The Ponzi Flywheel



Ponzis are taking us to places that no Ethereans have seen before; the sunlit plains of deflation.

Yes, you heard that right. A literal Ponzi protocol with no utility is driving Ethereum users to use the chain so much that ETH has turned deflationary.

The Ponzi in question is Xen.

The website is quite sparse, and there isn't really that much you can do on it. There is the by-now familiar option to stake XEN tokens for a 20% APY, and a couple of dashboards with some data related to the project.

The interesting bit is the mint page. You see, one can mint new XEN tokens for oneself at the click of a button.

							ree XEN nk @ 894229
	Term, days: 1						1
START MINTING							MINTING
	Add XEN to wallet						
y		4	(0)		(4)		Contract: 0x06450dEe7FD2Fb8E39061434BAbCFC05599a6f Copyright © 2022 by Fair Crypto Foundation. All Rights Reser

The catch: these XEN tokens do not arrive immediately. In fact, the user can select how much later they can access their newly minted tokens; the minimum is set at 1 day. The longer the wait, the more tokens you get.

However, there is no guarantee that XEN will have any value in the future. If you select too long a wait you might just go home empty-handed. As we said, the token does literally nothing. Not that that should matter anyway. This is crypto after all, and some of the highest-valued tokens are about as useful as a ham sandwich at a bar mitzvah.

In any case, a lot of people are minting XEN. Like, a lot. Some have even created bots to mint new Xen from a myriad of wallets at the same time. This handy, and to some people sorta shady strategy is known as sybiling.

Could you guess who is likely the greatest sybiler of Xen? The creator of the Xen protocol itself, according to <u>this thread</u>. Ah, isn't crypto fantastic?

But what concerns us today are not Ponzi games. It is the fact that ETH has turned deflationary.

How is that even possible? And why does more usage of the chain enable this?

Burn baby, burn

The first change to the issuance of Ethereum that allowed ETH to turn deflationary was the implementation of EIP-1559 back on August 5th 2022.

EIP-1559 changed Ethereum's fee market. The fee market refers to the way users pay fees (known as gas), and how much they pay. One needs to pay this fee for any action on Ethereum, be it a simple transfer or to interact with for instance Uniswap.

Before EIP-1559, Ethereum followed a first-price auction. This means that people bid an amount of money (in this case ETH) to pay for their transaction to be processed and the highest bidder won.

After EIP-1559, the fee is split in two: the base fee and the priority fee. The base fee is always included. The priority fee is a "tip" that users can add to get their transaction included in the next block faster.

What is interesting is that the base fee, which is denominated in ETH, is burnt. Forever.

Since the London upgrade, this is what ETH issuance looks like:



The Triple Halving (of our collective net worths)

The second change to ETH's issuance came thanks to the Merge, one of the most impactful events in Ethereum's history. The Merge refers to the switch from Proof-of-Work (PoW) to Proof-of-Stake (PoS) consensus, and was implemented on September 15th.

A consensus mechanism is how the participants of a blockchain agree on the validity of the history and transactions of the chain.

The original consensus mechanism for Ethereum was PoW. In PoW, members of the network expend computational effort to solve a mathematical puzzle, and are rewarded new coins in return.

In a PoS blockchain, validators offer their coins as collateral to mine new blocks. Validators are awarded newly issued coins whenever they mine a new block. The coins acting as collateral are "staked", and users cannot transact with them.

Why change to PoS? From the <u>ethereum.org</u> website: " (PoS) is more secure, less energy-intensive, and better for implementing new scaling solutions".

What the change did, too, was to reduce the amount of new ETH that is created. Before the Merge took place, ETH issuance looked like this:

- Issuance to miners: ~13,000 ETH/day or ~3.95% annual inflation
- Issuance to stakers: ~1,600 ETH/day or ~0.49% annual inflation
- Total issuance pre-Merge: ~14,600ETH/day or ~4.44% annual inflation

After the Merge, only issuance to stakers remains:

- Issuance to stakers: ~1,600 ETH/day or ~0.49% annual inflation
- Total issuance post-Merge: ~1,600ETH/day or ~0.49% annual inflation

This represents an ~89% drop in issuance.

