



EUNO WHITE  
PAPER V2

EUNO · a decentralized payment medium  
for tomorrow's cashless society.

April 2021

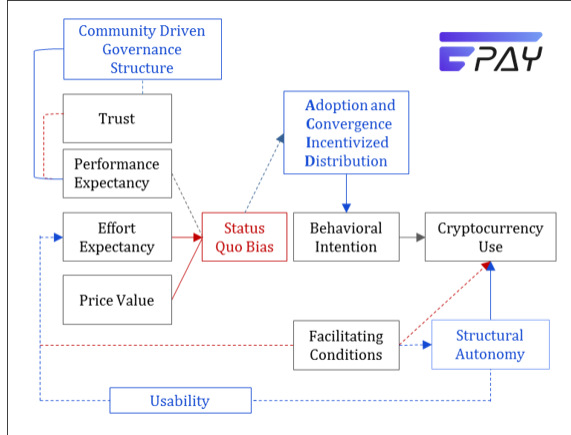
**Introduction**

Building on the original theoretical framework that was laid out in the **White Paper published in September 2018**, this follow-up document looks into recent developments in the EUNO network and aligns what has already been achieved to the use-case of EUNO Pay.

Here, it is worth taking a quick look back at what was envisioned in the design of EUNO Pay to understand the basis of recent developments and way forward.

EUNO was built on the basis of maximizing the likelihood of acceptance, trust and performance, and eliminating the deterrents of adoption by providing a payment medium that reduces volatility and value risks for merchants and for users through a network of widely distributed coins and one that incentivizes use in day-to-day transactions.

**Designed for Acceptance and Adoption**



Since then, the cryptocurrency space itself has seen several iterations of advancements, and continues to approach mainstream use in a variety of financial and data-transfer applications.

EUNO Pay has likewise made strides in development and is now ever-closer to its use case form.

From a performance, trust, and self-sufficiency perspective, features that are crucial for acceptance and sustainability, EUNO has not shifted to a strict Proof of Stake (PoS) and Masternode system, cutting out the need for mining to sustain the network, and giving more power to the user.

The swap from the original network that took place in the fourth quarter of 2020, also increased the coin supply to 8 billion coins from 50 million, distributed proportionately among holders, and extended the date to reaching maximum supply to 2035 by reducing the emission rate, a step aimed at expanding distribution among users, improving usability of EUNO as a payment system, and offering room for the ACID protocol reward system.

Those key developments came alongside efforts in improving usability through continuous developments of a new user-friendly wallet, the launching of the main net and integration into payment gateways that would support the use-case of EUNO Pay as a direct crypto to fiat payment medium, opening the door to future integration of other cryptocurrencies into the EUNO network, while retaining the fully autonomous and decentralized governance structure.

**EUNO Chain V2 Post 10/2020 Swap**

Max supply	8,000,000,000	EUNO
Block time	60	sec
EUNO coin supply at the time of the swap 37mill/50mill (Pre-mine)	6,000,000,000	EUNO
Start Date (Swap from Original Chain)	07.10.2020	
Years until max. Supply	15	Years
Number of Halvings	4	Halvings
Collateral	8,000,000	EUNO
MN Reward	80	%
Staking Reward	20	%

**What is EUNO Pay**

EUNO Pay is a user-friendly point of sale payment system that utilizes near frequency communication technology. NFC technology allows two systems to establish close-range communication through radio frequency identification. NFC enabled payments are processed when a customer holds their mobile phone close to a merchant’s payment terminal, allowing for an instantaneous settlement. Using EUNO Pay, you will be able to purchase items through any point of sale terminal with an instantaneous conversion into the merchant’s local currency, facilitated by a payment gateway. For merchants, this would provide an exchange rate risk-free transaction through a low maintenance and secure system. For consumers, it would provide a secure and fast payment mechanism through the EUNO Pay mobile wallet application, in addition to a utilization return facilitated by the ACID protocol.

**Governance Structure and Durability**

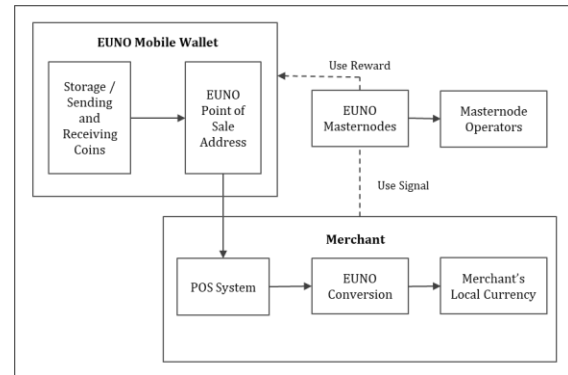
EUNO Pay is governed by its own community, offering a flexible and democratic structure that allows for continued progress in the project’s development and ensures adequate improvements in functionality, usability and security. The decentralized governance structure gives stakeholders the chance to submit proposals on all aspects related to EUNO Pay and participate in a smart voting mechanism, following public proposal deliberations.

It ensures that stakeholders partake transparently and democratically in the overall strategy and development of EUNO, with proposals, discussions, and voting taking place over a specialized and easy to use platform, offering long term security for users, and promoting confidence in the project’s durability by preventing partial decision making, while permitting the team to focus on development, implementation, and marketing.

**ACID Protocol - Adoption and Convergence Incentivized Distribution**

The ACID protocol is a mechanism introduced by EUNO coin aimed at promoting wide coin distribution and incentivizing coin use in commercial transactions to support exposure, trust, and counterbalance negative price considerations including volatility and opportunity cost of use. The ACID protocol makes use of EUNO masternodes to provide a share of rewards to EUNO point of sale users, effectively reimbursing users with a portion of post-transacted coins through the EUNO mobile wallet application.

