Cyrille Bialkiewicz Prize for Research in Decentralized Finance

Summary of

Vote Delegation in DeFi Governance[*]

by

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Introduction

Our paper examines the mechanisms behind vote delegation in Decentralized Autonomous Organizations (DAOs), focusing on Uniswap, the leading decentralized exchange (DEX). As DAOs aim to replace traditional corporate governance with decentralized, blockchain-based mechanisms, understanding how voting power is delegated is essential to assess whether these systems are truly decentralized.

Despite the ethos of decentralization, governance in DAOs often reveals a different reality: high voting power concentration and the pivotal role of early stakeholders. This paper probes this tension by studying delegation patterns in Uniswap's DAO and exploring whether they are driven by:
1. Ownership stake (skin-in-the-game)
2. Independence from powerful stakeholders like Andreessen Horowitz (a16z)
3. Reputation and merit based on governance activity

Governance Structure and Data

Uniswap introduced a governance process via the UNI token in September 2020. Holders must delegate their voting power—either to themselves or others—to participate in governance. Governance (during our sample period) follows a four-stage procedure, three of which involve voting:
1. Discussion forum (informal proposal),
2. Temperature check (Snapshot vote, 25K votes to pass),
3. Consensus check (Snapshot vote, 50K votes to pass),
4. On-chain vote (Smart contract-based, 2.5M votes to propose, 40M quorum to pass).

Crucially, delegation is a prerequisite to participate, and our study leverages on-chain and off-chain data on vote delegations and proposer activity to identify what drives delegation decisions.

We assemble a wallet-day level panel of 47,808 observations between September 2020 and April 2022. We also collect information on voting activity across all stages of the governance process for each of the 48 proposals submitted during our sample period. We focus on the "Top5" group of wallets—those that ranked among the top five voters in any proposal—to understand which wallets receive the most delegated votes.

Key Findings

Finding 1: No evidence for skin-in-the-game preference

Contrary to classical governance theory, we find a negative association between self-delegated voting power and votes received from others. A 1% increase in self-delegation is associated with a 1.58–1.63% decrease in external delegation. Therefore, token holders do not reward

large ownership stakes when choosing delegates. This finding undermines the "skin-in-the-game" hypothesis and suggests that token holders may value decentralization over aligned ownership.

Finding 2: Venture capital firm a16z's disproportionate influence and window dressing

Delegates affiliated with Andreessen Horowitz (a16z) receive 2,689 to 3,548 times more votes from others than non-affiliates. Despite the appearance of decentralization, these delegates almost always vote in line with a16z's preferences. The governance structure may be decentralized in form but centralized in practice, with a16z controlling outcomes through a network of aligned delegates—potentially a form of window dressing. This finding challenges the narrative that Uniswap (and potentially other DAOs) are meaningfully decentralized, raising regulatory concerns especially under frameworks like the EU's MiCA.

Finding 3: Reputation-based delegation

Delegates with a history of successful governance proposals attract significantly more voting power: Being a proposer is associated with 59x more delegated votes, proposing at the final (on-chain) stage boosts this to 101x, successful proposals increase delegation by 31x, successful on-chain proposers may receive up to 626x more votes. Delegation is thus not purely symbolic—it's meritocratic, with reputation and past success playing a crucial role in how voting power is concentrated.

Contributions and implications

Our work contributes to several literatures. First, it adds to the literature on DeFi and DAO governance. It is among the first to empirically distinguish self-delegation from delegation by others, revealing critical dynamics of power in token-based governance. Second, while prior work on DEX focuses on liquidity and trading, this study shifts the lens to its governance—arguably as important to understanding DEX evolution. Third, since Uniswap operates as a DAO, with no managers or directors, our work also contributes to the literature on corporate governance and shareholder democracy. Our findings echo concerns in traditional finance about concentration of influence and the challenge of informed decision-making in dispersed ownership systems.

Our work has important implications as our findings raise concerns about pseudo-decentralization and support calls for embedded regulation in smart contracts to ensure accountability in DeFi ecosystems.

Takeaways

This paper identifies three key drivers of vote delegation in DAOs:
1. Preference for decentralization (delegators avoid high self-delegators)

2. Hidden centralization via a16z affiliate network (suggestive of window dressing)
3. Reputation and success in governance activity (merit-based delegation)

While the Uniswap DAO presents itself as a decentralized organization, governance is de facto concentrated, often around powerful actors like a16z. Delegators appear to reward visible, competent actors—yet, this may inadvertently further entrench centralization when such actors are affiliated with dominant stakeholders.

The paper thus nuances the optimism around DAOs and suggests that true decentralization remains a promise rather than a reality, even in the most advanced DeFi ecosystems.