

A Breakdown of Ethereum Supply Distribution Since Genesis

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Why this matters

1. **Security:** As a proof-of-stake blockchain, Ethereum relies on validators for block production and to operate a validator, a user must own and stake 32 ETH. Therefore, the amount of ETH a user or entity controls determines their degree of potential influence on Ethereum's block production process.
2. **Decentralization:** Concentration of ETH supply in the hands of few entities may suggest a high degree of centralization in the block production process of Ethereum and undermine network qualities of censorship resistance and credible neutrality.
3. **Winners/Losers:** Looking at the supply distribution of Ethereum illustrates which individuals and entities stand to benefit the most from staking rewards.

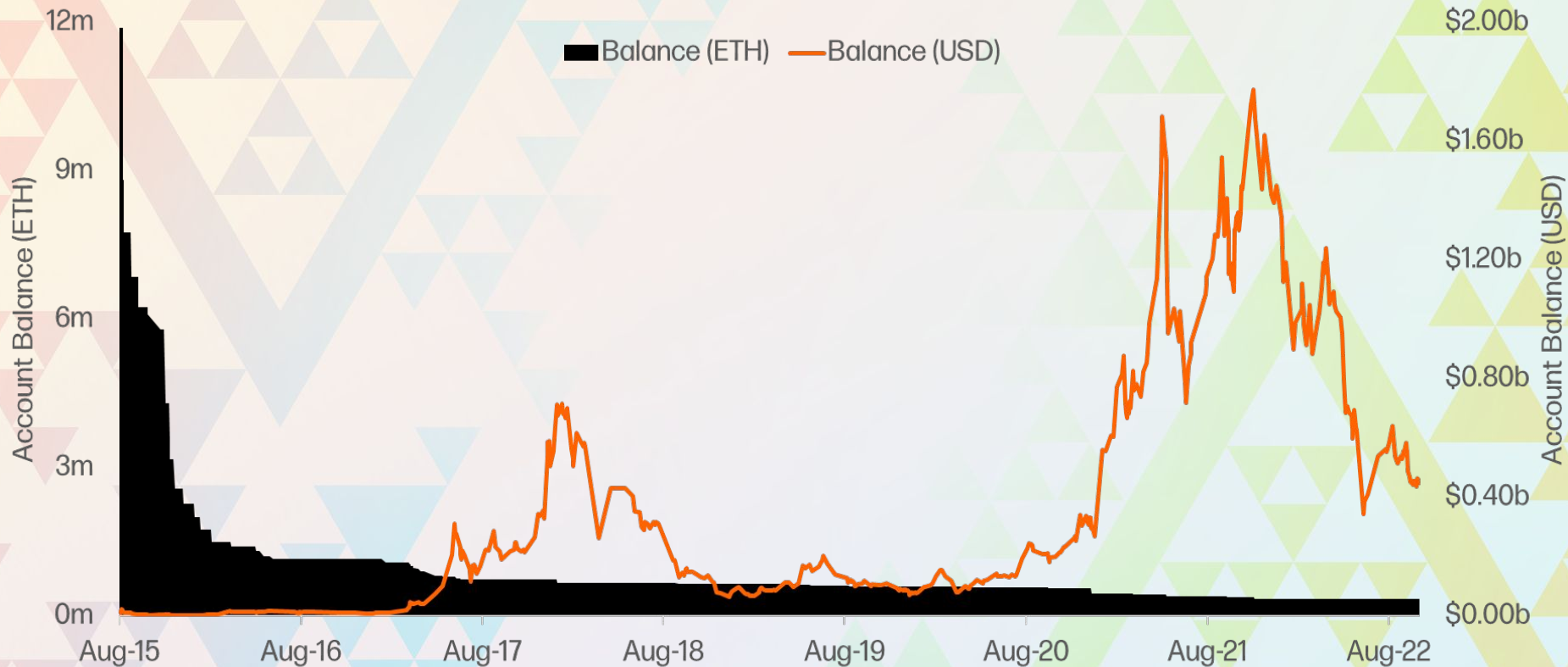
Breakdown of Ethereum Supply by Issuance and Burn

