve currency, backed by gold. Although the dollar no longer is tied to gold, the legacy of maintaining reserves as a symbol of financial strength remains.

Holding significant reserves of valuable assets such as gold and foreign currencies has instilled domestic and international confidence in the U.S. economy. This tradition of maintaining reserves continues today, with reserves playing a crucial role in maintaining the stability and credibility of the U.S. financial system.

Moreover, as the U.S. has grown into a global superpower, the need for reserves has expanded beyond domestic concerns to encompass international responsibilities. Maintaining national reserves allows the U.S. to fulfill its role as a leader in global financial markets, ensuring stability not just for itself but for the global economy as a whole.

3.3 **Strategic Objectives for a Bitcoin Reserve**

In the context of the U.S. government's already substantial asset holdings, which include land, oil, and gold, expanding the portfolio to include Bitcoin could serve multiple strategic objectives that align with both economic and geopolitical imperatives.

Just as the government has leveraged its holdings to stabilize markets, hedge against inflation, and promote national security, a Strategic Bitcoin Reserve offers new forms of economic resilience and global leadership. The SBR would not only reinforce American monetary dominance, but also enhance financial system credibility, counter geopolitical adversaries, and build long-term economic resilience.

Much like the U.S. government's other assets and reserves, Bitcoin could serve as a strategic asset with both economic and geopolitical value. By establishing an SBR, the U.S. would position itself as a leader in the digital age, ready to adapt to and shape the future of global finance. As digital currencies continue to rise in importance, the U.S. must take proactive steps to secure its position as the dominant force in the global financial system.

Figure 8: Bitcoin has responded positively to most geopolitical shocks, acting as a hedge against tail risks in the global system

S&P 500, gold, and bitcoin through major geopolitical events

Event	Date ¹	10D Return ²			60D Return ²		
		SPX	Gold	BTC	SPX	Gold	BTC
U.S.-Iran Escalation	Jan. 3, 2020	2%	0%	12%	-7%	6%	20%
COVID Outbreak	Mar. 11, 2020	-20%	-9%	-25%	2%	3%	21%
2020 U.S. Election Challenges	Nov. 3, 2020	7%	-1%	19%	12%	-1%	131%
Russia Invasion of Ukraine	Feb. 24, 2022	1%	2%	-6%	3%	9%	15%
U.S. Regional Banking Crisis	Mar. 9, 2023	-2%	10%	25%	4%	11%	32%
Yen Carry Trade Unwinding ³	Aug. 5, 2024	2%	0%	0%	--	--	--

Image from: BlackRock. (2004). Bitcoin: A unique diversifier. BlackRock. <https://www.blackrock.com/us/financial-professionals/literature/whitepaper/bitcoin-a-unique-diversifier.pdf>

To be sure, policymakers must also acknowledge the risks associated with a Bitcoin reserve. Bitcoin is still in the early stages of adoption, and it may not achieve the widespread use that many expect. Should Bitcoin fail to appreciate or lose its efficacy, the U.S. government could incur significant losses on its investment. Nonetheless, the long-term benefits of Bitcoin, particularly its potential to reduce the risk of inflation and provide financial flexibility, outweigh these risks.

It is also important to recognize that an SBR has nothing to do with a central bank. An SBR

would not be held by the Federal Reserve System, but instead by the Treasury Department. It is therefore important to distinguish the strategic reserve concept from foreign exchange reserves held by central banks.

Typically, a central bank holds foreign exchange reserves in order to provide for payments to be made in foreign currency. These reserves also may be held strategically to avoid dollar-based sanctions or as an intermediate asset that has greater stability of value than other reserves. In contrast, an SBR

would be held by the Treasury Department for strategic reasons, and as an asset with option value for potential use in fiscal policy.

Of course, Bitcoin's potential option value depends on its underlying value which, as noted above, is not assured. Bitcoin's potential option value thus must be weighed against the risk that it may not receive widespread adoption or that its price fails to appreciate (or declines).

