BITBULLNEWS DATA · BBN INDICES — CRYPTO INDUSTRY HEALTH

VERSION 1

BBN SETTLEMENT INDEX

PUBLIC METHODOLOGY

The BBN Settlement Index is BitBullNews' monthly benchmark of stablecoin-based settlement activity across the crypto economy. It measures whether crypto rails are being used to move value in a practical, economically meaningful way — not just whether token prices are rising or stablecoin float is growing.

> **HOW TO READ IT**
>
> A reading above 50.0 means settlement activity expanded month-on-month, below 50.0 means it weakened, and exactly 50.0 means no net change; the further from 50, the stronger the pace of change.

< 50.0	50.0	> 50.0
WEAKENING	NO CHANGE	EXPANSION

Index family	BBN Indices — Crypto Industry Health
Index name	BBN Settlement Index
Primary objective	Measure month-on-month change in adjusted stablecoin settlement activity across major issuers and chains
Update frequency	Monthly
Coverage standard	8–12 in-scope stablecoins; 12–25 chains; 300–800 stablecoin-chain series, target 200–500 valid per month
Minimum publication	100 valid series (provisional) / 150 valid series (full headline), subject to coverage requirements
Published by	BitBullMedia Pte. Ltd., 51 Goldhill Plaza #07-10/11, Singapore · UEN 202224841R

01 WHAT THE INDEX MEASURES

The BBN Settlement Index measures the settlement function of crypto rather than speculative trading. It focuses on stablecoins because they are the dominant on-chain instruments for dollar-linked value transfer, treasury movement, cross-platform settlement and liquidity movement between venues. It is not a measure of stablecoin market capitalization — a large supply does not by itself mean high settlement use — so the index emphasizes adjusted value movement, transactional usage, active participation and breadth across stablecoin assets and chains.

The central challenge is that raw stablecoin transfer volume materially overstates economic settlement. A large share of unadjusted transfers is exchange-internal movement, arbitrage between venues, DEX-router transfers, MEV bot activity, liquidity-provider rebalancing, issuer mint/burn mechanics and bridge lock/mint events double-counted across chains. An index built on unadjusted volume becomes a crypto-trading-infrastructure index, not a settlement index. BBN Settlement therefore uses an Adjusted Settlement Value measure inspired by the Visa-Allium On-Chain Stablecoin Analytics adjusted-volume framework, with the explicit clarifying rules set out below. This adjustment is the single most important design choice in the methodology.

02 COVERAGE STANDARD

The index is built around a broad, liquid and repeatable settlement universe, designed to capture major rails while excluding thin, promotional or low-quality activity that inflates usage without reflecting real value transfer.

COVERAGE DIMENSION	PUBLIC STANDARD
Stablecoin asset universe	8–12 in-scope stablecoins, selected by reserve transparency, on-chain observability and continuous operation of at least 12 months.
Chain universe	12–25 major settlement chains and L2 networks with observable stablecoin transfer activity and at least 12 months of reliable history.
Settlement series	Target monitored universe of 300–800 stablecoin-chain monthly series; target valid monthly coverage of 200–500 series.
Observation period	Monthly release based on completed calendar-month data (UTC).
Minimum publication	150 valid series for a full headline; 100–149 for provisional; below 100 no headline is published.

03 STABLECOIN UNIVERSE

The in-scope stablecoin universe is published as part of the methodology, reviewed annually and republished with any change. A stablecoin is included where it meets all of the following observable criteria.

INCLUSION CRITERION	STANDARD
Minimum size	At least USD 500M average circulating supply during the trailing six months.
Continuity	At least 12 months of continuous operation since launch.
Observable transfer data	Token contracts deployed on at least one in-scope chain with public, indexable transfer history.
Reserve transparency	At least one of: regular attestations by an established auditor; regulated status in a recognized jurisdiction (US, EU, UK, Singapore, Japan, Hong Kong, UAE); or on-chain over-collateralization with public verification.
Peg discipline	Did not exceed 5% absolute deviation from peg for more than 7 consecutive days in the trailing 12 months. Stablecoins that materially lost their peg (for example TerraUSD in May 2022) remain in historical data for survivorship-honest treatment but exit the forward universe at the next annual review.

