Dogecoin

Primer

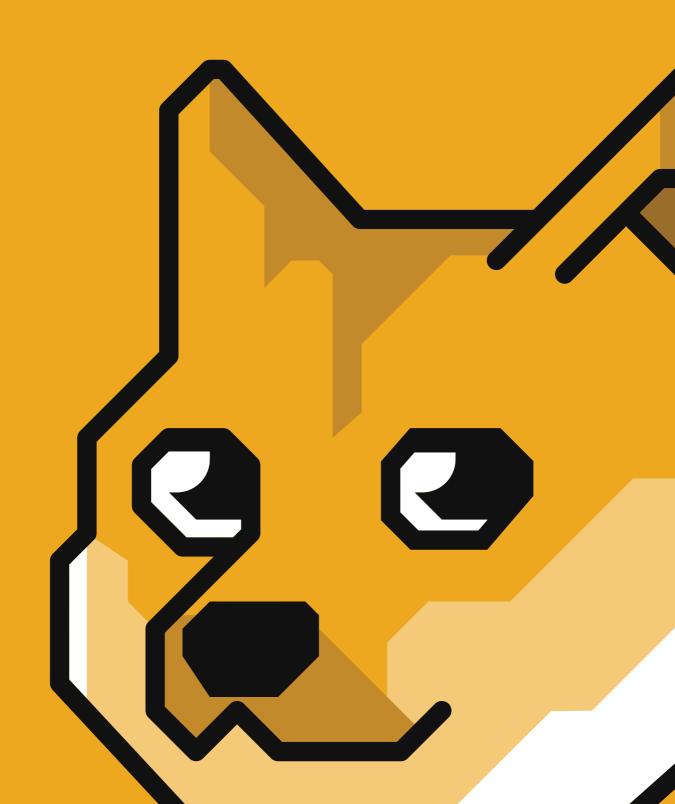




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Why Dogecoin? It's the meme that made it.



In a world where financial value is traditionally tied to cash flows, utility, or cutting-edge technology, Dogecoin (DOGE) stands as a bold exception. Launched in 2013 as a tongue-in-cheek experiment, Dogecoin began as a meme—a Shiba Inu with a quirky caption—but has since morphed into something far greater: a symbol of internet-native value. What started as a playful jab at the seriousness of finance has become a global phenomenon, proving that in the digital age, emotion, culture, and community can be just as powerful as a balance sheet.

DOGE isn't your typical cryptoasset. It doesn't boast a groundbreaking protocol or a meticulously engineered roadmap. Instead, it thrives on something more intangible yet undeniably potent: relevance. Memes are the internet's lifeblood—carriers of humor, identity, and connection. What was once an ephemeral currency of the web became a lasting asset, not by chasing trends, but by embedding itself in the fabric of online culture. While most memecoins flare up and fade away, DOGE has endured, evolving into digital folklore that resonates worldwide.

At the heart of this phenomenon is the Dogecoin community—active, irreverent, global, and fiercely loyal—a self-sustaining digital tribe. And in a decentralized world, that matters. This community creates attention, which brings liquidity; fosters belonging, which drives retention; and inspires advocacy, which fuels growth. In a world where attention is scarce and sentiment shapes capital flows, this grassroots network isn't just a feature—it's the engine. DOGE's value lies in its ability to rally people around a shared, lighthearted ethos, turning a meme into a movement that challenges us to rethink what "value" means in a hyper-connected world.

With that said, let's meet Dogecoin—the original memecoin that's rewriting the rules.