The U.S. government has long held a diverse array of strategic assets, from land to gold, and the inclusion of Bitcoin could serve multiple purposes: reinforcing American monetary dominance, enhancing the credibility of the financial system, countering adversaries in geopolitical arenas, and building long-term economic resilience. Each of these objectives demonstrates how Bitcoin can be more than just a financial asset—it can be a critical strategic tool in maintaining the U.S.'s global leadership.

In an era where digital assets are increasingly shaping the global financial landscape, the United States must adapt to maintain its dominance. Incorporating Bitcoin into the U.S. government's asset holdings presents an opportunity to reinforce American monetary

dominance, enhance financial system credibility, counter geopolitical adversaries, and build long-term economic resilience.

3.3.1 *Reinforcing American Monetary Dominance*

The U.S. dollar has long served as the world's reserve currency, a symbol of America's economic and geopolitical strength. However, with the rise of Bitcoin and other digital currencies, the global financial system is undergoing a significant transformation. An SBR would allow the U.S. to remain at the forefront of this transformation, ensuring that the dollar's dominance is not eroded by the emergence of new financial paradigms. By adopting Bitcoin as part of its national asset mix, the U.S. would signal its adaptability and foresight in the face of a rapidly evolving global financial ecosystem.

Holding Bitcoin as a national asset would not only cement the nation's leadership in the digital currency space, but also would serve as a strong signal to other countries about the U.S.'s commitment to financial innovation. Just as the U.S. has led the world in technological and financial advances since the end of World War II, adopting Bitcoin as a strategic asset would position the country to shape the future of

digital finance. Other nations are already moving forward with their own digital currency initiatives.

The U.S. cannot afford to fall behind in this race for global monetary network leadership.

Moreover, establishing an SBR would attract more Bitcoin and Bitcoin businesses to our shores, reinforcing the U.S. leading position in global capital markets and giving the U.S. more influence over the development of this industry.

By encouraging the growth of Bitcoin and dollar-based stablecoins, the U.S. would reinforce global dollar-dominance while -fostering monetary links into the Global South. These links in turn will empower individuals to resist the encroachments of China's digital authoritarianism and thwart the efforts of its willing accomplices in corrupt regimes.

Citizens in emerging markets are increasingly looking to dollar-based stablecoins as a means of escaping unstable currency and banking systems. Bitcoin offers these populations access to a financial asset that cannot be easily seized or devalued by corrupt or incompetent governments.

Together, Bitcoin and dollar-based stablecoins represent a soft-power initiative that advances

U.S. geopolitical and monetary interests while reinforcing human rights in contested parts of the world.

3.3.2 *Enhancing Financial System Credibility*

Integrating Bitcoin into U.S. national reserves could significantly bolster the credibility of the country's financial system in an increasingly uncertain global economic environment. As skepticism toward fiat currencies grows, particularly in the face of persistent inflation and expanding debt levels, Bitcoin offers a fundamentally different kind of reserve asset—one that operates independently of centralized monetary systems and is immune to the inflationary pressures that traditionally affect fiat currencies. By incorporating Bitcoin, the U.S. could signal its ability to innovate and adapt to changing financial landscapes, reinforcing confidence in the long-term sustainability of America's financial system.

The credibility of the U.S. financial system hinges on its ability to maintain the value of its currency while managing debt responsibly. As the U.S. faces growing concerns over inflation and the sustainability of its national debt, holding Bitcoin in national reserves would

demonstrate the U.S. government's proactive approach to modern financial challenges, reinforcing confidence in the system's resilience and stability.

By demonstrating that the U.S. is willing to integrate modern financial tools like Bitcoin, the government can also appeal to younger generations of investors who may be more inclined to trust digital assets over traditional financial instruments. This would not only enhance domestic credibility, but also attract global capital, as other nations look to the U.S. as a model for responsible digital asset management.

In addition, by adopting Bitcoin as a national asset, the U.S. would reinforce its leadership role in setting global standards for digital asset regulation and integration. As other countries explore the use of digital currencies and alternative financial systems, early adoption of Bitcoin could serve as a blueprint for our allies and partners. This proactive approach would strengthen the perception of U.S. leadership in an increasingly strained global financial system and would help keep the U.S. ahead of monetary, technological, and geoeconomic developments.

