

## Freeport

### Introduction

Freeport aims to be a decentralized protocol with mutually beneficial incentives that work for all participants (traders and market originators). It is also meant to be completely open and permissionless where anyone can create a market and anyone can trade on any market. Market originators create the markets/pools of wagering and also conclude/settle markets.

### Incentive Compatibility

Market settlement utilizes reputation-based system that should create incentives for the originator to report the outcomes of the market event truthfully. Truthful settlement is necessary to maintain a reputation within the community of traders who will likely steer clear of originators with bad/unknown reputations for fear of a malicious actor who would report untruthfully for their own benefit. It is encouraged, but not necessary, that they dox themselves to establish some form of reputation and rapport with the community that will bolster trust from traders and ultimately drive more trading and liquidity. Traders might not have a ton of confidence trading on a market with a previously unknown originator who's only known feature is their public key hash. Although, it is not inconceivable to think that there would be an anonymous originator who has an impeccable track record for settling markets correctly and timely, who would garner a lot of trust from the trading community regardless of identity. That's just the thing, it's a free market where everyone involved is responsible for their own actions and trades. It should be the goal of a market originator to have higher liquidity in their markets to ensure/produce more potential profit. In this way, originators are incentivized to provide accurate, timely settlements to their events as well as provide clear descriptions of outcomes and grading.

### How It Works (Broadly)

Upon market creation, the market originator will provide a succinct description of the event, the available outcomes, an initial stake/minting of outcome tokens, the fee they will take from the pool, and the expiration date (if no settlement transaction occurs, everyone gets their Ada back). Traders will be able to buy outcome tokens with Ada. The prices of outcome tokens are driven by traders using an algorithm like those used in Cardano decentralized exchanges. A percentage of the trades will go to the originator for his service in market creation, settlement, and the risk involved in the initial stake. Once a market is settled by the originator, the outcome tokens corresponding to the correct outcome will be allowed to unlock Ada from the available pool. Wallets holding outcome tokens that are not correct will be unable to retrieve funds from the contract. If the originator does not settle the market before the given expiration date, everyone receives their Ada back (i.e. traders will be allowed to send an unlock transaction for that market and receive the Ada wagered minus fees). If the originator settles the market incorrectly, *there will be no recourse for traders*. It is very important that traders be conscious of where/who they trade with. There are no do overs and no one to step in during the event of a malicious settlement from a market originator. This is software meant for use by fully functioning adults who assume all risk for their trades and are responsible to properly vet the market they choose to trade within.

**How It Works (In Detail)**