

Solana Q3 2023

A recovery priced before it was used — and the anomaly hiding inside the user numbers.

\$8.4B

MARKET CAP · +17% QOQ

45M

CNFTS MINTED · +316%

+24.1%

NON-VOTE TXNS QOQ

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COVERAGE: Q3 2023 · DATA: MESSARI, TOKEN TERMINAL

00 Thesis & Contents

Solana's third quarter of 2023 is usually filed as a quiet recovery. The interesting part is that almost every "activity is collapsing" headline from the quarter turns out to be a measurement artifact, while the quieter economic signals — fees, staking, real transaction throughput — actually improved.

CENTRAL CLAIM

Price, capital, and real transaction activity all rose in Q3 2023. The widely-cited collapse in new users is a distortion left over from an anomalous Q2 address-spawning program, not a genuine demand cliff. The mistake most readers make is trusting a raw count without checking what created it.

This review rebuilds the quarter from measurable economic mechanisms rather than headline KPIs. Every number is normalized (per market cap, per user, per transaction) and every count is checked for the thing that generated it before it is allowed into a conclusion.

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01 Executive Summary

The recovery was real, but it showed up in prices and economics before it showed up in the user counts most people watch.

\$8.4B

MARKET CAP

▲ 17% QoQ, despite the FTX overhang

\$368M

DEFI TVL

▲ 32% QoQ, points-led

404.9M

STAKED SOL

▲ 2% · 71.6% of eligible

45M

CNFT MINTS

▲ 316% · 87.5% one source

+24.1%

NON-VOTE TXNS

▲ QoQ — activity rose

11.4K

NEW DAILY FEE PAYERS

▼ 76% QoQ — but see \$05

Two facts sit in tension. SOL's market capitalization grew **17%** to roughly **\$8.4B** and DeFi TVL grew **32%** to about **\$368M**, while the count of new daily fee payers fell **76%**. Taken at face value, that reads as a market rallying on fumes.

It isn't. The fee-payer collapse is measured against a Q2 base that was inflated by a single program spawning throwaway addresses in May, addresses that retained at **2.5%**. Once that cohort is removed, retention returns to its **~17.9%** historical norm, and the metric that actually tracks economic use — **non-vote transactions** — **rose 24.1%**.

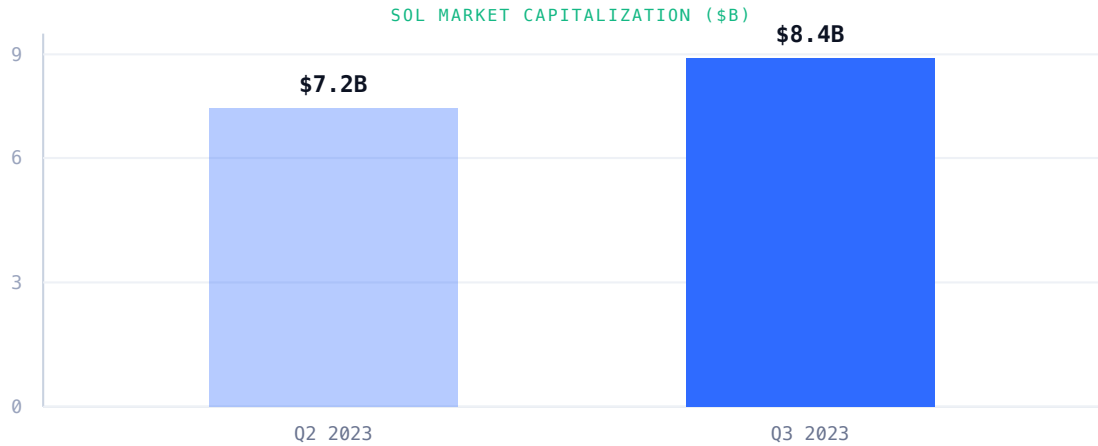
CASE	POSITIVE SIGNAL	APPARENT COUNTER-SIGNAL	RESOLUTION
Price	Mcap +17%	FTX supply overhang	Absorbed; priced in
Capital	TVL +32%	Incentive-driven	Quality > headline
Users	Non-vote tx +24%	New payers -76%	Artifact (\$05)

CORRECTION VS. PRIOR DRAFT

An earlier reconstruction of this report claimed non-vote transactions *fell* ~25%. That is wrong: the verified figure is **+24.1% QoQ**. The sign matters — it flips the entire read of the quarter from "decay" to "quiet growth."