**ACID Protocol**



**Appendix**

With  $x$  holdings of a currency  $i$  at price  $p$  and time  $t$  representing phases in the life of user adoption up to an equilibrium point  $n$  in which relative price stability is achieved:

$$t \in \{0, 1, 2, \dots, n\} \text{ and } p_0 \leq p_1 \leq p_2 \leq \dots \leq p_n$$

$\beta$  an anticipated price change at every period and  $\alpha$  a fixed percentage used for the purchase of a product or service:

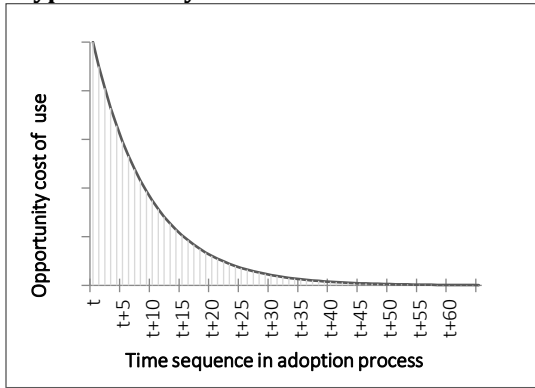
$$0 < \alpha \leq 1$$

We define the total anticipated opportunity cost of using a portion of  $x$  ahead of each expected increase in  $p_i$  as:

$$\int_{t=0}^n x_{it} p_{it} \alpha_t \beta_{t+1} dt$$

Anticipated price increases in the process of a currency's life prompt a behavioral aversion of loss that incentivizes deferral of use. As a result, potential users are inclined at each time period to defer spending to the next time period, indefinitely delaying the process of adoption. To counterbalance this pre-calculated loss, a system that induces a sense of balance or corresponding gain is needed.

**Cryptocurrency Use Deferral Function**



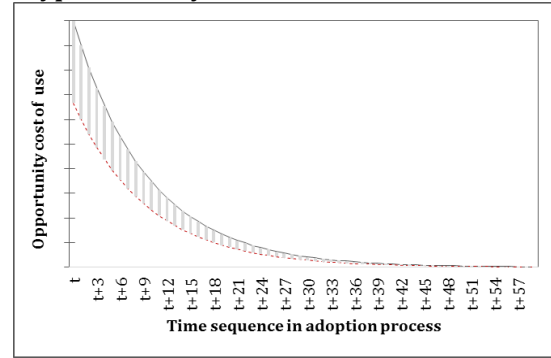
Assuming an equal percentage price change  $\beta$  for each period  $t$  perception of foregone capital gain on the use of a cryptocurrency  $i$  would add up exponentially as purchasing power increases, in comparison to saving up to equilibrium point  $n$ .

$$x_{i0} p_{i0} (1 + \beta_t)^t (1 - (1 - \alpha_t)^t)$$

To counterbalance the effects of price volatility for users, the EUNO wallet application for point of sale transactions allocates a reward  $r$  after each transaction, reducing perceived opportunity cost, and on downside movements, ensuring the partial or full reimbursement of losses, subject to the exchanged amount.

$$\int_{t=0}^n x_{it} p_{it} \beta_{t+1} (\alpha_t - r_t) dt$$

**Cryptocurrency Reimbursement Function**



Moreover, when  $r$  is inversely proportional to the share of spending, use results in a more balanced currency distribution among users and balances the risk-reward dynamics between actors.

Simulating a game in which two players A and B can either choose to spend a currency  $i$  that rewards use with a partial reimbursement  $r$ , or hold on to the currency until a future period  $t + 1$ . A choice to hold would yield:

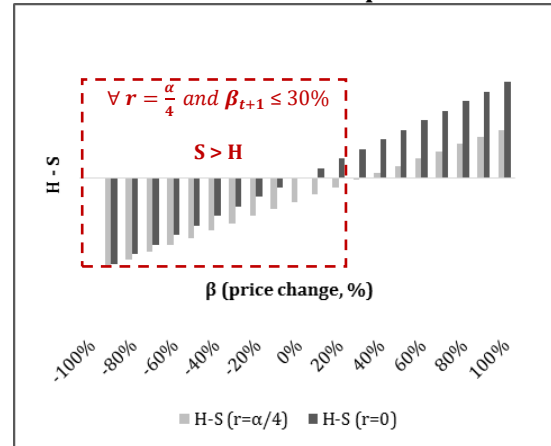
$$H_i = x_{it} p_{it} (1 + \beta_{t+1})$$

Whereas the choice to spend a portion  $\alpha$  of the currency would yield:

$$S_i = x_{it} p_{it} (1 + \beta_{t+1}) (1 - \alpha_t + r_t)$$

Taking  $\alpha = 0.1$ ,  $r = \frac{\alpha}{4}$  and  $x_{it} p_{it} = 100$ , we measure the net worth of holders for different values of  $\beta_{t+1}$ .

**Net Value of Holders minus Spenders  $\alpha = 0.1$**



**Currency Use Dynamics**

<b>Adoption and Convergence Incentivized Distribution</b>		A	
		$\alpha = 0$	$0 < \alpha \leq 1$
B	$\alpha = 0$	(H <sub>i</sub> ,H <sub>i</sub> )	(H <sub>i</sub> ,S <sub>i</sub> )
	$0 < \alpha \leq 1$	(S <sub>i</sub> ,H <sub>i</sub> )	(S <sub>i</sub> ,S <sub>i</sub> )

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