3.3.3 *Countering Geopolitical Adversaries*

In the realm of global finance, maintaining a first-mover advantage can be a decisive factor in geopolitical competition. An SBR could provide the U.S. with a critical edge over adversaries like China and Russia, who are exploring their own digital currencies as a means of reducing dependence on the dollar and reshaping the international monetary system. By adopting Bitcoin early, the U.S. could assert its leadership in global finance and prevent adversaries from gaining undue influence.

Bitcoin's decentralized nature makes it particularly attractive as a tool for countering authoritarian regimes. In a world where governments like China are seeking to implement state-controlled digital currencies, Bitcoin represents the opposite model—one of financial freedom and individual control. An SBR would champion these values on the global stage, promoting open financial systems that resist censorship and state control. This would be consistent with longstanding U.S. foreign policy goals of promoting democracy and individual rights.

Similarly, Bitcoin's decentralized nature and its public, immutable ledger present unique

opportunities for enforcing sanctions while allowing the spread of decentralized financial technology to align with U.S. values and interests. Unlike traditional financial systems, in which sanctions can be evaded through alternative banking networks or closed financial systems, Bitcoin's transparent ledger allows for real-time monitoring of all transactions. This makes it difficult for sanctioned individuals or entities to hide their activities or obscure financial flows.

While Bitcoin transactions cannot be easily blocked in the same way as traditional banking transfers, the public nature of the blockchain provides the U.S. with powerful surveillance capabilities. Every transaction is recorded permanently on the blockchain, creating a public record that can be traced to identify illicit activities. Advanced analytics tools and blockchain forensic techniques can be employed to track the flow of funds and identify individuals or entities attempting to circumvent sanctions, even across decentralized networks. This provides a new avenue for enforcing sanctions, as the U.S. can track financial activities globally and cut off the ability of bad actors to access resources.

The Bitcoin network's decentralized structure also allows it to function in regions where traditional banking systems are compromised or subject to political interference. The U.S. consequently could apply pressure on adversaries and support democracy movements and dissidents without relying on vulnerable or controlled financial systems.

By fostering Bitcoin and stablecoin use in global commerce, the U.S. can encourage a more open financial system that supports peer-to-peer transactions, reducing the ability of hostile regimes to control financial flows. At the same time, the U.S. can still enforce sanctions against adversaries through blockchain monitoring, ensuring that economic restrictions remain effective even in a decentralized financial system. This dual capability allows the U.S. to promote financial inclusion and support democratic values globally, while maintaining the ability to exert economic pressure on geopolitical adversaries when necessary.

3.3.4 Building Long-Term Economic Resilience

One of the most compelling arguments for an SBR is its potential to build long-term economic resilience.

Figure 9: Blackrock found that Bitcoin is a unique portfolio diversifier, as a more volatile version of Gold.

Bitcoin has exhibited low historical correlation with U.S. equities, with periods of dislocation