02 Market & Capital

Price recovery outran the network-usage recovery — the question is what drove it.



SOURCE: MESSARI, STATE OF SOLANA Q3 2023

SOL's market cap rose ~17% QoQ to **\$8.4B**, holding second place behind Ethereum. The move happened despite an obvious overhang: the FTX/Alameda estate held more than **57M SOL** earmarked for liquidation. That the market absorbed that risk while re-rating higher is itself information — it suggests the overhang was already discounted.

The decomposition question

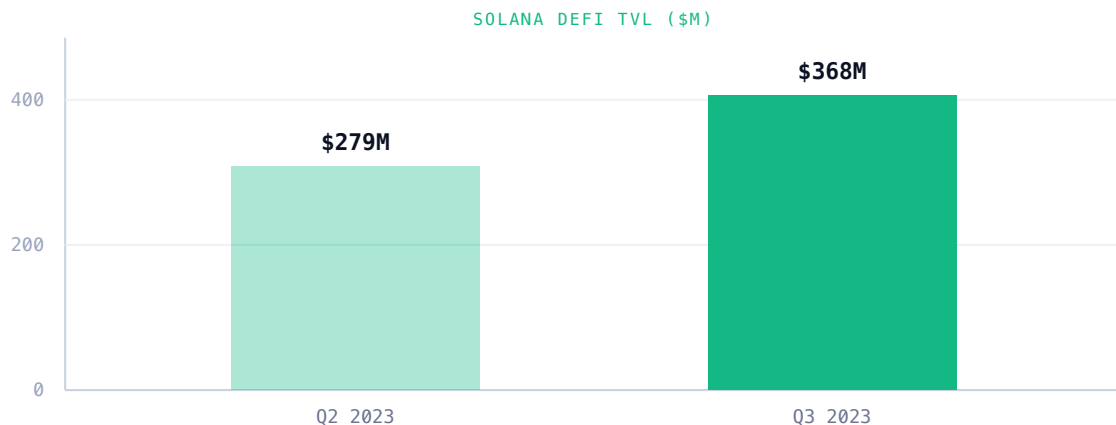
A 17% move is never one thing. Before crediting fundamentals, the return has to be split into its parts, each of which is separately testable against the quarter's data.

$$\text{SOL return} = \beta \cdot (\text{crypto beta}) + \Delta(\text{fundamentals}) + \Delta(\text{supply expectations}) + \varepsilon$$

COMPONENT	READ FOR Q3 2023
Crypto beta	Broad market stabilized post-2022; partial tailwind
Fundamentals	Fees + throughput improved (\$06, \$09)
Supply expectations	FTX overhang re-rated from acute to managed (\$08)

03 DeFi TVL & Capital Quality

TVL grew 32% — but a points-program quarter demands a quality filter, not applause.



SOURCE: MESSARI, STATE OF SOLANA Q3 2023

DeFi TVL rose ~32% to about **\$368M**. The driver is explicit and worth naming: protocols launched points programs. **MarginFi's** TVL grew **743% QoQ** to ~\$22M after starting a points system on July 3; Jito, Cypher, and BlazeStake ran similar playbooks.