As of the most recent review, the in-scope universe includes USDT (Tether), USDC (Circle), DAI / sUSDS (MakerDAO / Sky), FDUSD (First Digital), PYUSD (PayPal), TUSD (TrueUSD), USDP (Paxos), GUSD (Gemini), USDe (Ethena, explicitly categorized as a yield-bearing stablecoin) and selected on-chain over-collateralized stablecoins meeting the criteria above. The current list ships with each release.

Where a stablecoin exists as both native and bridged representations — native USDC versus USDC.e on Avalanche, or USDC on Ethereum versus USDC bridged via Circle CCTP — only the native representation counts toward the value component, to avoid double-counting. Bridged-only representations are tracked separately for the chain-breadth component but do not enter the value calculation, and CCTP-style burn-and-mint cross-chain transfers are treated as a single economic settlement event.

04 ADJUSTED SETTLEMENT VALUE

Adjusted Settlement Value is the core value measure. It approximates economically meaningful stablecoin transfer by removing non-economic flows, double-counting and infrastructure artefacts from raw transfer data, consistent with the Visa-Allium adjusted-volume methodology plus the clarifying rules below. The following flows are removed before aggregation.

EXCLUDED FLOW	TREATMENT
Issuer mint and burn events	Excluded from value; mint events are tracked separately for the float series but not added to settlement value.
Bridge lock-and-mint pairs	A lock on chain A paired with a mint on chain B within 24 hours through a recognized bridge contract counts as one cross-chain settlement, not two transfers.
CCTP burn-and-mint	Circle CCTP transactions count as one economic transfer between source and destination chains.
Issuer treasury and reserve movements	Transfers from publicly disclosed issuer-controlled wallets (treasury, reserve, mint-authority addresses) are excluded as operational.
CEX deposit / withdrawal addresses	Flows to and from a maintained list of major exchange hot/cold wallets are tagged; same-exchange two-leg round-trips by one address within 24 hours are de-duplicated.
DEX-aggregator router internals	Internal transfers within known router contract sets (1inch, Paraswap, 0x, CoW) during a single swap are not counted as separate settlements.
MEV bot patterns	Sandwich, atomic-arbitrage and front/back-run transactions identified by trade-level analysis (sub-block sequencing, known searcher addresses) are excluded.
Single transactions above USD 1B	Inspected case-by-case. Confirmed exchange or issuer operations are excluded; confirmed economic transfers (large OTC, sovereign or institutional flows) are retained with a logged note; unverifiable transactions are excluded by default.
Dust transfers	Transfers below USD 10 equivalent at transfer time are excluded from value and from active-participation counts.
Smart-contract loop patterns	Wallets with more than 100 self-transfers in a day, or rapid round-trips (A → B → A within 60 seconds) above a documented threshold, are flagged and excluded.

What remains approximates payment-like or institutional settlement: peer-to-peer payments, OTC settlement, cross-border transfers, on-chain payroll, merchant settlement, treasury operations between distinct entities and DeFi participation involving a transfer between distinct participants. It is a proxy, not a measurement of payments in any official sense — perfect classification of every flow is not possible from public chain data alone. Three core signals and two breadth measures are captured per series alongside the value figure.

AUXILIARY MEASURE	USE
Transaction utilization	Count of valid transfer transactions after dust, spam and self-loop exclusions; feeds the Utilization component.
Active settlement participation	Unique sending and receiving addresses after exclusions. An address active across multiple chains is counted once for the headline participation measure; the per-chain count is used for chain breadth.
Chain breadth	Number and share of chains showing positive settlement activity above a minimum-activity floor.
Asset breadth	Number and share of in-scope stablecoins contributing to activity.
Peg-deviation log	Maximum absolute deviation from $1.00 per in-scope stablecoin per month; published for transparency and used in the Concentration & Stability component.

05 COMPONENT STRUCTURE AND PER-SERIES SIGNAL

BBN Settlement is a diffusion index. Series are individual stablecoin-chain combinations — USDC on Ethereum, USDT on Tron — and each carries three core monthly signals: Adjusted Settlement Value, Transaction Utilization (valid transfer count) and Active Participation (unique participating addresses). For every series the index records the direction of change against a smoothed baseline and aggregates those directions into six headline components. A reading of 50.0 means an equal share of improving and weakening series across the panel. A diffusion construction is used in place of a level-based USD index because settlement is structurally non-stationary and heavily right-skewed — a few pairs such as USDT-Tron and USDC-Ethereum dominate the absolute level — so a level index would track secular float growth and those few series rather than broad conditions.