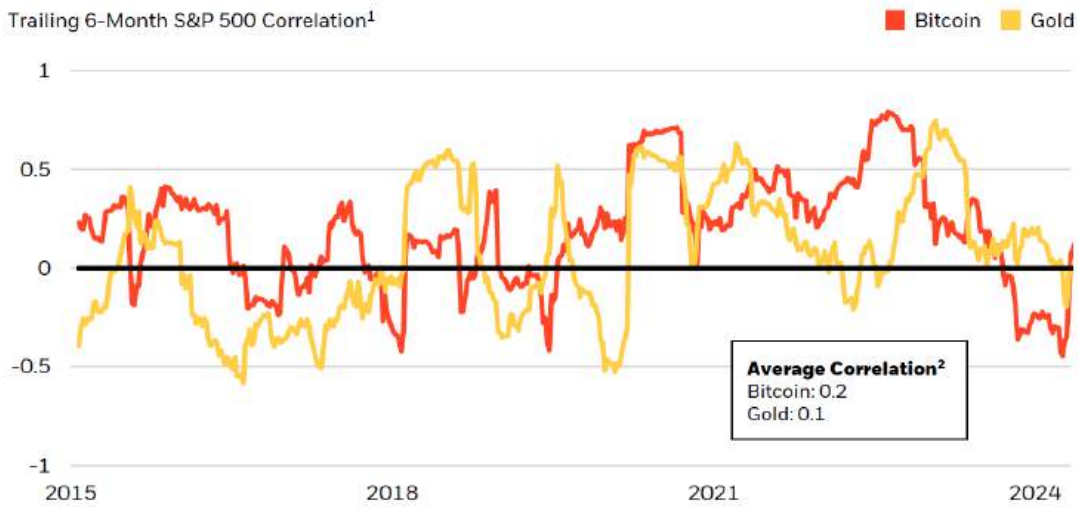


Image source: BlackRock. (2004). Bitcoin: A unique diversifier. BlackRock. <https://www.blackrock.com/us/financial-professionals/literature/whitepaper/bitcoin-a-unique-diversifier.pdf>

As U.S. debt continues to rise, concerns about inflation and the sustainability of fiscal policy are becoming more pronounced.

Given that the supply of Bitcoin is fixed, greater adoption will translate to higher prices. Increases in the value of Bitcoin might benefit the U.S., given that government debt arguably is on an unsustainable trajectory. Since the U.S. has its own sovereign currency, rising debt is unlikely to lead to default, but likely will require that some portion of the debt be monetized, resulting in inflation. In that event, investors may be motivated to buy 'hard' assets such as gold and Bitcoin.

An SBR, however, would provide the government with option value, i.e., the option to sell some or all of its Bitcoin and use the proceeds to pay down its debt. Moreover, if Bitcoin gains wider adoption, and its value consequently increases, the price of Bitcoin in terms of dollars will rise faster than the U.S. government's dollar-denominated debt, thereby growing the value of the government's asset holdings.

Furthermore, since the probability of inflationary finance is likely to drive up the price of Bitcoin, Bitcoin's value may well appreciate at precisely the time that the government might wish to raise revenue by selling it. In other

words, owning Bitcoin would provide the government with a financial hedge against the prospects of inflationary finance.

This characteristic has an additional strategic advantage. If investors know that the U.S. government owns a substantial amount of Bitcoin and that (a) Bitcoin is likely to appreciate during debt monetization and (b) that the government is likely to use that price appreciation to pay down the debt, fears of the debt monetization may diminish. Thus, by making a credible promise to pay down the debt in the face of concerns that the debt is unsustainable, the government could actually reduce the likelihood that those fears arise in the first place.

Additionally, Bitcoin's role as a global digital asset could help the U.S. absorb foreign surpluses without the negative effects often associated with the dollar-dominated system. For example, the U.S. faces the well-known Triffin Dilemma, which arises when a country's currency serves as the global reserve currency and savings vehicle. In order to provide liquidity for global trade and absorb global surpluses, the U.S. must run a persistent trade deficit. However, running persistent deficits undermines manufacturing competitiveness, increases

domestic inequality, and creates economic imbalances.

Essentially, the U.S. prints dollars and issues debt to balance foreign (mainly adversary) trade surpluses. This dynamic works positively in the early stages, but as debt grows unsustainably, there is a risk of a systemic loss of confidence in the reserve asset and crowding out of private sector investment. As global demand for Bitcoin increases, the U.S. would benefit from holding a substantial SBR reserve that benefits from absorbing global dollar surpluses, allowing it to maintain economic stability while diversifying its financial portfolio.

3.4 Implementation Considerations

The management and oversight of an SBR would require a carefully designed governance structure to ensure its effective operation and alignment with national interests. The Department of Treasury should be responsible for holding and managing the SBR, distinct from Federal Reserve operations. This separation is crucial, as it positions the SBR as a tool of long-term fiscal management rather than monetary policy, emphasizing its strategic role as a national asset without conflicting with existing institutional responsibilities and legal mandates.