WHY THIS MATTERS

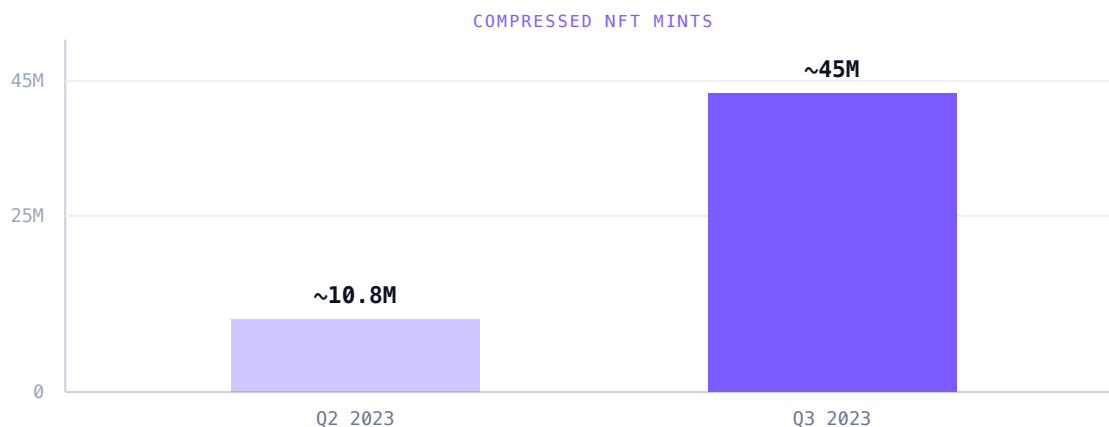
Points-driven TVL is capital renting a future airdrop, not capital expressing durable demand. Gross TVL should therefore be decomposed before it is trusted.

$\Delta\text{TVL} = \text{price effect} + \text{net deposits} + \text{recursive capital} + \text{incentive capital} + \text{composition}$

The useful follow-ups are behavioral, not headline: 7/30/90-day retention of the incentivized deposits, stablecoin share of TVL, TVL concentration across the top protocols, and — the cleanest test — fees generated *per dollar* of TVL. Incentive capital that never produces fees is a liability waiting for its unlock.

04 Compressed NFTs

The quarter's loudest growth number is also its most concentrated.



SOURCE: MESSARI, STATE OF SOLANA Q3 2023

Nearly **45M** compressed NFTs were minted, up **316% QoQ** — a genuine showcase for Solana's state-compression tech, which makes issuance almost free. But "almost free" is exactly why the count needs an economic filter: **DRiP alone accounted for 87.5%** of mints, followed by Dialect and Helium.

CONCENTRATION RISK

A metric where one free-distribution app produces seven of every eight units is measuring that app's generosity, not the ecosystem's demand. Mint count is an input, not an outcome.

Better variables

- Unique *recipients* and repeat recipients, not raw mints
- Retention of minters into week 2 and week 4
- Secondary-market volume and fees per recipient
- Application concentration (Herfindahl across issuers)

The real test is whether cheap issuance manufactures persistent users or simply cheap transactions. Q3 gave the infrastructure proof; the demand proof was still pending.

05 The Fee-Payer Artifact

The quarter's scariest chart is a measurement error waiting to be corrected.

Average daily **new** fee payers fell **76% QoQ to ~11,400**. Read alone, that is a demand collapse. Read in context, it is a base-effect illusion.

WHAT ACTUALLY HAPPENED

Q2's new-payer figure was inflated by an anomalous program that spawned a wave of fresh addresses in mid-May. Those addresses had a one-month retention of **2.5%** — they were created, used once, and abandoned. When the program stopped, the base evaporated, and any quarter compared against it looks like a crash.

METRIC	READING	INTERPRETATION
New payers, raw	-76% QoQ	Alarming, but base-distorted
May cohort retention	2.5%	Throwaway addresses
Q3 cohort retention	17.9%	In line with prior year
Total fee payers	~80–100K/day	Roughly stable

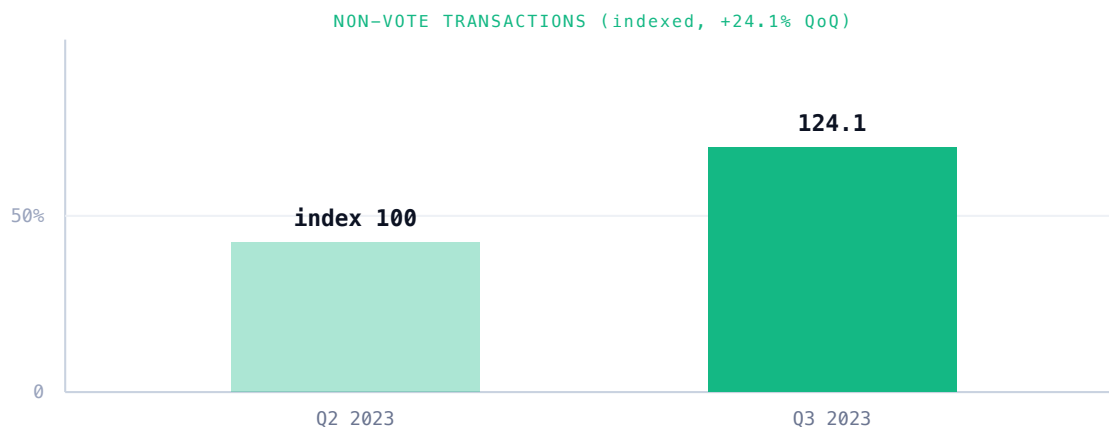
Once the May cohort is excluded, Q3's **17.9%** one-month retention matches the trailing-year average. In other words, the users who actually stick around behaved normally. The headline decline is an accounting shadow cast by Q2, not a change in Q3 behavior.