Meet Dogecoin, the oldest dog on the blockchain

\$0.80 90'000'000 # DOGE Price 80'000'000 \$0.70 70'000'000 \$0.60 60'000'000 \$0.50 50'000'000 \$0.40 40'000'000 \$0.30 30'000'000 \$0.20 20'000'000 \$0.10 10'000'000 \$0.00 0 Mar-17 Mar-19 Mar-15 Mar-21 Mar-23 Mar-25 Total # of DOGE Addresses **DOGE Price**

Figure 1 - DOGE Holders & Price Growth

Source: Glassnode, 21Shares. Data from March 23, 2015 - March 22, 2025

With a jaw-dropping return of over 130,000%—or 127% annualized—over the last decade, Dogecoin stands as the best-performing top 25 cryptoasset of the past 10 years. As mentioned, it originally launched in 2013 as a lighthearted, open-source fork of Bitcoin featuring the iconic Shiba Inu from the "Doge" meme, however it has quickly evolved to a \$30B asset embraced by millions.

Fueled by fast, low-cost transactions, a vibrant grassroots community, and growing mainstream acceptance—including from Tesla, AMC, and Newegg—Dogecoin continues to reinforce its retail appeal and real-world utility.

Even after hitting its all-time high in May 2021, Dogecoin's network has continued to expand. Total wallet addresses have nearly doubled from 44 million to over 84 million in under four years, reflecting its explosive adoption and increasingly mainstream status.

With millions of holders worldwide, Dogecoin's ascent as the original memecoin has cemented its place as both a cultural icon and a widely used entry point into crypto. Its approachable, community-led ethos has onboarded countless first-time investors into the digital asset space.

Now, with the launch of traditional financial products, Dogecoin enters a new chapter—available through a regulated, institutionally-backed investment vehicle offering secure, transparent access to a more traditional generation of investors, as they get acquainted with the oldest dog on the blockchain.

Beneath the fur, Dogecoin has a "retail Bitcoin" design

6.00% 160B DOGE **DOGE Inflation Rate** 140B DOGE 5.00% 120B DOGE 4.00% 100B DOGE 3.00% 80B DOGE **60B DOGE** 2.00% 40B DOGE 1.00% 20B DOGE 0.00% **OB DOGE** Jan-17 Jan-19 Jan-21 Jan-23 Jan-25 Jan-15 **Dogecoin Circulating Supply Dogecoin's Inflation Rate**

Figure 2 - Dogecoin's Inflation Rate and Circulating Supply

Source: Coingecko, 21Shares. Data from Jan 1, 2015 – March 23, 2025. The inflation rate is annualized; the 2025 figure is an annualized projection based on data available year-to-date.

Dogecoin, like Bitcoin, uses a proof-of-work (PoW) consensus mechanism, running on its own blockchain originally forked from Litecoin. It employs the Scrypt hashing algorithm—less resource-intensive than Bitcoin's SHA-256—making mining more accessible to everyday users with consumer-grade hardware. Thanks to merged mining with Litecoin, Dogecoin benefits from shared infrastructure, with hashpower recently reaching all-time highs of 2.5 PH/s—making the network increasingly difficult to attack.

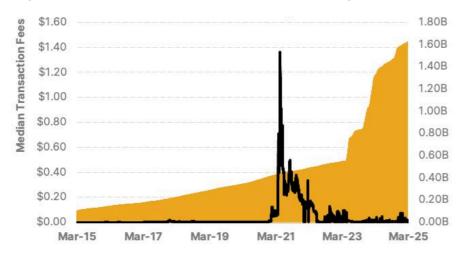
Dogecoin's design is built for speed and utility: it has no maximum supply, confirms blocks every minute, around 10 times faster than Bitcoin, and maintains ultra-low transaction fees—ideal for tipping, microtransactions, and everyday use.

While its supply is technically unlimited, Dogecoin's issuance model is transparent and predictable: approximately 10,000 DOGE are mined every minute, totaling around 5.25 billion new tokens annually. As the supply base expands, this fixed issuance creates a natural disinflationary trend—cut nearly in half over the past decade—while ensuring network security through consistent miner rewards.

Altogether, Dogecoin's technology fosters an aligned ecosystem between users and miners. With sustainable economic incentives, it acts as a kind of "retail Bitcoin"—built not only for hoarding, but for real-world use too.

Dogecoin is more than just a memecoin, it has real-world bite!