Some dot eths have taken a liking to calling it the triple halving, after Bitcoin's halving by which the issuance of BTC is cut in half every four years. Historically, this has preceded every major BTC bull market. So you can understand why investors were excited about these changes.

Although, considering recent market conditions, the triple halving might as well have referred to a triple halving of ETH prices (\$4800 -> \$2400 -> \$1200 -> \$600). But I digress.

The fact is that the Merge dropped issuance so much that ETH can become deflationary if there is enough activity on the chain, thanks to the burn implemented by EIP-1559.

After these two changes, this is how the issuance of ETH looked like over the last 30 days:



Not bad, but still inflationary.

This is because we are in the midst of a bear market, and activity on chain is very low. Which means, the base fees that were burnt were not enough to counter the 1,600 ETH that is issued every day to stakers. That is, until Xen came around.

Less ETH by the minute

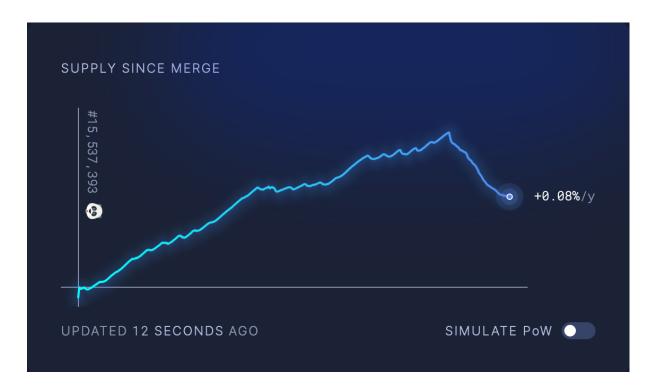
This is how issuance looks like over the last week, after Xen arrived to the scene:

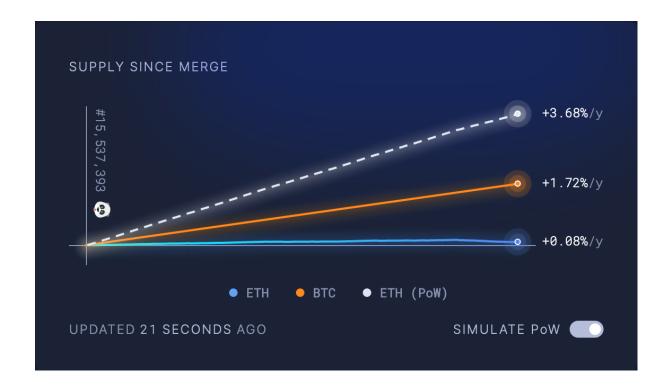


Now we are talking!

Granted, a burn of 0.17% of supply in a year does not really remove that much ETH. But look at it this way: in the past, positive issuance acted like a headwind against price appreciation. For price to go up, someone first had to gobble up all the new ETH that was being issued. At current prices, that was \$17.5M worth of ETH created each day, or over \$500M a month. And most of that was given to miners that would sell it sooner rather than later.

Now, after PoS was enabled, that sell pressure is all but gone. And, if there is actual long-term deflation, that sell pressure becomes equivalent to "buy pressure". The headwind is now a tailwind, and even investors buying Ethereum will have much more of an impact, pushing prices up much faster.





<u>EIP-1559</u> will change Ethereum's fee market mechanism. Fundamentally, EIP-1559 gets rid of the first-price auction as the main gas fee calculation. In first-price auctions, people bid a set amount of money to pay for their transaction to be processed, and the highest bidder wins. With EIP-1559, there will be a discrete "base fee" for transactions to be included in the next block. For users or applications that want to prioritize their transaction, they can add a "tip," which is called a "priority fee" to pay a miner for faster inclusion.