COMPONENT	WEIGHT	WHAT IT MEASURES
Adjusted Settlement Value (V)	35%	Direction of economically meaningful stablecoin transfer value across eligible series.
Transaction Utilization (U)	20%	Direction of valid transaction count across settlement rails.
Active Participation (P)	15%	Direction of active senders, receivers and chain-aggregated unique participants.
Chain and Asset Breadth (B)	15%	Direction of HHI-based breadth across chains and stablecoins; a more even distribution is improving.
Momentum and Persistence (M)	10%	Whether settlement growth is sustained across the panel rather than a single-month spike.
Concentration and Stability (C)	5%	Whether activity is less concentrated and more resilient, with an explicit penalty for peg-deviation events.
Total	**100%**	—

PER-SERIES DIRECTIONAL SIGNAL

SERIES S, SIGNAL X, MONTH T

$$d_x(s, t) = \textbf{direction} \text{ of } [\ x(s, t) - \mathrm{MA3}(\ x(s, t-1)\ )\ ]$$

X ∈ {ADJVALUE, TXCOUNT, PARTICIPANTS}; MA3 IS THE TRAILING THREE-MONTH BASELINE.

IMPROVING	UNCHANGED	WEAKENING
1.0	**0.5**	**0.0**
Above the baseline by more than the material-change threshold τ.	Within ±τ of the baseline.	Below the baseline by more than τ.

The threshold τ is set at 5% of the series' trailing 12-month average absolute month-on-month change for that signal, with a 2% floor and a 15% cap. These wider tolerances than other BBN indices reflect the natural monthly noise of stablecoin data, which can swing sharply on single-issuer or single-chain operational events. Parameters are reviewed annually.

06 COMPONENT SCORES AND THE HEADLINE

Value, Utilization and Participation are each the weighted share of improving series in their respective signal, where ω_s is the series weight. Each is bounded in [0, 100] with 50.0 representing no net change in that signal.

VALUE, UTILIZATION, PARTICIPATION — MONTH T

$$V(t) = 100 \times \Sigma\ \omega_s \cdot d_{AdjValue}(s, t) \div \Sigma\ \omega_s$$

$$U(t) = 100 \times \Sigma\ \omega_s \cdot d_{TxCount}(s, t) \div \Sigma\ \omega_s$$

$$P(t) = 100 \times \Sigma\ \omega_s \cdot d_{Participants}(s, t) \div \Sigma\ \omega_s$$

Breadth uses the Herfindahl–Hirschman Index across in-scope stablecoins and chains, converted to a diffusion direction. The component is Improving if BreadthLevel(t) exceeds MA3(BreadthLevel(t−1)) by more than $\tau_{breadth} = 1.0$ point, Weakening if smaller, Unchanged otherwise, scoring 100 / 50 / 0. Higher breadth means activity is more evenly distributed; a falling signal means narrowing concentration in fewer issuer-chain pairs.

BREADTH LEVEL — MONTH T

$$HHI_{assets}(t) = \Sigma\ (\text{ stablecoin's share of total AdjValue })^2$$

$$HHI_{chains}(t) = \Sigma\ (\text{ chain's share of total AdjValue })^2$$

$$\text{BreadthLevel}(t) = 100 \cdot [\ (1 - HHI_{assets}) + (1 - HHI_{chains})\ ] \div 2$$

Momentum reads whether series show sustained growth rather than one-month spikes. A series contributes Improving if its persistence is positive and increased month-on-month, Weakening if negative and decreased, Unchanged otherwise; M is the weighted share of improving series.

PERSISTENCE — SERIES S, MONTH T

$$\text{Persistence}(s, t) = \text{MA3}(\text{ AdjValue}(s, t)\ ) - \text{MA12}(\text{ AdjValue}(s, t)\ )$$

Concentration and Stability uses the same breadth level as a level reading, less an explicit peg-deviation penalty. It is the only component using a level rather than a pure month-on-month direction — a peg event is a level fact about the month, not a directional move — and it is held to 5% of headline weight to preserve the diffusion character of the index. The penalty activates when any in-scope stablecoin's maximum monthly deviation from \$1.00 exceeds one cent: a 5-cent deviation produces a 2.5-point penalty and a 12-cent depeg of the magnitude seen for USDC in March 2023 produces a 6-point penalty.

