The State of Crypto

Fairer, Cheaper, Faster Everyday Finance

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coinbase

State of Crypto: Fairer, Cheaper, Faster Everyday Finance

Our current financial system costs regular Americans too much, takes too long, and is too hard to access. Frustration over fees in particular – having to pay middlemen in order to move and use their own hard-earned money – is the top driver of discontent with the entire system. In 2022, Americans could have saved, at a minimum, about $74 billion in credit card transaction fees alone*, amounting to an average of $600 per household, and merchants spent more than $126 billion on fees to process credit card transactions. By using blockchain technology instead, they could have paid next to nothing.

New research conducted for Coinbase by The Block details how apps for legacy financial institutions, and even payment apps based on these institutions, keep the system unfairly expensive, hard to access, and mired in delays. Users of the system, both consumers and small businesses alike, must pay, then wait, then pay again as their money wends its way past intermediaries who add fees and time to the process. New polling finds that at least three in five Americans want updates to the current system that make it cheaper, faster, and easier to access, and the top reasons why they see potential in crypto are in line: its ease of use, affordability, and streamlined, fully digital, legacy-free nature.

Improvements consumers want

Cheaper transactions	71%
Faster transactions	70%
Better access	63%

Top reasons for potential in crypto

1	Easy to use
2	Fully digital payment option
3	Lower costs and fees
4	Not tied to big banks
5	No need for intermediaries

Consumers who have grown up with the internet – and there are more of them every day – also expect to be able to transact at the speed of the internet, globally, anytime of day or night, without overcoming hurdles to participate or waiting on business hours or cross-border delays.

Unsurprisingly, these sentiments are strongest among younger generations. Americans aged 18-40 are much more likely to own crypto than older Americans, and by wide margins, they're more likely to believe crypto can make the system cheaper, faster, and fairer. But in an era of little bipartisan agreement on any issue, self-identified Democrats and Republicans agree within 4 percentage points that crypto and blockchain could make the financial system cheaper, faster, and easier to access. The future of money is here.

Cheaper

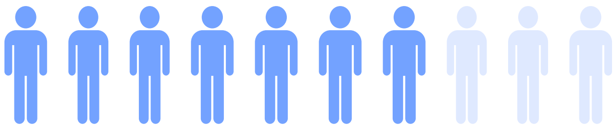
Finding

#1 Too many
#2 Too much

The number and cost of fees are the top drivers of discontent with the entire financial system.

7 in 10

71% of Americans – and 9 in 10 American crypto owners – want lower fees as part of a new, updated financial system.



Fact

$74 billion*

The minimum that American consumers could have saved in 2022 by using blockchain for transactions instead of traditional credit cards.

Up to 5,000x**

How much cheaper crypto payments can be vs. payments through traditional means, especially for international transfers.

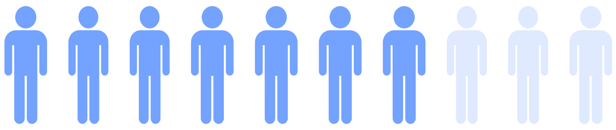
<$.01 vs. 1.5%-3.5%

How much cheaper blockchain fees are for merchants vs. average credit card processing fees.

Faster

7 in 10

70% of Americans – and 9 in 10 crypto-owning Americans – want faster transaction times (that happen in seconds, unrestricted by bank hours or weekends) as part of a new, updated financial system.



24x to 432,000x***

How much faster blockchain networks process payments than wires and services like Western Union.

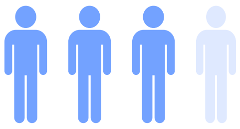
Near-instant vs. 1-6 business days

How much faster payroll processing happens via blockchain vs. average processing time for traditional payroll.

Easier to access

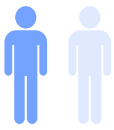
3 in 4

76% of American crypto owners – those who know best – think crypto could make the financial system easier to access.



