



FairCoin FreeVision Whitepaper

April 1th, 2019

Introduction

FairCoin exists since 2014 with the vision of a fair and cooperative working economy. All informations about it can find under <https://fair-coin.org> the base website of FairCoin.

Main part of FairCoin is the price mechanism to stableize the price and prevent the pump and dump and the effects to the fair economy.

Another important part is the proof-of-cooperation algorithm where specific nodes create the blocks within all transactions by a round-robin procedure and almost without a fee. This proof-of-cooperation algorithm saves ressources and scales up better than a proof-of-work or proof-of-stake system as other cryptocurrencies use.

The reality shows us that the existing price mechanism is very limited and creates some needs that is hard to fulfill. In principle the system depends on investors that put new capital into the system that secures the liquidity that is necessary to hold the price stable and on level. During the creation of this whitepaper the current market price of FairCoin is 0.10€ but the official price is still at 1.20€

FairCoin FreeVision don't want to call the price mechanism in question but want add another price mechanism that works everytime and in every market and doesn't depends on new investors or capital.

We want ADD other possibilities to FairCoin but we don't want and will NEVER fork the FairCoin blockchain. We don't want compete against the existing mechanism and infrastructure but we want also support it and maybe we can improve the whole FairCoin ecosystem with our ideas.

We see FairCoin at the moment primary driven und decided by Fair.Coop as an eco-human-centric but idealistic movement. But we see also similar but other movements like komun.org as an eco-human-centric but with a higer focus to decentralization.

We think that if we want to create a powerful cryptocurrency that could become a alternative to fiat money or Bitcoin then we need to spread FairCoin and invite people that for example want support a fair economy but don't want to go the idealistic way but prefer more pragmatism and realism. We want make compromises instead to follow only the one way if it brings us a step forward.

FairCoin FreeVision should be understood as a part of FairCoin community that don't want ignore the free market but work with it and find a middle-way between liquidity and stability. We also want think about decentralization, about possible improvements of the proof-of-cooperation algorithm or the way to process the exchanges from fiat to FairCoin or FairCoin to fiat.

FairCoin FreeVision is made for people with a high focus on freedom and sustainability. For example progressivists and wants to be the connector to a mass of people and help us to build up a powerful network.

We want make FairCoin to a liquid standard for local and social currencies and create a global standard of a payment infrastructure.

The Price Mechanism

Price adjustments should be not made by humans in assemblies because we think that it works only in a very low level but cant portray the global movement or community of thousands of FairCoin members.

It is not very productive that a dozen of members decides about the new price but the community has 500 or more members.

We think that the price adjustments in FairCoin should be done by automatism and the fixed price mechanism outsourced to another currency like FairCash.

Why We Want Prefer A Free Market Based Price Mechanism Than An Official Price Mechanism?

Because

Our support price will adjusted by cascades.

The freevision bid prices (means change FairCoin to other currencies) by logarithmic cascades of in avagerage 25% normalized.

And the freevision ask prices (means change other currencies to FairCoin) by logarithmic cascades of in average 5% normalized.

To prevent lot of jumps between cascades a hysteresis of 5% is added to both prices.

To prevent prices changes by pumps and dumps on free market the freevision bid prices will decreased only if the free markets ask prices are fallen under the freevision bid price. The freevision ask price will increased only if the free market bid price is going above the freevision ask price.

To prevent changes in markets with low liquidity the bid and ask depth of free market prices is set to 10000 FairCoin (and can be changed in the future if necessary). So small volumes and transactions doesn't have influence to freevision price mechanism.

```
define('LOG_NORMALIZED_2
5',
  Array(
    1,
    1.25,
    1.5,
    1.75,
    2,
    2.5,
    3,
    3.5,
    4,
    5,
    6,
    7,
    8
  )
);
```

```
define('LOG_NORMALIZED_5
',
  Array(
    1,
    1.05,
    1.1,
    1.15,
    1.2,
    1.25,
    1.3,
    1.35,
    1.4,
    1.5,
    1.6,
    1.7,
    1.8,
    1.9,
    2,
    2.1,
    2.2,
    2.3,
    2.4,
    2.5,
    2.6,
    2.7,
    2.8,
    3,
    3.25,
    3.5,
    3.75,
    4,
    4.25,
    4.5,
    4.75,
    5,
    5.25,
    5.5,
    6,
    6.5,
    7,
    7.5,
    8,
    8.5,
    9,
    9.5
  )
);
```

The freevision bid price is everytime lower than the free market price and the freevision ask price is everytime higher than the free market price.

So we can prevent arbitrage trading and the liquidity problematic.

The Slot System

To make the exchanges efficient to handle we use a slot system to organize all exchanges.

Every slot has the same size for example 1000 FairCoin. So we would support only exchanges in 100€ steps.

The maximum number of slots is limited to 10 at the moment to consider the challenges of P2P exchange. So it is also possible for smaller FairCoiners to process the exchanges and we can reach a good level of decentralization easier.

Because of the mechanism that an arbitrage trading should not be possible the exchanges don't contain risks for the connectors that do the exchange.

To prevent that arbitrage traders would do the exchanges the FreeVision exchange will define trustful members in the first stage and later a web-of-trust mechanism will be implemented.