CONCENTRATION & STABILITY — MONTH T

$$\text{PegPenalty}(t) = 50 \cdot \textbf{max}(\text{ in-scope stablecoin peg deviation from \$1.00 })$$

$$C(t) = \textbf{clip}(\text{ BreadthLevel}(t) - \text{PegPenalty}(t), 0, 100\text{ })$$

HEADLINE — BBN SETTLEMENT, MONTH T

$$\text{BBN Settlement}(t) = 0.35 \cdot V + 0.20 \cdot U + 0.15 \cdot P + 0.15 \cdot B + 0.10 \cdot M + 0.05 \cdot C$$

COEFFICIENTS SUM TO 1.00; THE HEADLINE IS BOUNDED IN [0, 100] WITH 50.0 MEANING THE WEIGHTED PANEL IS UNCHANGED VERSUS THE PREVIOUS MONTH. ROUNDED TO ONE DECIMAL PLACE.

07 A WORKED EXAMPLE

COMPONENT	SCORE	WEIGHT	CONTRIBUTION
Adjusted Settlement Value (V)	57.0	0.35	19.95
Transaction Utilization (U)	55.0	0.20	11.00
Active Participation (P)	54.0	0.15	8.10
Chain and Asset Breadth (B)	60.0	0.15	9.00
Momentum and Persistence (M)	53.0	0.10	5.30
Concentration and Stability (C)	46.0	0.05	2.30

Headline = 55.7 · Moderate expansion

The 55.7 reading sits in the Moderate expansion band. Adjusted Settlement Value is leading the move and breadth across chains and stablecoins is supportive. Concentration and Stability below 50 is the weak point — either activity is concentrating into a few stablecoins or chains, or an in-scope stablecoin saw peg deviation during the month — and the release commentary would identify which is driving the C score.

08 INTERPRETATION FRAMEWORK

Headline values are rounded to one decimal place and classified into non-overlapping bands so that every reading falls into exactly one category, with no gaps.

READING	LABEL
≥ 60.0	**Strong settlement expansion**
55.0 – 59.9	**Moderate expansion**
50.1 – 54.9	**Modestly above no-change**
= 50.0	**No net change**
45.0 – 49.9	**Modestly below no-change**
40.0 – 44.9	**Softening settlement conditions**
< 40.0	**Material contraction**

The Adjusted Settlement Value definition is the key interpretive context: the index measures payment-like and institutional settlement, not total transfer volume. It is best read alongside the three-month moving average and the peg-deviation log — especially in any month a major stablecoin deviates from $1.00 — and alongside other BBN indicators where available, such as Activity, Liquidity and Revenue.

09 WEIGHTING AND CAPS

The index is neither equally weighted nor purely volume-weighted. A pure volume weighting would be dominated by USDT on Tron and USDC on Ethereum; equal weighting would overstate small chains. BBN Settlement uses a capped, log-scale approach.

WEIGHTING LAYER	TREATMENT
Series weight	Proportional to ln(1 + trailing-12-month median Adjusted Settlement Value), so a 100× larger series matters more but does not crowd out small ones.
Single-stablecoin cap	No single stablecoin may exceed 35% of total headline weight, regardless of volume; excess is downweighted proportionally.
Single-chain cap	No single chain may exceed 30% of total headline weight.
Single-series cap	No single stablecoin-chain pair may exceed 20% of total headline weight.
Issuer concentration check	When the top two issuers (typically Tether and Circle) jointly exceed 80% of weighted value, a commentary note accompanies the release.
Data quality weight	Series with fully reconstructable on-chain indexing receive 1.0× weight; series with documented historical gaps or single-source dependencies receive 0.8×.
Continuity adjustment	Series with definition breaks (contract migration, issuer redenomination, chain-level indexing upgrade) are flagged and may be excluded from the value component until at least six months of post-break data accumulate; they remain in breadth components throughout.

10 DATA VALIDATION AND QUALITY CONTROLS

Stablecoin value can appear in many forms — native transfers, bridges, mint/burn events, exchange flows, internal treasury movements — so a layered, rule-based validation process is applied to reduce false signals and preserve comparability.