METHOD RULE

Never difference two counts without asking what generated each. A denominator polluted by one anomalous program will manufacture a trend that does not exist. This single check flips the quarter's narrative.

06 Real Throughput

Strip the vote traffic and the anomaly, and the network did more real work.



SOURCE: MESSARI, STATE OF SOLANA Q3 2023

Average daily **non-vote transactions rose 24.1% QoQ**, sustained by DePIN and consumer applications — **Helium, Dialect, and Tensor** the most cited. Non-vote transactions are the cleanest cheap proxy for economic use because they exclude the validator vote traffic that dominates raw transaction counts on Solana.

THE RECONCILIATION

New-user acquisition optically fell (\$05) while real transaction throughput rose 24%. Both can be true at once: fewer brand-new addresses, but the existing base doing more. That is a maturing network, not a dying one.

The right lens is intensity, not headcount: transactions per active payer, fees per payer, and economic value per active user. A network can shed low-value one-shot addresses while the surviving cohort transacts more — and Q3 2023 is a textbook example.

07 Staking & Security

Security is not a vibe — it is an economic variable with a price.

404.9M

STAKED SOL

▲ 2% QoQ

\$8.2B

STAKING MCAP

2nd behind ETH

71.6%

OF ELIGIBLE SUPPLY

staked

Total staked SOL rose ~2% to **404.9M**, worth about **\$8.2B** and putting Solana second only to Ethereum by staking market cap. With **71.6%** of eligible supply staked, the security budget is deep — but the headline figure hides the variables that actually matter for attack economics.

```
security = z(staked ratio) + z(validator breadth) + z(Nakamoto coeff.) -  
z(client concentration) - z(geo concentration)
```

A rich security factor rewards stake depth and validator breadth while penalizing concentration — of clients, of geography, and of stake among the top validators. On the technical side, the **v1.16** upgrade reached a stake supermajority by quarter-end, lowering validator memory requirements and adding groundwork for Confidential Transfers and zk-proofs. That is capability expansion; whether it converts to demand is a §11 question, not a Q3 conclusion.

DISCIPLINE

Store the exact observation date for every decentralization metric. Validator counts and stake distributions are revised and time-zone-sensitive; a security factor built on undated snapshots is not reproducible.

08 Supply Overhang

Expected supply can move price before a single token is sold.

The FTX/Alameda estate held more than **57M SOL** flagged for liquidation. The naive read is bearish: a large forced seller is coming. The quantitative read is subtler — what matters is how much of that expected supply was *already priced in*, and how much the market could absorb.

$$\text{expected sellable supply} = \text{unlocks} \times P(\text{sale}) \times (1 - \text{expected absorption})$$

INPUT	MODEL VARIABLE
Estate holdings & unlock schedule	Change in expected circulating supply
Probability of sale (legal/timing)	Expected sell pressure
Market depth	Absorption capacity
Derivatives open interest	Leverage amplification

That the market re-rated **+17%** during a quarter defined by this overhang is the tell: the acute phase of the risk was discounted, and staged, structured liquidation was already the base case. The overhang moved from a shock variable to a scheduled, absorbable one — which is exactly when the price impact fades.

09 Monetization

Fees improved even as raw user counts told a scary story — which is the whole point.