Figure 3 - Transaction Count vs Cost on Dogecoin



- Cumulative # of Transactions
- Median Transaction Fees

Source: Glassnode, 21Shares. Data from March 23, 2015 – March 22, 2025

While Dogecoin began as a lighthearted experiment, its evolution has proven it to be far more than a meme.

Thanks to its speed, low fees, and strong community backing, Dogecoin has grown into a functional digital currency with a range of real-world use cases. From payments and merchant adoption to infrastructure development and charitable giving, Dogecoin continues to demonstrate its staying power as a practical and accessible tool in the broader crypto ecosystem.

Dogecoin as a payment tool

Cumulative # of Transactions

Dogecoin has transformed into a widely accepted digital currency, embraced by major brands like Tesla, AMC, Newegg, and the Dallas Mavericks. With fast transaction speeds and low fees—even amid surging transaction volumes—it has become a practical option for everyday payments. Crypto payment processors like BitPay have further expanded its reach, enabling thousands of merchants worldwide to accept DOGE. Most recently, The Open House Group—a prominent real estate firm listed on the Tokyo Stock Exchange—added the digital asset to its list of supported payment methods, making it one of the few accepted for property transactions.

Enhancing Dogecoin's payment infrastructure

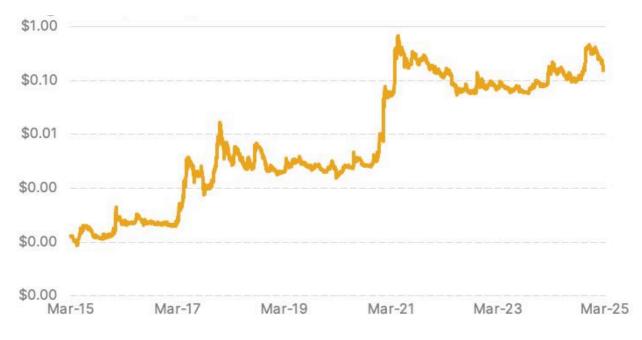
Initiatives like Dogebox and GigaWallet are simplifying the asset's integration for businesses. Meanwhile, RadioDoge is working to expand access by enabling offline transactions in remote regions through low-cost radio and Starlink technology—advancing global crypto inclusion. A rumored integration with Elon Musk's X platform could further extend Dogecoin's utility across digital tipping and commerce. Collectively, all of these efforts reinforce Dogecoin's growing relevance in real-world payments and its potential as a frictionless, decentralized transaction layer.

Do only good everyday

As we've seen, community drives crypto—and Dogecoin's shines brightest. This global network doesn't just thrive on memes; it turns that energy into social good. From funding clean water in Kenya to sending Jamaica's Bobsled Team to the Olympics and raising over \$1 million for Ukraine relief, Dogecoin's community transforms internet culture into real-world impact. Low fees and fast transactions make it a favorite for grassroots giving, showing a coin born as a joke can leave a lasting legacy. At its core, DOGE is more than a digital asset —it's a movement powered by a community that believes in doing good, every day.

After a decade of outperformance, is Dogecoin getting ready to run again?

Figure 4 - Dogecoin (DOGE) Price Performance



Source: Glassnode, 21Shares. Data from March 23, 2015 - March 22, 2025

DOGE's performance and staying power across multiple market cycles suggest it is not "just another one of those memecoins". Over the past decade, Dogecoin has even outperformed Bitcoin--delivering over 133,000% in returns, nearly 1,000x Bitcoin's gains in the same period. Despite deep drawdowns during bear markets, Dogecoin has shown remarkable structural resilience. Following each major rally, it has consistently formed higher lows—a pattern of long-term appreciation and compounding strength.

Historically, the asset has closely mirrored Bitcoin's movements, often peaking a few weeks after. While 2024 saw Bitcoin dominate headlines following landmark ETF approvals, Dogecoin still followed its trajectory—though it has yet to stage its typical delayed breakout.

As macro uncertainty continues to fade and momentum returns to the market, retail participation is likely to accelerate—setting up conditions in which Dogecoin has historically thrived.