With EIP-1559, the base fee is burned, but a tip and the block reward still go to the miner. On **5th August 2021**, the London upgrade was launched and notably bought about a reformation of the transaction fee market for the ETH 1.0 chain via EIP-1559

Issuance rate to miners: Issuance rate to stakers

Total annual issuance rate: ~4.62% (4.13% + 0.49%)

- ~89.4% of the issuance is going to miners on the execution layer (4.13 / 4.62 * 100)
- ~10.6% is being issued to stakers on the consensus layer (0.49 / 4.62 * 100)

It might have been that you didn't even realise the network went through such a change, as the transition was as smooth as one could hope for.

This is a testament to the work of the core developers from the Ethereum Foundation, who devoted countless hours to ensure the switch to PoS went as smoothly. We congratulate them xxx.

A consensus mechanism is how the participants of a blockchain agree on the validity of the history and transactions of the chain.

The original mechanism was Bitcoin's PoW, in which members of the network expend computational effort to solve an arbitrary mathematical puzzle, and are rewarded new coins in return.

In a PoS blockchain, validators offer their coins as collateral to mine new blocks. Validators are typically awarded newly issued coins whenever they are selected to mine the new block. The coins acting as collateral are "staked", and users cannot transact with them. They can only be retrieved after an unbonding period.

In any case

Xen created October 9th?

But enough talk about ponzis. Silly protocols like this are going to spring up if gas fees are low enough.

Bitcoin halving, by which the issuance of BTC is cut in half Triple halving (50 + 25 + 12.5 = 87.5%)

It looks more and more by the day that the triple halving was actually a triple halving in ETH prices

Jarvis discussed the merge here https://jarvislabs.substack.com/p/merge-like-joe-cool

Merge - PoS

Proof-of-stake (PoS) underlies Ethereum's <u>consensus mechanism</u>. Ethereum switched on its proof-of-stake mechanism in 2022 because it is more secure, less energy-intensive, and better for implementing new scaling solutions compared to the previous <u>proof-of-work</u> architecture

https://ethereum.org/en/developers/docs/consensus-mechanisms/pos/

96% reduction in issuance at a cyclical bottom in activity

ETH issuance

- Mining rewards ~13,000 ETH/day pre-merge
- Staking rewards ~1,600 ETH/day pre-merge
- After The Merge, only the ~1,600 ETH per day will remain, dropping total new ETH issuance by ~90%
- The burn: At an average gas price of at least 16 gwei, at least 1,600 ETH is burned every day, which effectively brings net ETH inflation to zero or less post-merge.

Issuance pre-merge

Total annual issuance rate: ~4.62% (4.13% + 0.49%)

- ~89.4% of the issuance is going to miners on the execution layer (4.13 / 4.62 * 100)
- ~10.6% is being issued to stakers on the consensus layer (0.49 / 4.62 * 100)

Issuance post-merge

Total annual issuance rate: ~0.49% (only consensus layer inflation left)

Net reduction in annual ETH issuance: ~89.4% (0.49% / 4.62% * 100)

The burn - EIP 1559 (London Upgrade)

The opposite force to ETH issuance is the rate at which ETH is burned. For a transaction to execute on Ethereum, a minimum fee (known as a base fee) must be paid, which fluctuates continuously depending on network activity. The fee is paid in ETH and is *required* for the transaction to be considered valid. This fee gets *burned* during the transaction process, removing it from circulation

Xen

you can mint new tokens for near-zero value on a one-day delay, with the number of tokens mintable going down over time. You get more tokens if you boost supply but lock them for a year

the whole scheme relies on people daily putting real money into the LP by buying XEN tokens, otherwise it will zero quite fast as minters sell their free tokens https://twitter.com/MotleyInvestor/status/1578724892685410304?s=20&t=hhy3IXqQjIx_CVb quwBUxw

Xen Sybiling own token:

https://twitter.com/takenstheorem/status/1580077606795640833?s=20&t=tc_3BMkEnjlH7BK GJpsU3Q

XEN is now trading on MEXC, with valuation of 10x vs the cost of gas. So spending \$40 on a tx yesterday would have allowed you to sell it for \$400 today.