CONTROL	HOW IT WORKS
Series-eligibility check	Series must meet the minimum-liquidity, observability and continuity standards of the coverage and universe rules.
Material-change threshold τ	5% of the series' trailing 12-month average absolute month-on-month change in the relevant signal, with a 2% floor and 15% cap.
Outlier review	A series is flagged when its month-on-month change exceeds the 99th percentile of its own trailing 24-month distribution. Flagged items are reviewed against documented events (issuer migration, chain outage, redenomination, depeg); confirmed events are retained or excluded per rule and spurious values are held for verification.
Bridge double-count detection	Lock-and-mint pairs through recognized bridge contracts within 24 hours are merged, and CCTP burn-and-mint pairs are merged as a single settlement.
Exchange address tagging	A maintained list of major CEX hot/cold wallet addresses tags inbound and outbound flows; round-trips identified within 24 hours are de-duplicated.
Depeg flag	When any in-scope stablecoin's intra-month maximum absolute deviation from $1.00 exceeds one cent, a depeg flag is set and the event enters the Concentration & Stability component.
Asset migration handling	When an issuer migrates (for example MakerDAO's transition to Sky's USDS), predecessor and successor are mapped to a continuous series where economic substitution is documented, and the migration is noted in commentary.
Survivorship handling	Stablecoins that materially lose their peg or cease operation (for example TerraUSD) remain in historical data through their cessation month with actual final values feeding the index, then exit the forward universe and are noted in panel-change commentary.
Revision log	A public log of restatements accompanies each release.

11 GEOGRAPHIC AND USE-CASE CONTEXT

Settlement use is geographically uneven. USDT on Tron dominates cross-border payments, remittances and dollar-access in Asia, Latin America and MENA, with smaller, higher-count transactions; USDC on Ethereum carries US-anchored institutional flows, DeFi participation and treasury operations, with larger, lower-count transactions; other combinations such as USDC on Solana (consumer and merchant payments) and DAI / USDS on Ethereum (on-chain treasury and DeFi-native use) fill distinct niches.

The index applies no geographic cap, because regional weighting would suppress the actual distribution of stablecoin use that the index is trying to measure. Geography is acknowledged in commentary alongside the headline, and users with a regional focus should consult the chain-level breakdown rather than the headline alone.

12 PUBLICATION, REVISIONS AND REPORTED OUTPUTS

The index is published monthly for a calendar-month (UTC) reference period, normally within the second half of the following calendar month once on-chain data, bridge reconciliation and quality checks complete. A full headline requires at least 150 valid series, coverage of at least three in-scope stablecoins and at least six in-scope chains, and at least 70% of weighted series from Tier 1 indexed-data sources. A provisional reading covers 100–149 valid series, or 150 or more with insufficient stablecoin or chain coverage, and carries a “Provisional” label; below 100 valid series no headline is published and a brief coverage note is issued instead.

A prior monthly value is restated when late-validated data, source reclassification, bridge-pairing corrections or methodology corrections would change the headline by 0.5 points or more; smaller corrections are noted internally without a restated public value. Restatements normally occur in the immediately following release, are accompanied by a revision note giving the original value, the new value and the reason, and are exceptional beyond one cycle. Material methodology changes are announced with at least 30 days' public notice before they take effect.

Each release reports the headline reading with its month-over-month and twelve-month change; the six component scores; the three-month moving average; the leading and lagging stablecoin and chain contributors; the peg-deviation log for each in-scope stablecoin; a coverage statement with valid-series count, stablecoin and chain coverage and data-source distribution; a universe-change note covering additions and exits; and a revision note whenever a prior reading is restated.

13 SCOPE, LIMITATIONS AND LEGAL NOTE

BBN Settlement is a monthly diffusion indicator of adjusted stablecoin settlement activity across major issuers and chains, combining adjusted value, transaction count, participation, breadth, momentum and concentration/stability into a directional reading centered on the no-change line at 50.0, derived from a published, criteria-based universe of stablecoins and chains using an adjusted-volume approach inspired by Visa-Allium On-Chain Stablecoin Analytics. It is not an official statistic, a regulated benchmark, a measure of total payment-rail adoption, or a measure of stablecoin reserve quality, regulatory compliance, issuer solvency or end-user identity. The published value is a scaled score, not a USD figure, and not a measure of absolute settlement volume; permissioned, private and off-chain settlement is outside scope; and on-chain heuristics cannot perfectly separate economic settlement from operational movement, a residual ambiguity the index acknowledges. In short, it answers one question — are stablecoin rails being used more or less intensively to move value across the crypto economy this month than last?

LEGAL NOTE