At the same time, regulatory clarity around Dogecoin has meaningfully improved. The SEC recently confirmed that most memecoins are not considered securities, likening them to collectibles, and that PoW rewards—like those earned from mining DOGE—also fall outside that scope. These developments further legitimize Dogecoin's role in the ecosystem, potentially setting the stage for its next paw up—especially as it now holds a firm base around \$0.17, nearly 3x its pre-rally level before reaching a new all-time high in the last cycle.

Dogecoin is off the leash & moves to its own rhythm

Figure 5 - Correlation Across Traditional Asset Classes, Bitcoin, Ethereum & Dogecoin

				U.S. Tech			U.S. Long-Term	Emerging	
	Dogecoin	Ethereum	Bitcoin	Equity	Gold	Real Estate	Treasury	Equity	U.S. Equity
U.S. Equity	14%	43%	35%	77%	18%	75%	31%	65%	100%
Emerging Equity	8%	20%	18%	60%	36%	53%	28%	100%	
U.S. Long-Term Treasury	0%	6%	3%	33%	26%	49%	100%		
Real Estate	16%	32%	25%	60%	26%	100%			
Gold	2%	6%	10%	11%	100%				
U.S. Tech Equity	14%	33%	36%	100%					
Bitcoin	31%	76%	100%						
Ethereum	37%	100%							
Dogecoin	100%								
•									
Average Correlation	15%	32%	29%	41%	17%	42%	22%	36%	45%

Source: Bloomberg, Yahoo Finance and 21Shares. Correlation calculated on a 2-week rolling return window from March 22, 2021 to March 21, 2025.

Color Description: Yellow denotes high correlation across assets, grey denotes low or negative correlation across assets.

In addition to its long-term performance, Dogecoin stands out as an asset that behaves asymmetrically—offering investors a rare source of uncorrelated returns across both traditional and crypto portfolios. With an average correlation of just 15% to major assets, Dogecoin's price action remains largely detached from broader macroeconomic trends, reinforcing its value as a true diversification tool.

Even within crypto, Dogecoin exhibits notable independence: its correlation with Bitcoin sits at just 31%, and 37% with Ethereum. This divergence stems from unique capital flow dynamics, where higher-beta cryptoassets tend to rally after blue-chips reach major milestones.

While Bitcoin slowly evolves into a digital store of value and Ethereum powers decentralized infrastructure, Dogecoin remains largely a cultural asset—thriving on narrative momentum, and crowd psychology, offering explosive upside when risk appetite surges.

For investors seeking upside without mirroring the behavior of core holdings, Dogecoin offers a compelling case. Its ability to decouple from market trends while tapping into more speculative surges makes it a powerful, if unconventional, portfolio addition with wildcard potential.

A small 1% allocation to Dogecoin has a loud bark!

Figure 6 - 1% Dogecoin Allocation in a Bitcoin-enhanced Growth Portfolio

	Benchmark Monthly Rebalance	1% DOGE Daily Rebalance	1% DOGE Weekly Rebalance	1% DOGE Monthly Rebalance	1% DOGE Quarterly Rebalance	1% DOGE Annual Rebalance	1% DOGE No Rebalance
Cumulative Return	32.29%	37.86%	39.07%	40.89%	39.57%	38.58%	34.33%
Annualized Return	7.25%	8.36%	8.59%	8.95%	8.69%	8.50%	7.66%
Annualized Volatility	9.26%	9.58%	9.63%	9.75%	10.32%	10.49%	11.12%
Sharpe Ratio	0.32	0.39	0.40	0.42	0.39	0.37	0.31
Sortino Ratio	0.30	0.40	0.42	0.45	0.41	0.39	0.31
Max Drawdown	-22.21%	-22.52%	-22.79%	-22.93%	-23.02%	-23.94%	-24.75%
Max Relative Drawdown	-	-0.31%	-0.58%	-0.72%	-0.81%	-1.73%	-2.54%

Source: Bloomberg, Yahoo Finance and 21Shares. Data from March 22, 2021 to March 21, 2025. **Benchmark Portfolio**: 58.5% U.S. Equities (SPY), 38.5% U.S. Bonds (AGG) & 3% Bitcoin (BTC). **Dogecoin-enhanced Portfolio**: 58% U.S. Equities (SPY), 38% U.S. Bonds (AGG), 3% Bitcoin (BTC) & 1% Dogecoin (DOGE).

