Supply (Circulating, Total, Max)

CoinMarketCap
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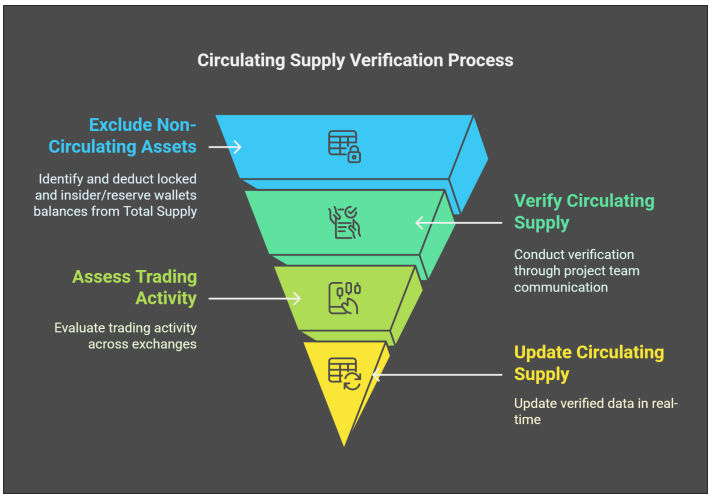
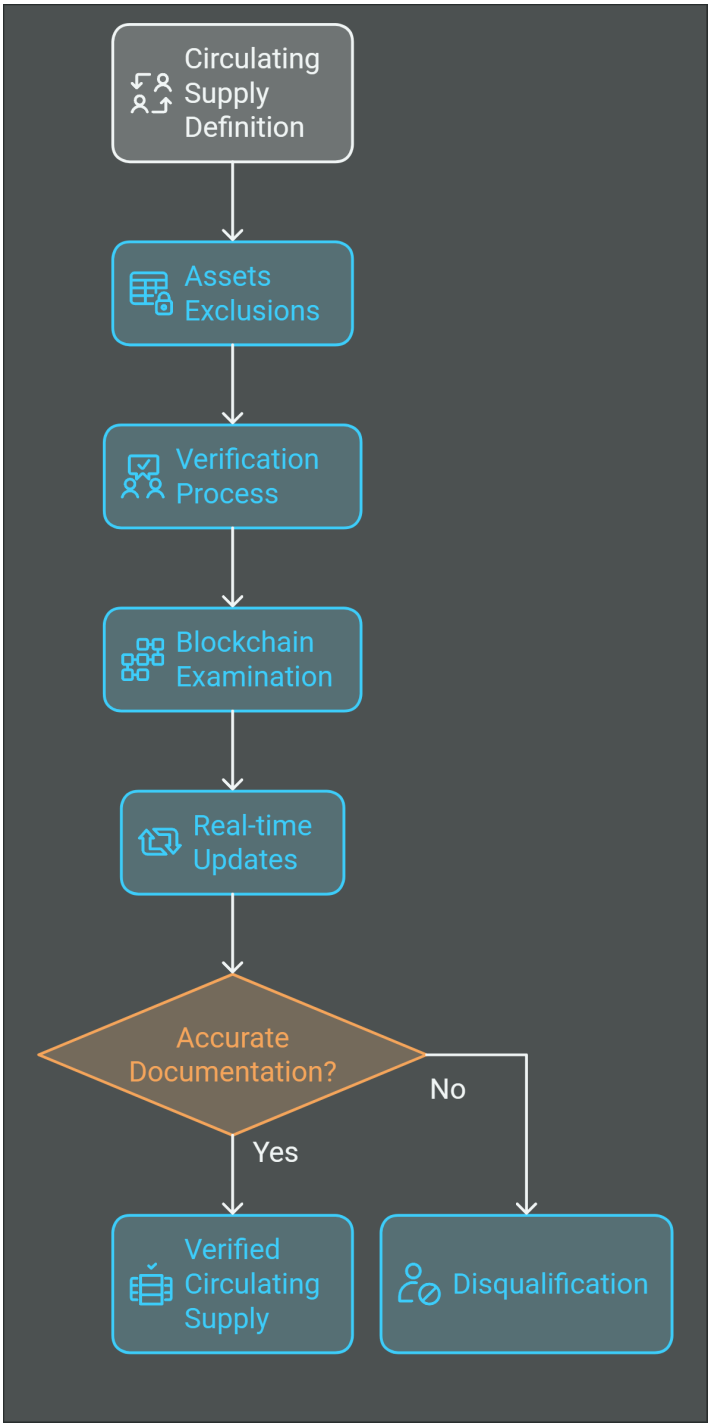
To verify your circulating supply (and market cap), submit a request here for our review. Verification will be done according to our methodology. Please refer to our FAQ guide.