1 in 2

51% of Americans, including about half of adults aged 18-40 and Black and Hispanic Americans, say they think the current financial system isn't fair for everyone.



60 minutes vs. 2-6 business days

How much faster DeFi loan approval and processing happens compared to traditional methods.

Crypto is cheaper

Fees – both how many there are, and how much they cost – are fueling discontent with the entire financial system, frustrating consumers who have to pay intermediaries for the ability to move their own money, and hindering smaller merchants' ability to grow.

Transaction fees

Payment Methods Comparison – Transaction Fees Paid by Users

TRADITIONAL METHODS	BLOCKCHAIN NETWORKS
Automated Clearing House (ACH): $0 or a few dollars	**Ethereum:** $6.42
Wire: $0–$50 *(ranging from incoming domestic wires to outgoing international wires)*	**Optimism:** $0.28
	Arbitrum: $0.25
Credit Card: Merchants can charge surcharges (up to the cost of accepting the card or max. 4%) or convenience fees (up to processing cost, typically 2–3% of the purchase price)	**Base:** $0.21
	Avalanche C-Chain: $0.16
	Polygon PoS: $0.02
	Solana: $0.007

Note: Fees for the blockchain networks represent the average fees during the 4th quarter of 2023.

Source: Bankrate, Artemis.

Payments over blockchain networks can be **up to 5,000x cheaper**** than payments through traditional methods like wires, especially for international money transfers when accounting for the best case scenario of fees less than $0.01.

- Wire payments come with fees of up to $50, especially for international transfers, while certain blockchains are optimized for fees of less than $0.01.
- Underbanked and unbanked Americans cite high fees as the top reason why they don't have bank or credit union accounts.
- 72% of Gen Z and Millennials say they're interested in lower fees as part of a new, updated financial system.

Remittance fees

Total remittances globally amounted to $836 billion in 2022 and are projected to increase by $50 billion by 2024. Sending money home to loved ones via blockchain instead of the legacy system for one year could save the senders **nearly an additional month's worth of remittance.**

- On average, migrant workers around the world send up to $300 to loved ones every month. Across the course of a year, they could pay nearly another month's worth – $252 – in currency conversions and fees.

- By sending remittances through blockchain instead of through the legacy system, paying just $0.01 per transaction or $0.12 for the year, senders would save approximately $252.
- In the US alone, 15% of Americans have sent a remittance in the previous 12 months. Whether they use banks, with fees averaging 10.8%, or money transfer operators, with fees averaging 6.2%, or the post offices, charging 5.5%, the impact is immense. The average fee rate of 6.18% means Americans on average spend close to $12 billion on remittance fees per year.

Merchant fees

Credit Card Merchant Fees | Interchange + Assessment Fees

CREDIT CARD	AVERAGE INTERCHANGE FEES	AVERAGE ASSESSMENT FEES
Visa	1.15% + $0.05 to 2.40% + $0.10	$0.0195 per transaction + 0.14%
Mastercard	1.15% + $0.05 to 2.50% + $0.10	$0.0195 per transaction + 0.1275% (transactions less the $1,000); $0.0195 per transaction + 0.1475% (transactions more the $1,000)
Discover	1.35% + $0.05 to 2.40% + $0.10	$0.0195 per transaction + 0.13%
American Express	1.43% + $0.10 to 3.30% + $0.10	0.15%

Payment Processor Fees

PAYMENT PROCESSOR	SWIPED TXN FEE	ONLINE TXN FEE	MONTHLY FEE
National Processing	Base Costs + 0.14% + $0.07	Base Costs + 0.29% + $0.15	$9.95+
PayPal	2.99% + $0.49	3.49% + $0.49	$0
Block	2.60% + $0.10	2.9% + $0.30	$0
Stax	0.00% + $0.08	0.00% + $0.18	$99+

Source: Bankrate, Merchant Cost Consulting, Self-reported.

Credit card processing fees are merchants' second highest cost after labor. Their average credit card processing fees range from **1.5% to 3.5%,** adding up to burdensome overhead, versus blockchain fees that can be **as low as less than $0.01** (best case scenario).