While formal powers over the SBR should be vested with the Treasury Secretary, a dedicated oversight committee or similar mechanism could be established to help oversee and manage such a novel facility. This committee could be chaired by the Treasury Secretary (or their delegate). Its members might include representatives from the Departments of Defense and, Homeland Security, the Intelligence Community, and the National Security Council, as well as representatives from the Government Accountability Office, the Office of Management and Budget and experts from outside the government (in either a membership or an advisory capacity). The committee should be responsible for advising the Treasury Department on policies for the acquisition, storage, security, and potential use of the Bitcoin reserves, as well as ensuring transparency and accountability in its management.

Regular audits and reports to Congress should be mandated to maintain public trust and enable legislative oversight, taking advantage of the cryptographic nature of Bitcoin to publish public Proof of Reserves.

3.4.1 *Acquisition Methods*

The acquisition of Bitcoin for the SBR could occur through multiple channels, each with its own advantages and considerations:

1. **Open Market Purchases:** This method would allow for gradual accumulation without causing dramatic market disruptions. The government could set up a systematic buying program, potentially using dollar-cost averaging to mitigate the impact of Bitcoin's price volatility. This approach would also signal the government's long-term commitment to Bitcoin, potentially stabilizing the market and encouraging broader adoption.
2. **Seized Assets:** Incorporating Bitcoin seized from criminal investigations provides a cost-effective means of building the reserve. This method not only adds to the SBR but also demonstrates the government's ability to effectively regulate and control illicit activities. However, care must be taken to ensure that this method does not impair open legal cases or become a primary source, as it could create perverse incentives in law enforcement.
3. **Mining Operations:** The U.S. could consider engaging in Bitcoin mining operations. This approach

would serve the dual purpose of acquiring Bitcoin and supporting domestic energy infrastructure. Such operations could be designed to incentivize the development of renewable energy sources and improve the resilience of the national power grid. However, this method would require significant initial investment and ongoing operational costs and would need to be balanced against competitive distortions to the private mining industry.

Each of these methods could be employed in combination, allowing for a diversified acquisition strategy that maximizes benefits while minimizing risks and market impact.

3.4.2 *Storage and Security Protocols*

The implementation of robust, multi-signature cold storage solutions is essential for the security of the SBR. Given the high-stakes nature of national reserves and the unique challenges of securing digital assets, the storage and security protocols for the SBR would need to be state-of-the-art and continuously updated.

A multi-layered approach could include:

- **Hardware wallets:** Specialized devices designed to securely store private keys offline.
- **Air-gapped computers:** Systems physically isolated from unsecured networks to prevent remote access and hacking.
- **Geographically distributed backup systems:** Multiple secure locations to store backup keys, reducing the risk of loss due to localized events.
- **Adaptation of existing high-security government facilities:** leveraging infrastructure already designed for storing and protecting sensitive national assets.

Additionally, the use of advanced techniques such as Shamir's Secret Sharing or similar cryptographic management solutions to distribute key fragments among multiple trusted parties, requiring consensus for any movement of funds. Regular security audits, penetration testing, and disaster recovery drills would be essential to maintain the integrity of the system. National cryptographic expertise within the defense and intelligence communities, coupled with third-party assessments to help evaluate such systems' security protocols, should also address human factors including strict access controls, background checks for personnel, and ongoing training to prevent social engineering attacks. Transparency in security measures (without revealing specific vulnerabilities) could

help maintain public confidence in the management of the SBR. The threat model facing the SBR would be similar in intensity to our most sensitive USG cryptographic information and will require commensurate security measures.

3.4.3 *Legal and Regulatory Framework*

Implementing an SBR would require the development of a comprehensive legal and regulatory framework. This framework would need to address various aspects of acquiring, holding, and potentially using Bitcoin as a national asset.

New or revised legislation will be necessary to authorize the Treasury Department to purchase and hold Bitcoin as a reserve asset. The legal framework must define clearly the purposes of the SBR, the authorities responsible for its management, and the conditions under which it can be utilized.