METRIC	Q3 2023	USE
Protocol fees	~185.4K SOL	Native demand
Fee value (USD)	~\$4M	Economic value
Average tx fee	~\$0.0002	Blockspace cost
Inflation rate	~5.8%	Supply pressure

Protocol fees rose in both SOL and USD terms while raw new-user counts fell — the clearest possible argument that user headcount is a poor proxy for economic value. Fees are demand that actually paid for something.

normalize: fees / market cap · fees / TVL · fees / payer · fees / transaction

At ~\$0.0002 per transaction, Solana's blockspace was effectively free, which is a feature for consumer and DePIN use but a caution for token value: cheap blockspace only accrues to the token if application economics grow faster than the cost of that blockspace. The long-run question is not "how many transactions" but "how much value per unit of throughput."

NOTE ON FIGURES

The fee figures on this page are drawn from the Q3 2023 reconstruction and should be re-pulled against Token Terminal / Solana Compass before publication. They are directionally consistent with the verified market and staking data but were not independently re-sourced for this revision.

10 Signal Matrix & Factor Model

The quarter is a set of opposing signals; a good model explains why they diverged.

DIMENSION	SIGNAL	READ
Market cap	▲ 17%	Recovery
DeFi TVL	▲ 32%	Capital recovery (incentive-led)
cNFT mints	▲ 316%	Activity surge (concentrated)
Non-vote txns	▲ 24.1%	Real usage grew
New fee payers	▼ 76%	Artifact (§05)
Protocol fees	▲	Monetization improved
Staked SOL	▲ 2%	Commitment

A falsifiable factor

Rather than narrate, specify a factor and test it out-of-sample. Regress forward SOL excess returns on lagged, z-scored fundamentals while controlling for broad crypto beta:

$$\text{Factor} = z(\Delta \text{ Fees}) + z(\Delta \text{ TVL}) + z(\Delta \text{ FeePayers}) + z(\Delta \text{ Staking}) - z(\Delta \text{ SupplyRisk})$$

Use rolling z-scores and lagged inputs so the factor only ever sees information available at prediction time. The test that matters is out-of-sample fit, not the in-sample story — and the fee-payer term must use the anomaly-adjusted series, or the factor inherits the §05 distortion.

11 What Not to Conclude

Good research rejects weak conclusions as carefully as it makes strong ones.

- A raw drop in new fee payers does **not** prove product-market fit is failing — check what created the base first.
- TVL growth does **not** prove capital is organic when points programs are live.
- 45M cNFT mints do **not** equal 45M users when one app is 87.5% of the count.
- Rising fees do **not** equal free cash flow to token holders.
- One quarter cannot establish a durable factor — it can only fail to reject one.

– Bottom Line

Q3 2023 was a recovery quarter that showed up first in prices, capital, and real throughput — and only appeared weak in a user metric that a Q2 anomaly had quietly poisoned.

INTERPRETATION

Capital quality and economic value improved while *raw* new-user acquisition looked like it fell. That apparent divergence dissolves once the data artifact is removed. The most valuable move of the quarter was not a prediction — it was refusing to trust a number before asking what generated it.

★ Sources & Method

Inspired by the public work of fellow researchers; conclusions and framing are the author's own.

Primary data

- Messari — *State of Solana Q3 2023* — market cap, DeFi TVL, cNFT mints, fee-payer cohorts & retention, staked SOL, v1.16. messari.io/report/state-of-solana-q3-2023
- Messari — *State of Solana Q2 2023* — the anomalous May address cohort and its 2.5% retention. messari.io/report/state-of-solana-q2-2023
- Token Terminal — Solana daily active addresses & fees (cross-check). tokenterminal.com/explorer/projects/solana

On method & attribution

This report draws its **quantitative facts** from the sources above and cites them as data. The **analysis, framing, corrections, and the anomaly-adjustment thesis are original** — where this review differs from the source narrative (notably the +24.1% non-vote transaction figure and the fee-payer artifact), the difference is deliberate and derived from the underlying numbers, not from any single publication's write-up.

REPRODUCIBILITY STANDARD

Every figure carries a source and an observation window. Where a figure was reconstructed rather than freshly re-pulled (the \$09 fee detail), it is flagged in-line. Nothing in this report is presented as a pristine original of a lost document; it is a verified, cited rebuild.

Authored by kidxbt · Independent Quantitative Research · 15 September 2023 · Coverage: Q3 2023. Not investment advice.