- A $1,000 transaction incurring a credit card charge of 1.5% to 3.5% results in fees for merchants ranging from $15 to $35, while a payment on a blockchain network with an average fee of one cent amounts to just $0.01.
- For a $10,000 payment, the percentage-based charge means credit card fees for merchants ranging from $150 to $350, while the blockchain transaction continues to cost $0.01.

Case study: Solana Pay

Solana Pay is executing notably on the crypto industry's goal of enabling cheaper business transactions. By eliminating intermediaries, it also eliminates bank fees and chargebacks. Its current average transaction fee for a merchant is ~$0.002.

Apparel and footwear brand ASICS teamed up with Solana Pay for a more cost-effective way to extend the global reach of a limited-edition footwear release. The partnership slashed ASICS' fees to as low as $0.00025 per transaction (average fee closer to $0.002) – a significant difference from conventional processors like PayPal, known for charges of 3.49% plus $0.49 per transaction. Considering the sale of around 3,000 collection pairs at $200 each, a traditional processor would have incurred ~$22,000 in fees (based on PayPal's rate), whereas Solana transaction fees amounted to a mere $6 total.

Solana Pay X ASICS

COLLABORATION OVERVIEW

ASICS, a leading apparel and footwear company, joined forces with Solana Pay, leveraging blockchain technology for a global product release

SCALABILITY AND COST REDUCTION

Solana Pay addressed ASICS' scalability challenges by offering substantially lower transaction fees (averaging around $0.002 per transaction) compared to traditional payment processors such as PayPal (3.49% plus $0.49 per transaction).

FINANCIAL EFFICIENCY IMPACT

The collaboration resulted in notable cost savings, with Solana fees amounting to ~$6 (assuming an average fee of $0.002) for the sale of 3,000 footwear pairs at $200 each, compared to potential fees of ~$22.4K with a traditional processor like PayPal.

Solana Pay's impact extended beyond cost reduction, establishing a direct connection between businesses and customers. This collaboration showcased blockchain's transformative power, enhancing global reach, reducing transaction costs, and revolutionizing customer interactions through innovative solutions.

Crypto is faster

Moving at the speed of the internet, from peer to peer without legacy intermediaries that keep bank hours and otherwise slow things down, crypto enables reliably fast payments, including cross-border payments and remittances; faster payroll to help boost consumer liquidity; and quick execution of smart contracts.

Cross-border payments and remittances

Blockchain networks process payments **at least 24x and as much as 432,000x faster*** ** than traditional methods (e.g., ACH, wire, paper checks, etc.).

- Blockchain networks at their slowest complete a transaction in one hour – traditional methods at their fastest complete payments in 24 hours, lagging blockchain by a factor of 24 at best.
- The fastest blockchain networks, with transaction times under one second, outpace the slowest traditional methods, which take five days, by 432,000x.
- Remittances, which are often urgent payments, play a growing role for households in emerging economies, including in post-disaster recovery. Crypto remittance is 388x faster than traditional methods.

Source: Bankrate,On-chain Data, Stripe, The Block Research, VISA.

Payment Methods Comparison – Settlement Time

TRADITIONAL METHODS	BLOCKCHAIN NETWORKS
Automated Clearing House (ACH): 1–3 business days	**Bitcoin:** ~60 minutes *(time to finality)*
Wire: Within 24 hours for domestic wires; 1–5 business days for intenational wires	**Ethereum:** ~15 minutes *(time to finality)*
Debit / Credit Card: 1–3 business days	**Stellar:** ~5 seconds *(time to finality)*
Paper Checks: 2–5 business days *(factor in additional days for mail system delays)*	**Sui:** Under 1 second *(time to finality)*

Payroll

Payroll processing via blockchain, versus total processing time for traditional payroll, is **near-instant versus an average between one and six business days.** Benefits in same-day payroll include strengthening loyalty to employers, and helping employees take better advantage of investments that can earn them interest, and token streaming to access a growing array of DeFi services.

