Abstract: Decentralised organisations use blockchains as a basis for governance: they use on-chain transactions to allocate voting weight, publish proposals, cast votes, and enact the results.

However, blockchain-based governance structures have challenges, mostly notably, the need to align the short-term outlook of pseudononymous voters with the long-term growth and success of the decentralised organisation. The Vote-Escrowed Token (veToken) model attempts to resolve this tension by requiring voters to escrow or lock tokens of value for an extended period in exchange for voting weight.

In this paper, we describe the veToken model and analyse its emergent outcomes. We show that voting behaviour follows bribes set by higher-level protocols, and that the cost per vote varies depending on how it is acquired. We describe the implementation of the veToken model by Curve Finance, a popular automated market maker for stablecoins, and the ecosystem of protocols that has arisen on top of this implementation. We show that voting markets such as Votium largely determine the outcome of fortnightly votes held by Convex Finance, and we show that Frax Finance, a stablecoin issuer, plays a central role in the ecosystem even though they directly lock relatively few tokens with Curve. Instead, they indirectly lock tokens through yield aggregators such as Convex Finance and purchase voting weight through voting markets such as Votium.

Although the veToken model in isolation is straight-forward and easily explained, it leads to many complex and emergent outcomes. Decentralised organisations should consider these outcomes before adopting the model.

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Emergent Outcomes of the veToken Model

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