Regulatory considerations would include how the SBR interacts with existing financial regulations, particularly those related to anti-money laundering and combating the financing of terrorism. Clear guidelines would need to be established for how the government's Bitcoin holdings are accounted for, audited, and reported.

Additionally, the legal framework should address potential international implications, ensuring that the SBR complies with international financial regulations and treaties. This may involve engaging with international bodies such as the Financial Action Task Force to develop appropriate standards for government cryptocurrency holdings.

3.4.4 *Size and Accumulation Strategy*

The size of the SBR should be substantial enough to serve its strategic purposes, but not so large as to dominate the market or create systemic risks such as a loss of confidence in the U.S. dollar system.

One approach could be to aim for a Bitcoin holding proportional to the U.S.'s gold reserves. However, the optimal size may depend on additional factors, including the total Bitcoin market capitalization, global adoption rates, specific policy objectives, and fiscal capacity.

The accumulation strategy should be designed to minimize market impact and avoid creating disruptive price effects. This could involve a phased approach over several years, using methods such as dollar-cost averaging or implementing buying programs

during periods of market weakness. The government might also consider diversifying its acquisition methods, combining open market purchases with other strategies like accepting tax payments in Bitcoin or engaging in mining operations.

Transparency in the accumulation process would be important to maintain market confidence and prevent speculation or manipulation. Regular public disclosures of the reserve's size and acquisition rate could be mandated, similar to other national reserves.

3.4.5 *Integration with Existing Financial Systems*

The integration of an SBR with existing financial systems would require careful consideration and planning. This integration would need to address how the SBR interacts with monetary policy, fiscal policy, and broader economic management strategies.

One key consideration would be how Bitcoin holdings are accounted for on the national balance sheet. This could involve developing new accounting standards or adapting existing ones to accommodate the unique characteristics of cryptocurrency assets. The volatility of Bitcoin's price would need to be addressed in financial reporting and risk management practices.

The relationship between the SBR and monetary policy would need to be clearly defined. While the SBR would be managed by the Treasury rather than the Federal Reserve, its existence could have implications for monetary policy decisions. For instance, large-scale Bitcoin holdings could affect the government's overall risk profile and potentially influence decisions on interest rates or quantitative easing.

For example, Treasury purchases of Bitcoin on the open market (using, for example, dollar funds credited to the Treasury General Account by having the Federal Reserve mark-to-market undervalued gold certificates) could lead to an increase in circulating bank reserves, causing second order effects on the money supply and credit conditions. That is, reserves in the Treasury General Account become dollars in the accounts of the private sellers of Bitcoin and enter the money supply.

Integration considerations would also extend to the international level. The existence of a U.S. Bitcoin reserve could impact currency markets and international trade relations. Mechanisms for using the SBR in international financial operations, such as balance of payments adjustments or emergency liquidity provision to allies, would need to be developed.

4

Objections and Replies

4.1 An SBR would expose the U.S. Government to vulnerability by triggering a loss of confidence in the sustainability of the dollar system.

Reply: This objection assumes that adding Bitcoin to the U.S. national reserves would undermine the dollar's credibility or stability. However, Bitcoin is simply another form of reserve asset, much like gold. The introduction of gold into national reserves has never been perceived as undermining the dollar system, and similarly, Bitcoin would be positioned as an alternative store of value, not as a replacement for or competitor to the dollar.

The current status quo of the global financial system is increasingly being questioned due to concerns about the sustainability

of the U.S. national debt and the long-term demand for U.S. debt instruments. As inflation fears rise and confidence in fiat currency systems diminishes, adding a hard, neutral reserve asset like Bitcoin could enhance the credibility of the U.S. government's long-term fiscal position.

An SBR would also address long-standing concerns about the lack of hard assets on the U.S. balance sheet. For the first time in over 50 years, the U.S. would be adding a non-fiat, non-debt-based asset to its reserves, strengthening its fiscal resilience in a rapidly changing global financial landscape. This diversification would not replace the dollar, but instead would reinforce confidence in the government's ability to back its currency with real, finite assets.