Circulating Supply Verification Process

1. In crypto, 'Market Cap' is a polysemous term in that it is often used to describe distinct valuation metrics that share the same label. To disambiguate, here are the myriad ways to calculate market cap, ranked in descending order of valuation.
    1. **Fully Diluted Valuation (FDV):** Maximum Supply x Price
    2. **Minted Market Cap (MMC)**: Total Supply (net of burns) x Price
    3. **Unlocked Market Cap (UMC)**: Unlocked Circ. Supply x Price
    4. **Circulating Market Cap (CMC)**: Public float x Price
2. On CoinMarketCap, coins are ranked by their **Circulating Market Cap (CMC)**. Derived from public float, the aspiration is to -- in keeping with the ethos of decentralisation -- reflect what public investors consider the company to be worth and mitigate rank manipulation.
3. As the adage goes, don't trust, verify. Anyone can tell us that their project has a putative market cap of USD 164 billion and it would be expedient for us to publish that figure without any critical analysis. In fact, many actors in this space have every incentive to inflate their CS/MC, which could displace honest projects from our rankings page.
4. In the spirit of fairness and data fidelity, should we take what projects say at face value and let them grade their own homework or should we strive to apply a consistent methodology across the assets on our site? Users and the media often question us over large balances that are ostensibly 'circulating' for certain projects, which necessitate reasonable efforts on the due diligence front.
5. Our decision on *whether* to publish the verified CS will therefore depend on the team's ability to verify the data with a reasonable level of confidence. In particular, the team will evaluate the asset's trading venues, volume, and liquidity to determine whether these are *commensurate with the notional market cap/rank*.





Circulating Supply

1. Circulating Supply is the best approximation of the number of assets that are circulating in the market and in the general public's hands. We have found that Circulating Supply is a much better metric than Total Supply for determining the market capitalization. The method of using the Circulating Supply is analogous to the method of using public float to determine the market capitalization of companies in traditional investing.
2. Assets that are locked (via smart contracts or legal contracts), allocated to insiders (e.g. teams or private investors), or not sellable on the public market are generally not regarded as circulating, *regardless of whether they are unlocked*. Examples include, but are not limited to, the following:
    1. **Private sale** - Assets that were earmarked for a subset of investors and not available to the public through open bidding/balloting.
    2. **Ecosystem/Bounty/Marketing/Operations/Airdrops** - Assets that have been earmarked for activities to grow the project's ecosystem. For example, airdropped tokens are generally excluded from circulating supply unless the project is able to furnish evidence that there was active demand for the asset (e.g. users had registered/KYCed for the airdrop).
    3. **Masternodes/Staking** - Assets that have been 'staked' in masternodes are evaluated on a case-by-case basis - Factors such as masternode distribution, ownership, and lock-up periods are also taken into consideration.

4. **Team/Foundation/Treasury/Escrow** - Assets held by project members or major ecosystem participants. Such holdings can constitute a significant percentage of the supply.

3. Circulating Supply is verified by our team through communication with the project's team. We ask for details including but not limited to the initial distribution, private allocations, locked addresses, team-controlled addresses, and addresses containing portions of the supply allocated for future use.
4. We ***may not*** take the figures from APIs/whitepapers/blog posts because we have our own calculation schematic which may differ from the project teams.
5. We examine the project's blockchain and distribution table to determine the best approximation of what is freely circulating in the market based on the information provided.
6. **After the information is verified**, the circulating supply is usually updated in real-time by (i) referencing deductible wallet balances or (ii) using relevant block explorer APIs if there is scrutability and reproducibility.
7. It is in every project's interest to provide accurate and well-documented information in good faith. Most well-run projects are able to account for the distribution of their assets across different addresses. If a project has difficulties furnishing the requisite documentation or if there are irregularities in their submission, we would not able to verify their CS data.
8. Projects that attempt to manipulate or artificially inflate their supply figures will be **permanently disqualified** from the rankings.
    1. **(Verified/Rankable) Circulating Supply (and Market Cap)**: As a general guideline for the issuance of verified CS, an asset must have *material trading activity/volume* on at *least 3 CMC-supported exchanges* with 'tracked listing' status. CoinMarketCap requires projects to provide enough information to meet our baseline levels of due diligence. We will not publish a verified circulating supply figure if project teams **do not** furnish the requisite information that meets our standards/methodology. Liquidity, volume, and the trading venues that the asset is on will also be taken into consideration when deriving the verified CS (and Market Cap) due to their implications on our cryptoasset rankings. As the adage goes, don't trust, verify.
    2. **(Self-Reported) Circulating Supply**: CMC's Self-Reporting Dashboard aims to give projects greater flexibility and control over the information that they share with the public. In the current iteration, projects will be able to manage their (i) self-reported circulating supply and (ii) tags. The goal of (i) is to give projects a voice by allowing them to display their self-reported CS (alongside the CMC-verified CS) on their CMC page (irrespective of the methodology used) without any ranking implications. Previously, the CS figure was derived solely from the CMC's team's methodology and ability to verify the supply information.

