

L30: Distribution and Vesting

Module D: Tokenomics

Blockchain & Cryptocurrency

December 2025

- Understand token allocation categories and their purposes
- Analyze vesting schedules and cliff periods
- Evaluate the impact of unlock events on token price
- Apply distribution analysis to real projects
- Case Study: Solana token unlocks

Definition: The initial allocation of tokens among different stakeholder groups.

Common Allocation Categories:

- Team and Founders
- Early Investors (Seed, Series A/B/C)
- Advisors
- Community Sale (ICO/IEO/IDO)
- Ecosystem Development
- Liquidity Provision
- Foundation/Treasury
- Airdrops

Goal: Balance early supporter rewards with long-term community alignment.

Typical Allocation Breakdown

Example Distribution (Healthy Project):

Category	Percentage
Team & Founders	15-20%
Investors (VCs)	15-25%
Community Sale	10-20%
Ecosystem & Development	20-30%
Liquidity & Market Making	5-10%
Foundation/Treasury	10-15%
Advisors	2-5%

Red Flag: Team + Investors \geq 50% indicates high centralization risk.

Purpose: Incentivize long-term commitment and alignment.

Best Practices:

- Allocation: 15-20% of total supply
- Vesting: 4 years minimum
- Cliff: 1 year (no tokens until 12 months)
- Linear unlock after cliff

Why Long Vesting?

- Prevents “pump and dump” by insiders
- Demonstrates commitment to project
- Aligns incentives with long-term success
- Builds trust with community

Example: Team gets 20M tokens, 1-year cliff, then 416,667 tokens/month for 48 months.

Typical Investment Rounds:

Round	Allocation	Price	Vesting
Seed	5-10%	Lowest	2-3 years
Series A	5-10%	Low	18-24 months
Series B	5-10%	Medium	12-18 months
Public Sale	10-15%	Highest	0-6 months

Key Considerations:

- Earlier investors = longer vesting
- Discount compensates for higher risk
- Too many investors = fragmented governance
- VC unlock events can cause price pressure

1. ICO (Initial Coin Offering) - 2017 Era

- Direct token sale to public
- Minimal regulation (historically)
- High risk, many scams

2. IEO (Initial Exchange Offering)

- Conducted on centralized exchange
- Exchange vets project (some due diligence)
- More trusted than ICO

3. IDO (Initial DEX Offering)

- Launch on decentralized exchange
- Immediate liquidity
- Lower barriers, but high volatility

4. Fair Launch

- No pre-sale or VC rounds
- Everyone buys at same price
- Example: Yearn Finance (YFI)

Purpose: Fund long-term growth and sustainability.

Uses:

- Developer grants
- Bug bounties
- Marketing and partnerships
- Liquidity incentives
- Research and development
- Educational initiatives

Governance:

- Controlled by foundation or DAO
- Transparent spending reports
- Community voting on large allocations

Typical Allocation: 20-30% of total supply.

What is Vesting?

Definition: A schedule that controls when token holders can access their allocated tokens.

Key Terms:

- **Cliff Period:** Initial waiting period before any tokens unlock
- **Vesting Period:** Total duration until all tokens are unlocked
- **Linear Vesting:** Equal amounts unlock at regular intervals
- **Unlock Event:** Specific date when tokens become transferable

Example:

- Total allocation: 1,000,000 tokens
- Cliff: 12 months (0 tokens unlocked)
- Vesting: 48 months total
- After cliff: 27,778 tokens unlock per month for 36 months

1. Linear Vesting

- Equal amounts released each period
- Most common and predictable
- Example: 1/48th per month for 4 years

2. Stepped Vesting

- Larger chunks at specific milestones
- Example: 25% per year for 4 years

3. Accelerated Vesting

- Faster unlock at beginning
- Risky: encourages early selling

4. Reverse Vesting (Back-loaded)

- More tokens unlock later
- Stronger long-term alignment
- Rare in practice

Purpose: Ensure minimum commitment before any tokens unlock.

Typical Cliff Durations:

- Team: 12 months
- Investors: 6-12 months
- Advisors: 6 months
- Community: Often 0 (immediate unlock)

Why Use Cliffs?

- Prevents immediate dumping
- Tests commitment of team/advisors
- Provides time for project to mature
- Reduces initial circulating supply

Investor Perspective: Cliffs protect against early team departures.

Definition: Dates when large amounts of vested tokens become tradable.

Market Impact:

- Increase circulating supply
- Potential selling pressure
- Price often drops before/during unlock
- Market anticipates and prices in

Types of Unlocks:

- 1 **Cliff Unlocks:** Large one-time release
- 2 **Linear Unlocks:** Continuous monthly/daily releases
- 3 **TGE (Token Generation Event):** Initial launch unlocks

Tracking: Use tools like Token Unlocks, Messari, CoinGecko to monitor upcoming events.