- About eight in 10 employees (79%) want same-day wages.
- Nearly seven in 10 would be likely to stay longer with the employer and pick up extra shifts.

Source: Bankrate, Stripe, The Block Research, VISA, TechnologyAdvice.

Traditional Payroll Total Processing Time

PROCESSING METHOD	PROCESSING TIME	PAYMENT METHOD	PROCESSING TIME	TOTAL TIME
Manual	1–2 business days	Direct Deposit	1–3 business days	2–5 business days
		Paper Checks	2–5 business days	3–7 business days
Software Automation	Minutes to a few hours	Direct Deposit	1–3 business days	1–3 business days
		Paper Checks	2–5 business days	2–5 business days
Outsourced	A few hours to 1 business day	Direct Deposit	1–3 business days	1–4 business days
		Paper Checks	2–5 business days	2–6 business days

Crypto is easier to access

Requiring only internet access, crypto offers much more accessible, timely access to financial services than the legacy system, including for groups of people and parts of the world that haven't had much access to the system at all, or whose home currencies might be unstable.

Account set-up

Crypto accounts are more accessible to more people than traditional bank accounts, which require paperwork and costs that create higher barriers to entry.

- Financial requirements can include an initial deposit, typically between $25 and $100, and a series of post-setup fees – monthly service fees, per-check fees, check printing fees, ATM-use fees – plus fees that kick in if certain requirements are not met (minimum balance or overdraft fees, etc.).
- Setting up a crypto wallet simply requires creating a private key and possibly completing two-factor authentication, both at no charge.

DeFi loan approvals

Benchmarked at 60 minutes, DeFi loan approval and processing is **about 48x to 144x faster** than traditional avenues for loan approval and processing, which can take two to six days. More importantly, DeFi loans are more accessible for more people, giving those less served or unserved by the legacy financial system a means to take out loans that can help build a business or buy a home, i.e., build wealth.

Traditional Loan Process vs. DeFi Lending

COMMON ISSUES	DEFI LENDING IMPROVEMENTS
Lengthy Application and Approval Process	DeFi lending offers a streamlined and decentralized process, often allowing for quicker loan approval and disbursement due to the absence of traditional paperwork.
Strict Eligiblity Criteria	DeFi lending platforms have more inclusive eligibility criteria, enabling individuals with varied financial backgrounds to access loans without strict creidt score requirements
Collateral Requirements	DeFi lending platforms offer flexibility in collateral types, including cryptocurrencies, offering more options for borrowers.
Fixed Terms and Payment Structures	DeFi loans often provide more flexibility in terms of repayment structures. Smart contracts on blockchain platforms enable customizable and programmable terms that borrowers can tailor to their needs.
Limited Accessibility for Small Loans	DeFi lending protocols are designed to accommodate smaller loan amounts, making them more accessible for individuals or businesses seeking modest financing.
Higher Interest Rates for Unsecured Loans	DeFi lending provides competitive interest rates for both secured and unsecured loans.
Geographic Limitations	DeFi lending platforms provide global accessibility without physical presence or specific geographic restrictions.

Access to stable currency
In countries with unstable governments and currencies, stablecoins like USDC are a neutral, decentralized way for citizens to safeguard their savings and transact across borders. Since December 2020, **the number of active addresses that have transferred stablecoins has increased more than 10x, and the number of active transfers has increased more than 8x.**

This is Coinbase's third *State of Crypto Report*. Our Q3 2023 report on crypto adoption by age and access found that more than half of Americans aged 18-40 don't or only sometimes use the traditional financial system, and our Q2 2023 report on corporate adoption found that more than half of Fortune 100 companies are developing blockchain initiatives to stay competitive. This series aims to educate the public about the role crypto can play in updating the financial system for the benefit of consumers and businesses alike. At a time of broad agreement that the current system is too expensive, slow, and hard to access, the findings lay out how crypto can help update the system to be fairer, cheaper, faster, and easier for everyone to use.