Total Supply

We define Total Supply as the total amount of coins in existence right now, minus any coins that have been verifiably burned. This is also known as Minted/Issued Supply.

Minted Market Cap (MMC) = Total Supply (net of burns) x Price

- Analogous to *TradFi's* use of Issued shares to calculate market cap.
- Derived from issued supply (net of burns) and *includes* locked and unlocked supply.
- Can overlap with FDV when TS = MS.

Max Supply

The best approximation of the maximum amount of coins that will exist in the forthcoming lifespan of the cryptocurrency, minus any coins that have been verifiably burned. This is also known as the theoretical max number of coins that can be minted, minus any coins that have been verifiably burned.

Fully Diluted Valuation (FDV) = Max Supply x Price

Unlocked Metrics

The UCS and UMC provide a clearer picture of unlocked tokens, helping users understand the ***maximum amount of supply*** that can be ***potentially*** sold on the market at any given time.

Unlocked Circulating Supply (UCS)

- Max Supply (net of burnt supply) - Unminted Supply - Locked Supply.
- This is derived from Token Release Schedules (TRS)

Unlocked Market Capitalization (UMC)

- Price x UCS

FAQs

What's the difference between CS and UCS?

1. CS excludes insider allocations
    1. Analogous to float (excludes insider holdings) in TradFi
2. UCS includes all unlocked allocations.
    1. Analogous to Issued shares in Tradfi

2. **Assumes** that **all** unlocked coins are **sold immediately**

S/N	Unlocked Circulating Supply (UCS)	Circulating Supply (CS)
Definition	# of unlocked assets, derived from Token Release Schedules (TRS).	# of assets in the public's hands, analogous to public float in traditional markets.
Formula	Max Supply - Unminted Supply - Burnt Supply - Locked Supply	CS = TS - insider wallets
Pros	• Easy to understand • Shows **max** sell pressure	• Verifiable on-chain (Transparent) • Shows float • Low CS/TS % shows supply overhang • SEC guidelines call for disclosure of insider/treasury allocations

Cons	• Inflates market cap & rank
	• Assumes unlocks are sold immediately
	• **Self-reported** business plan
	• May not correspond to onchain reality if business plans change
	• 0.00462% industry coverage (~600/13M coins)
		• Implementation challenges
		  • Evasion by projects results in inconsistency
		  • Infrastructure constraints

Is there a need for different metrics?

1. UCS, CS, TRS, and float % are **complementary** metrics
    1. UCS represents the **maximum** sell pressure (that may not have been realised)
    2. TRS shows the project's **business plan**
    3. CS represents the float that generally reflects the on-chain reality
        1. Float % is a good gauge of **incremental** sell pressure
            1. Higher float % → less supply overhang (BTC, ETH) → Safer
            2. Lower float % → more supply overhang → Riskier

Note: Specialist token unlock sites like tokenomist, dropstab, and cryptorank all report CS and UCS as separate metrics. Cryptorank ranks cryptoassets by CS-derived market cap.

Projects have perverse incentives to exploit UCS-derived market cap to maximise visibility

1. Using UCS to calculate ranked market cap can only work if **all projects** operate in good faith.
2. Since CMC's inception, 80% of traffic has been on the CMC homepage (CMC top 100).
3. With ~14M tokens, visibility on the CMC homepage can help one stand out.
4. Projects, therefore, have every incentive to inflate their ranked market cap to attract users.
5. **Does not scale as a ranking mechanism for the broader industry (14M tokens)**
    1. TRS is harder to maintain since it is a business plan that may change
    2. TRS data only covers 0.00462% of all coins (~600/13M).