4.2 An SBR would enrich cybercriminals, terrorists, and Bitcoin whales while undermining the integrity of the global financial system.

Reply: Although holding Bitcoin might inadvertently benefit malicious actors, Bitcoin's use in illicit activities is statistically low. Various studies, including from leading U.S. government contractor Chainalysis, estimate that only 0.3 percent of Bitcoin transactions are associated with illicit activities.^{xxxv} Moreover, Bitcoin's decentralized structure ensures that ownership is widely distributed; a significant percentage of the network is composed of small holders, with many individuals holding less than 1 BTC.^{xxxvi}

The U.S. government's involvement in holding Bitcoin would not significantly alter the dynamics of its ownership but would instead signal that Bitcoin is a legitimate asset class. This would contribute to market growth and increased liquidity. As the legitimacy of Bitcoin as a reserve asset grows, so too would its adoption and trading volume, providing more opportunities for illicit actors to blend their transactions into the broader market. While this increased liquidity could offer

advantages to bad actors, it also comes with heightened regulatory oversight and scrutiny, which could help mitigate exploitation of the network for illicit purposes.

4.3 An SBR would transform the U.S. government into a proprietary hedge fund, unduly risking public money and encouraging speculation.

Reply: This concern stems from a misunderstanding of the strategic nature of the proposal. An SBR is not a tool for speculative trading or short-term gains. Rather, the reserve is designed to achieve long-term fiscal resilience and financial diversification.

Comparisons of an SBR to a hedge fund in any event are misleading. While hedge funds seek to maximize profits through aggressive and often speculative investment and trading, an SBR, on the other hand, would be a strategic, long-term asset held to stabilize and diversify the nation's financial portfolio.

The inclusion of Bitcoin in national reserves would acknowledge its established role in monetary policymaking. By its long-term holding of Bitcoin – minimum holding periods for as much as 20 years could be mandated

– the U.S. actually could help reduce market volatility, setting a standard for responsible digital asset management.

The fear of triggering a bubble overlooks the unique characteristics of Bitcoin. As a decentralized and finite asset, the supply of Bitcoin cannot be manipulated or inflated like fiat currencies. In fact, Bitcoin's inclusion in a national reserve could act as a stabilizing force for both the government and the global financial system. There will likely be a market effect from the initial establishment of an SBR, but a prudent programmatic purchase program and long-term commitment to holding would mitigate speculative behavior. Such a program would not be a U.S. Government 'pump and dump.'

4.4 An SBR would encourage more environmentally harmful mining and run counter to U.S. climate policy objectives.

Reply: Concerns over Bitcoin's environmental impact have proven to be misguided. As discussed in section 2.3 above, Bitcoin mining actually generates positive externalities for power grids and emissions.

It is true that Bitcoin mining uses roughly 0.55% of global electricity production capacity.^{xxxvii} But because mining activity is time-flexible, location-agnostic, portable, scalable, and most of all price-sensitive—miners use only the cheapest available energy, typically well below \$0.05/kWh. Consequently, bitcoin mining has been driven to abundant renewable generation, and is playing a grid stabilizing role on heavily-renewable powered grids. As a buyer of the cheapest electricity, Bitcoin mining incentivizes power infrastructure without adding to peak loads, when power is expensive, thus easing the operations of a greener grid.

For a brief time following China's ban of bitcoin mining, coinciding with a period of rapid Bitcoin price appreciation, the global mining industry flocked to existing electrical infrastructure in the United States, including coal plants slated for retirement. Keeping those plants operational undoubtedly raised environmental concerns. But as the market stabilized, miners turned to overbuilt hydro, wind, solar, and nuclear energy. Estimates suggest that up to 57% of global Bitcoin mining now is powered by renewable or nuclear sources.^{xxxviii}

If managed correctly, an SBR aligns with U.S. climate policy objectives by supporting a transition to renewable energy. Rather than undermining environmental goals, Bitcoin mining, when coupled with appropriate regulatory frameworks and technological innovation, could serve as a powerful tool for sustainable energy development.

