Hot Potato Whitepaper

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Abstract. In order to solve the problem of uncertainty about the eventual result of initial coin offering tokens, we propose the HOTPOTATO protocol, which, rather than relying on market forces to eventually end the token speculative bubble at an undefined and hard to measure date, ensures with 100% mathematical certainty that all tokens sold during the initial coin offering become worthless after a predefined period of time. This allows investors to focus solely on the speculative gains of reselling the token, without the anxiety of not knowing when the whole bubble is going to pop.

1. Introduction

The price volatility and uncertain future of initial coin offerings is a well-attested problem. This is in large part due to the lack of guarantee of project delivery, and dependency on short-term speculation for price movements. Most initial coin offerings offer a token with the promise of future exchangeability to the advertised asset, but this is guaranteed neither by a legally binding contract nor a programmed smart contract in the Block chain - the latter being unfeasible due to the frequent lack of any existing product at the time of the initial coin offering.

However, the token itself begins to acquire value during the period of time. Investor interest follows and causes a peak in the total market cap of the ICO, followed by several episodes of renewed interest and sharp declines.

We thus see a pattern of investors rapidly swapping the tokens, each one trying to sell it to an investor believing he can sell it to another investor for more, until the cycle breaks and one investor is forced to sell it for lower than he acquired the token, precipitating a drop in the token value, until the token begins to rise again.

Rather than having irrational market forces dictate the rise and fall of a token price, what if you could rely on a predictable, cyclically recurring pattern, directly programmed into the token?

2. Our Solution

We propose to make the core volatility and limited lifespan a core element of a new system for decentralized speculative assets on the Blockchain. We introduce the Hot Potato Coin, the first cryptocurrency token on the Ethereum Blockchain with a cyclically programmed finite duration.

In our implementation, the speculative asset bubble is programmed to "pop" every 30 days, with the wallet balances of all holders going to 0.

Each month, new early adopters can then rush to grab the initial tokens at the low prices, and resell them for more before the bubble collapses automatically.

3. Token Sale Structure

Figure 1

Token Sale - Price Increase (30-day period)
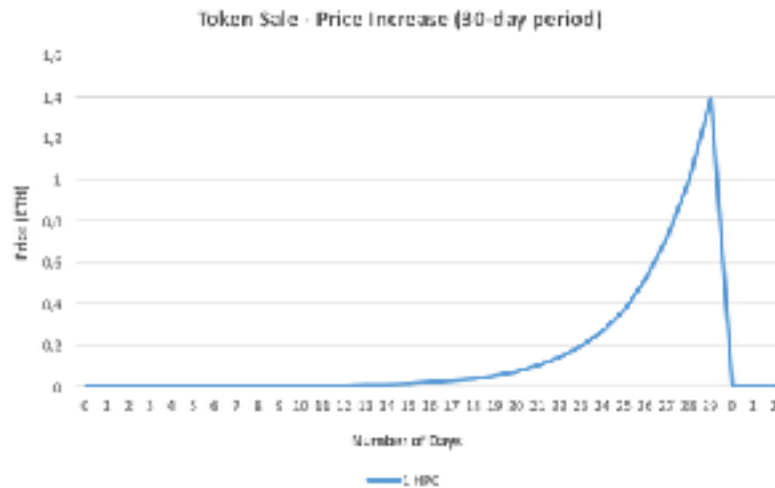
Hot Potato Coin will be distributed through a token sale model. Due to the cyclical nature of the system, the token sale will be perpetual, without a limit or "cap". Instead, we will rely on a programmed exponential increase of the price of 10x per week, resetting every month at the end of the Potato lifespan (see figure 1).

Figure 2

Token Sale - Price Increase (First 14 days)
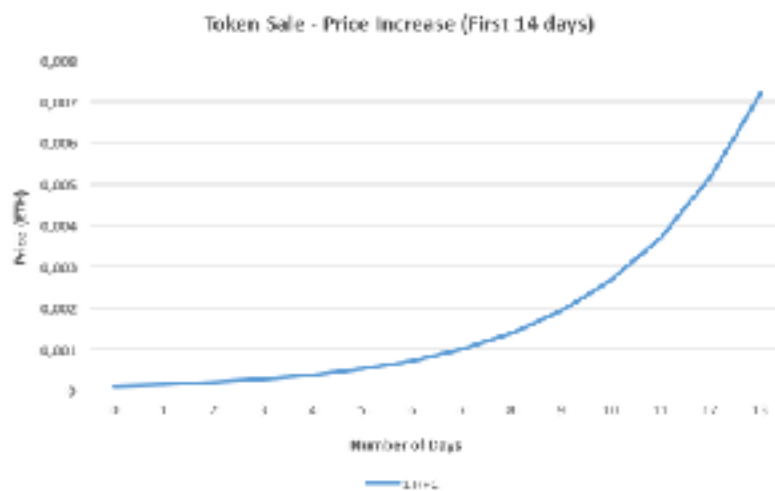
Note that in order to encourage early adoption, the price in the first 14 days will be augmenting much more slowly than in the last 14 (see figure 2). This is an alternative manner of incentivizing token exchange without relying on a hard cap, which imposes artificial constraints on the market prices. Ergo, after 14 days, most Hot Potato activity should organically move to exchanges as the token sale price gets further out of range of the market price. The price curve shall additionally serve as a psychological baseline for the on-going speculation.

4. Expectations

We are highly confident that Hot Potato Coin will never have any extrinsic worth and any worth it has will be solely due to speculative, irrational market forces.