How to exploit the use of UCS to calculate ranked market cap to maximise visibility

1. Total Supply = 1,000,000,000
2. Price = $10
3. Locked tokens = 950,000,000
4. Current Market Cap = (1,000,000,000 - 950,000,000) * $10 = $0.5B
5. A few days later, the project unlocks all tokens.
6. Unlocked Market Cap (using UCS): 1,000,000,000 * $10 = $10B

1. UCS makes it ***much easier*** for projects to manipulate ranked market cap
    1. Issue a coin with a high total supply
    2. Allocate 95% of supply to insiders → 5% public float → Easy to manipulate price
    3. Trade it at a high price on ~2 exchanges
    4. Unlock everything to inflate rank

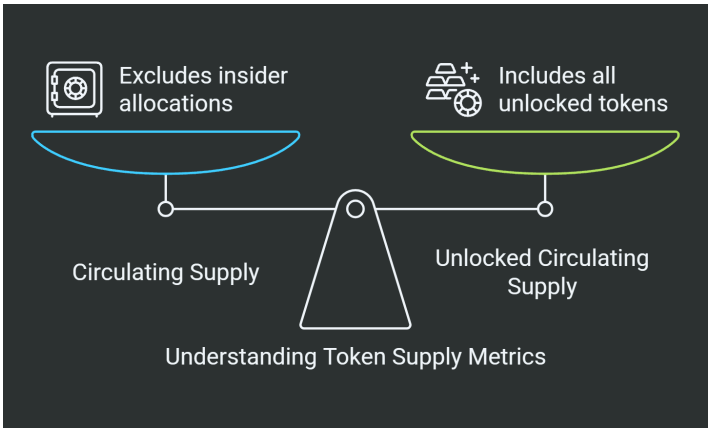
The screenshot below is an extreme case, and underscores the need to mitigate such risks.

MANTRA ($OM) Case Study

$OM saw a 95% red candle in <1 hr caused by whale/insider dumping. Given the magnitude of the dump, analysts contend that this is likely due to the float being inflated due to the project using UCS.

Melania Token Case Study

1. Vesting schedule states an initial lock-up period of 30 days.
2. TGE date: 20 Jan 2025 (GMT+8)
3. 1st unlock date = TGE (20 Jan 2025) + 30 days = 19 Feb 2025
    1. 20 Jan 2025: 85% of the supply was held in one wallet
    2. 31 Jan 2025: Supply was moved multiple times before the first unlock date (19 Feb 2025)
        1. https://solscan.io/block/315070820
        2. https://solscan.io/block/315070824
        3. https://solscan.io/block/315070828
        4. https://solscan.io/block/315070832
        5. https://solscan.io/block/315070836
        6. https://solscan.io/block/315070836
        7. https://solscan.io/block/315070840
        8. https://solscan.io/block/315075424
        9. https://solscan.io/block/315080885
        10. https://solscan.io/block/315080885
        11. https://solscan.io/block/315082439
    2. **Conclusion**: All tokens are unlocked since they can still be moved freely.
    3. Since all tokens can be moved, the entire supply is unlocked.
    4. Does that mean that CS = TS = MS = 1B $MELANIA?
    5. No - The **industry consensus** has been to exclude all team/insider allocations from CS.
        1. As of 31 Jan 2025, most data sites report CS and UCS as distinct metrics.
        2. Users are able to estimate supply overhang (incremental sell pressure) by calculating the delta between CS and TS and/or UCS).



If one were to apply Cambridge's definition strictly, the word 'circulating' entails movement.

The word 'circulating' derives from the Latin word *circulare*, meaning “to move around in a circle.” It implies motion, exchange, flow. It does not mean “to sit,” “to hoard,” or “to languish in a wallet untouched.” It is the language of motion, of exchange, of life itself. Blood circulates. Air circulates. Currency—if it is to be called such—must circulate.

Just as blood circulates through the body to deliver nutrients and oxygen, the CS of a cryptoasset moves through the crypto economy, providing liquidity and enabling transactions.

The concept of "actual flows" in circulating supply is a useful ideal due to:

- **Liquidity**: Just as blood flow ensures proper organ function, a healthy circulation of tokens ensures market liquidity, making it easier for investors to buy and sell.
- **Price discovery**: The movement of tokens through the system, like blood through capillaries, helps in efficient price discovery and valuation of the asset.
- **Network health & Active Participation**: Active circulation of tokens, analogous to blood flow, indicates a healthy and active ecosystem.

Investors—especially retail investors—look to circulating supply to understand scarcity, distribution, and risk. When we count dormant insider holdings as circulating, we:

- Misrepresent availability and liquidity
- Distort market cap
- Obscure concentration risk
- Create a misleading metric that suggests availability where there is none.
    - It’s like calling a parked limousine “in transit.”

- $OM saw a 95% red candle in <1 hr caused by whale/insider dumping. Given the magnitude of the dump, analysts contend that this is likely due to the float being inflated due to the project using UCS.

Circulating = movement

- Assets held by a founding team, untouched for years, is not circulating.
- Assets sitting in a treasury/ecosystem wallet, waiting for deployment, is not circulating.
- Assets locked in multisig wallets, inaccessible to the public, is not circulating.

If we are to honor the spirit of the Latin origins of 'circulating', then we must strive to prioritize publicly held coins that move—coins with trading velocity, coins that change hands, coins that participate in the market.

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