4.5 **An SBR would prematurely pick one cryptocurrency as a ‘winner’.**

Reply: The concern that establishing an SBR would be tantamount to choosing Bitcoin as the ‘winner’ over other cryptocurrencies overlooks the unique role that Bitcoin occupies in the digital asset space. Bitcoin, often referred to as ‘digital gold,’ has proven itself over the last 15 years as a secure, decentralized store of value. Unlike other cryptocurrencies, which focus on enabling complex smart contracts, decentralized applications, or even overtly fraudulent schemes, Bitcoin primarily functions as a synthetic monetary asset with a fixed supply, predictable issuance schedule, and no central authority or foundation. These features make Bitcoin unique and explain why it now is held not only by individuals, but also by institutional investors—pension

funds, insurance companies, Fortune 500 companies, sovereign wealth funds, and a number of governments.

Many other cryptocurrencies, some valuable in their own right, still are in experimental stages and rely on the efforts of a centralized group to maintain, update, or repair software code. Many are subject to volatile dynamics, regulatory uncertainty, and an unproven long-term value proposition. Bitcoin, on the other hand, has established itself as the most secure and widely adopted digital asset, with a market capitalization and network stability that far surpass any other cryptocurrency. Its characteristics—decentralization, scarcity, and security—make it uniquely suitable for inclusion in national reserves. Even a market-cap weighted crypto reserve predominantly features Bitcoin.

Establishing an SBR does not preclude the possibility that other digital assets will be added to a reserve as they mature and or gain acceptance. For now, though, Bitcoin is the only suitable candidate for inclusion in a strategic reserve.

4.6 An SBR would require the U.S. government to protect against market manipulation and potentially lose out to other nations or bad actors.

Reply: If the U.S. begins accumulating Bitcoin, it conceivably could be ‘front-run’ by other nations or large holders seeking to manipulate the market. However, the U.S. would still benefit asymmetrically from Bitcoin’s price appreciation, even if other entities were aware of its intentions.

Bitcoin’s transparent and decentralized nature means that its price is largely determined by global market dynamics rather than the conduct of any single actor. While others may anticipate and react to the U.S. government’s actions, this does not necessarily diminish the benefits that the U.S. would accrue from holding Bitcoin as a strategic asset.

In any case, other nations may not fully capitalize on opportunities to acquire Bitcoin, given its association with uses and values that often are at odds with authoritarian regimes.

4.7 Bitcoin is too volatile for a national reserve asset.

Reply: Bitcoin is volatile, but so are many reserve assets, including gold and even U.S. Treasury bonds, when viewed over long periods. The price of gold, for example, declined by over 80% from 1980 to 2000.^{xxxix} Volatility alone does not disqualify an asset from being a valuable part of a national reserve strategy. Rather, volatility is a reflection of market dynamics, and in Bitcoin’s case, it also reflects the fact that it is in a relatively early stage of adoption.

As Bitcoin matures and its market deepens, its volatility is likely to decrease, making it more stable as a store of value. Additionally, Bitcoin’s unique properties as a finite, decentralized, and global asset make it a valuable hedge against inflation and economic instability. Holding Bitcoin in national reserves provides the U.S. government with a tool for long-term financial resilience, even in the face of short-term price fluctuations.

By incorporating Bitcoin into national reserves, the U.S. would signal confidence in its long-term value, helping to stabilize its price and reduce the volatility that currently concerns some policymakers.

Conclusions and Recommendations

Establishing an SBR represents a forward-thinking approach to the challenges and opportunities of the digital age. The time has come for the United States to consider Bitcoin not just as an asset, but as a pillar of the nation's strategic resilience.

We recommend that U.S. policymakers:

1. Develop a comprehensive legal and regulatory framework for an SBR.
 2. Implement a phased, transparent acquisition strategy to minimize market impact.
 3. Establish robust security protocols and governance structures.
 4. Integrate Bitcoin mining strategies with renewable energy initiatives.
 5. Conduct ongoing research to adapt the SBR strategy as the digital asset landscape evolves.
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