If Dogecoin's decade-long outperformance and low correlation weren't compelling enough, its portfolio impact makes an even stronger case. We tested a Bitcoin-enhanced growth portfolio—a traditional 60/40 infused with 3% BTC--and introduced a modest 1% DOGE allocation. Since most prospective investors likely already hold Bitcoin, this offers a lens into how the two assets can complement each other.

Despite the small size, every approach delivered stronger returns. The benchmark returned 7.25% annually, while DOGE-enhanced portfolios reached as high as 8.95%. Sharpe ratios mostly improved across the board, indicating better risk-adjusted returns. Volatility did slightly tick up, but drawdowns remained largely contained. Even with no rebalancing, the max drawdown only deepened by a few percentage points—underscoring that even a 1% DOGE allocation adds meaningful punch without destabilizing the broader portfolio.

Rebalancing remains essential to capturing upside effectively. Without it, returns can plateau while risk quietly compounds. Monthly or weekly rebalancing offered the best balance—maximizing returns while keeping volatility and drawdowns in check, especially during periods of broader market stress, as we've recently seen. Given Dogecoin's momentum-driven nature, a more strategic approach—tied to broader crypto market cycles—may offer even greater optimization beyond routine rebalancing.

With the right structure, a 1% allocation proves to be far from reckless—and potentially highly rewarding.

Pack leader or just a pup? Sniffing out Dogecoin's valuation

Figure 7 - Dogecoin Bear, Neutral, Bull Scenarios

Case	Potential Price in 2025	Multiple from Current Price
Bear	\$0.38	2.02x
Neutral	\$1.00	5.50x
Bull	\$1.42	7.67x

Source: Coingecko, 21Shares. Data from March 24, 2025

Bear Case

Despite strong fundamentals and a rich cultural legacy, **Dogecoin's recent rally, fueled by post-election memecoin mania, may have front-run its true cycle potential.** As attention shifts to newer narratives, Dogecoin risks being seen as 'yesterday's play,' potentially underperforming even in a rising market. Still, that wouldn't signal a flaw in its model, just a pause in a fast-rotating cycle.

Assuming a continued -10% compounded annual growth rate (CAGR) from its 2021 peak of \$0.73, Dogecoin's price would be projected to land around \$0.38 by 2025—still more than a 2x from today's levels, but modest relative to past cycles. More notably, this would mark the first time Dogecoin fails to reach a new all-time high in a full market cycle.

Neutral Case

Dogecoin may not dominate headlines like it did in 2021, but it still holds cultural relevance and widespread recognition. In a scenario where the total crypto market cap peaks at \$5 trillion this cycle and Dogecoin maintains a solid, albeit slightly reduced, share of the market - say 3% instead of its previous 4% - this would imply a market cap of roughly \$150 billion.

At that valuation, DOGE would trade near \$1 per coin, a ~5.5x gain from current levels around \$0.185. This neutral case assumes Dogecoin retains its stature as the leading memecoin, despite increased competition, with stable adoption and renewed retail interest, but without the same euphoria of last cycle.

Bull Case

If we take DOGE's bottom price of \$0.007 just before the last bull run began and fast-forward two years to the bottom of the current cycle at \$0.0585, that move reflects a CAGR of 189% - if it were to mirror this explosive growth, DOGE would reach approximately \$1.42.

In this scenario, Dogecoin benefits from renewed memecoin mania, increasing real-world adoption, and stronger interest fueled by regulatory clarity and potential integration with other major platforms. A full return of retail enthusiasm and broad cultural momentum could re-establish DOGE as the breakout asset of the cycle, potentially even doubling its all-time high.

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