Methodology

Survey findings via Morning Consult

- Poll of 2,513 US adults conducted December 27-28, 2023, with a margin of error of +/- 2 to 5 percentage points depending on the audience.

Survey findings via Bovitz, Inc.

- Poll of 1,000 US adults conducted June 19-23, 2023

Crypto Payments Analysis, with research partner The Block:

- Analysis of on-chain payments data
- Identification of case studies

Other Sources

- US bank branch numbers fall to 40 year low
- Remittances matter: 8 facts you don't know about the money migrants send back home | UN DESA | United Nations Department of Economic and Social Affairs
- Remittances | KNOMAD
- Deloitte Global Payroll Benchmarking Survey Sponsored by APA and GPMI
- Survey: Small-Business Owners Misjudge Time to Prep Payroll
- Average Credit Card Processing Fees and Costs in 2023 | The Motley Fool

Crypto creates economic freedom by ensuring that people can participate fairly in the economy, and Coinbase (NASDAQ: COIN) is on a mission to increase economic freedom for more than 1 billion people. We're updating the century-old financial system by providing a trusted platform that makes it easy for people and institutions to engage with crypto assets, including trading, staking, safekeeping, spending, and fast, free global transfers. We also provide critical infrastructure for onchain activity and support builders who share our vision that onchain is the new online. And together with the crypto community, we advocate for responsible rules to make the benefits of crypto available around the world.

* Calculation of credit card fees savings: Publicly available data (US Securities and Exchange Commission, U.S. Census Bureau, Statista) was used to source the number of credit card transactions annually and the average amount per transaction in the US, in 2022. Using these figures, we calculated the total annual savings for the entire volume of transactions in the US when using blockchain with a fixed fee per transaction compared to traditional credit card fees, which are a percentage of the transaction amount. Average savings per household calculated using 2020 US Census estimate of 123.6 million households.

Annual Total Transaction Amount = Average Transaction Amount × Transactions Annually
Where:
- Average Transaction Amount = $90.89
- Transactions Annually = 54.8 billion

Annual Credit Card Fee = Annual Total Transaction Amount × Credit Card Fee Percentage
Where:
- Low-End Credit Card Fee = 1.5%
- High-End Credit Card Fee = 3.5%
- For the low end (1.5%): Annual Credit Card Fee (Low) = Annual Total Transaction Amount × 0.015
- For the high end (3.5%): Annual Credit Card Fee (High) = Annual Total Transaction Amount × 0.035

Annual Blockchain Fee = Transactions Annually × Blockchain Fee per Transaction
Where:
- Blockchain Fee per Transaction = $0.01 as baseline for low fee networks like Solana, regardless of transaction size

Savings = Annual Credit Card Fee – Annual Blockchain Fee
- For the low end (1.5%): Savings (Low) = Annual Credit Card Fee (Low) – Annual Blockchain Fee
- For the high end (3.5%): Savings (High) = Annual Credit Card Fee (High) – Annual Blockchain Fee

** Calculation of fee comparison: Upper range of $50 for the wire payment (most expensive in the traditional payments) and comparing that with networks (e.g., Solana) that have under $0.01 fees on blockchain in the best-case scenario (roughly using $0.01 for calculations). 50/0.01=5000x. This figure can be even more drastic for certain chains like Solana, with the average fee being around $0.002 (50/0.002= 25000x). Network congestion may affect fees – this example presents a best-case scenario for blockchain.

*** Calculation of speed comparison: Fastest traditional method: 24 hours, Slowest blockchain method: one hour, Slowest traditional method: five days, Fastest blockchain method: one second. Fastest traditional method to Slowest blockchain method (lower range) = 24 hours / one hour = 24x. Slowest traditional method to Fastest blockchain method (upper range) = five days / one second ≈ 432,000. Network congestion may affect transfer time - this example presents a best case scenario for blockchain.