Case Study: Solana (SOL) Unlocks

Background:

- Total supply: 500M SOL (inflating to 700M by 2030)
- Major unlocks from 2021-2025
- Massive VC backing (a16z, Multicoin, etc.)

Key Unlock Events:

- **Jan 2023:** 13.8M SOL unlocked (seed investors)
- **Mar 2023:** 17.8M SOL unlocked (early investors)
- **Ongoing:** Monthly validator/foundation unlocks

Price Impact:

- SOL price dropped 15-20% around major unlocks
- Market frontrun events (selling days before)
- Long-term recovery as adoption grew

Initial Allocation (2020):

Category	Percentage
Community & Ecosystem	38.9%
Team	12.5%
Foundation	10.5%
Seed Sale	15.9%
Founding Sale	5.1%
Validator Sale	5.1%
Strategic Sale	1.8%
Public Auction	1.6%
CoinList Sale	1.3%

Observations:

- Insiders (team + investors): 35%
- Long vesting helped manage dilution

Strategies to Mitigate Selling Pressure:

1 Staking Incentives

- Offer high yields to lock unlocked tokens
- Example: Solana staking 7% APY

2 Gradual Unlocks

- Daily/monthly instead of quarterly
- Smooths supply shock

3 Lockup Extensions

- Voluntary additional vesting
- Bonus tokens for extended locks

4 Strong Fundamentals

- Demand growth offsets supply increase
- Usage-driven value accrual

Airdrops as Distribution

Definition: Free distribution of tokens to users based on specific criteria.

Common Airdrop Types:

- **Retroactive:** Reward past users (Uniswap UNI)
- **Holder Airdrop:** To existing token holders
- **Task-based:** Complete specific actions
- **Governance:** For DAO participation

Benefits:

- Bootstrap community
- Decentralize ownership
- Reward early adopters
- Generate buzz and awareness

Risks:

- Airdrop hunters (not genuine users)
- Immediate selling pressure
- Sybil attacks (multiple wallets)

Famous Airdrop: Uniswap (UNI)

September 2020 Airdrop:

- 400 UNI per address that used Uniswap before Sept 1, 2020
- 250,000 addresses eligible
- Total airdropped: 150M UNI (15% of supply)
- Value at claim: \$1,200 per user

Impact:

- Instant governance decentralization
- Massive publicity and user growth
- Many users held long-term (strong community)
- Set standard for future DeFi airdrops

Key Insight: Retroactive airdrops reward genuine users, not speculators.

Why Transparency Matters:

- Builds trust with community
- Allows informed investment decisions
- Prevents surprise dilution
- Demonstrates professionalism

Best Practices:

- Publish detailed vesting schedule
- On-chain vesting contracts (immutable)
- Real-time unlock tracking dashboards
- Regular updates from foundation

Tools:

- Token Unlocks (tokenunlocks.app)
- Messari (messari.io/asset/[token]/profile)
- Project documentation (tokenomics page)

Warning Signs:

1 Excessive Insider Allocation

- Team + VCs \geq 50%

2 Short or No Vesting

- Team vesting \geq 2 years
- No cliff period

3 Opaque Distribution

- No published allocation details
- Unknown wallet holders

4 Unrealistic Promises

- Guaranteed high yields from unlocked tokens

5 Centralized Control

- Foundation holds \geq 30% indefinitely

Step-by-Step Checklist:

- 1 Find tokenomics documentation (website, whitepaper)
- 2 Identify total supply and initial circulating supply
- 3 Review allocation percentages by category
- 4 Check vesting schedules (duration, cliffs)
- 5 Look up upcoming unlock events
- 6 Verify on-chain vesting contracts
- 7 Calculate potential dilution over time
- 8 Compare to industry benchmarks

Questions to Ask:

- How much supply is locked vs. circulating?
- When are the next major unlocks?
- Are insiders incentivized to hold long-term?

Key Takeaways:

- Token distribution determines ownership concentration
- Healthy projects: Team + VCs \leq 40%, long vesting (3-4 years)
- Cliff periods prevent immediate insider selling
- Unlock events create predictable selling pressure
- Airdrops can bootstrap communities but attract farmers
- Transparency in vesting builds trust
- Always check Token Unlocks before investing

Next Lecture: Token Classification and Valuation - Regulatory frameworks and how to value tokens.

- ❶ Why do early investors typically have longer vesting than public sale participants?
- ❷ How did Solana's unlock events impact its price trajectory?
- ❸ What are the pros and cons of retroactive airdrops vs. task-based airdrops?
- ❹ How can a project mitigate selling pressure during major unlocks?
- ❺ What vesting schedule would you design for a new token launch?