L30: Distribution and Vesting

Module D: Tokenomics

Blockchain & Cryptocurrency

December 2025

Learning Objectives

- 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

Token Distribution Overview

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 ¿ 50% indicates high centralization risk.

Team and Founder Allocation

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.

Investor Allocation

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

Community Sale Methods

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)

Ecosystem and Development Fund

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

Vesting Schedule Types

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

Cliff Periods

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.

Token Unlock Events

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 frontran events (selling days before)
- Long-term recovery as adoption grew

Solana Distribution Breakdown

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

Managing Unlock Pressure

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.

Vesting Transparency

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)

Red Flags in Distribution

Warning Signs:

1. **Excessive Insider Allocation**
   - Team + VCs ¿ 50%
2. **Short or No Vesting**
   - Team vesting ¡ 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 ¿30% indefinitely

Analyzing a Project's Distribution

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?

2024 Trend: Points Programs (Pre-Token Distribution)

What are Points?

- Off-chain loyalty system tracking user activity
- Converted to tokens at future TGE (Token Generation Event)
- Replaced traditional airdrops as primary distribution mechanism

How Points Work:

1. Protocol tracks user actions (deposits, trades, referrals)
2. Users accumulate "points" proportional to activity
3. At TGE, points convert to tokens based on total points issued
4. Conversion ratio unknown until announcement

Examples (2024):

- **EigenLayer**: Points for restaking, major airdrop anticipation
- **Blast**: Points + Gold for L2 deposits, high-profile launch
- **Ethena**: Points for USDe staking, converted to ENA token

Criticism: Opaque, favors whales, mercenary capital, unclear value

Summary

Key Takeaways:

- Token distribution determines ownership concentration
- Healthy projects: Team + VCs ¡ 40%, long vesting (3-4 years)
- Cliff periods prevent immediate insider selling
- Unlock events create predictable selling pressure
- 2024 Trend: Points programs replacing traditional airdrops
- Transparency in vesting builds trust
- Always check Token Unlocks before investing

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

Questions for Reflection

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