		Lockup Period	Price per ETH	Amount (ETH)	% Share
Genesis	Initial Coin Offering	none	~\$0.30	60,000,000	49.70%
	Ethereum Foundation*	none	n/a	6,109,990	5.06%
	Early Project Contributors*	1 year	n/a	5,900,000	4.89%
Proof-of-Work Mining		none	n/a	50,568,205	41.88%
Base Fee Burning		none	n/a	-2,637,306	-2.18%
Proof-of-Stake Validating		variable	n/a	792,470	0.66%
			Total	120,733,358	100%

Source: Etherscan, Ethereum Foundation, The Infinite Machine

* The exact figures for the distribution of ETH supply between early project contributors and the Ethereum Foundation is not known, though it has been widely reported that the amount distributed to the Foundation for paying developers, project contributors, and operational expenses totalled to roughly 12mn ETH.

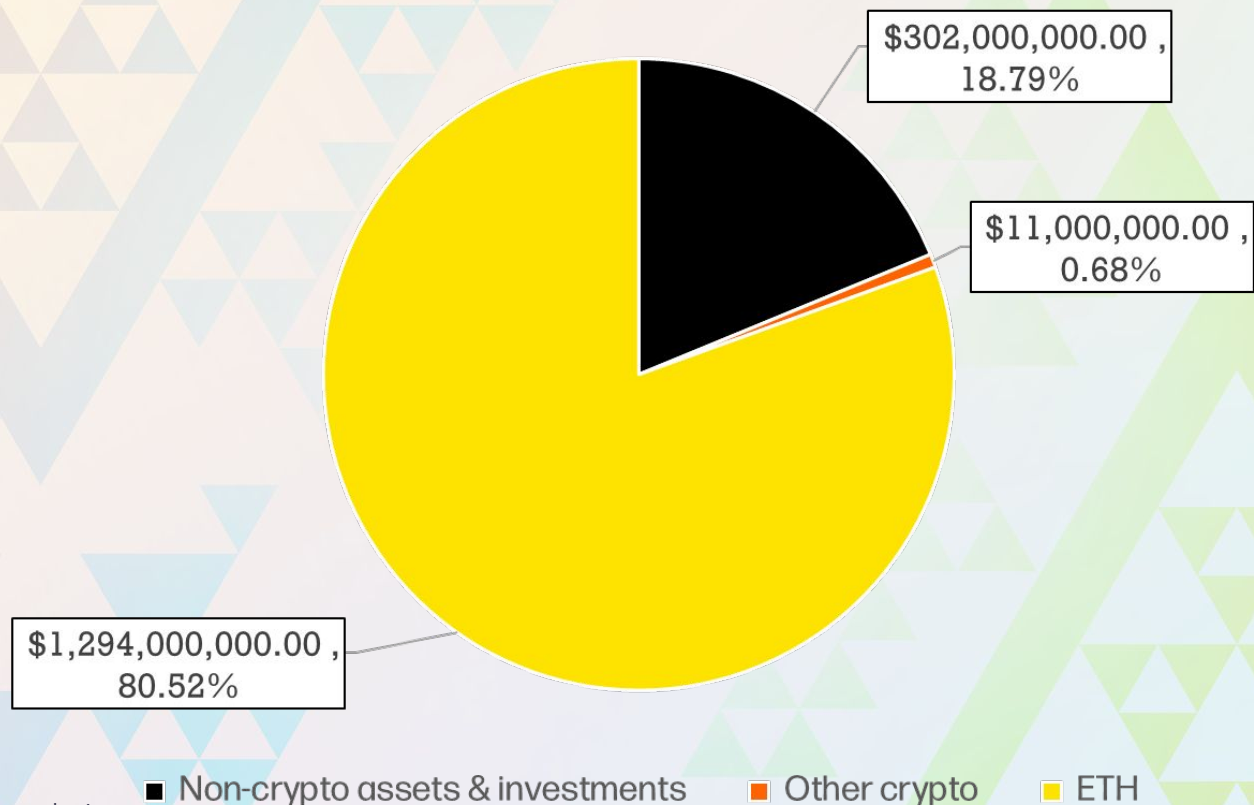
EF Account Balance Over Time



Source: Coin Metrics

*Account address: 0xde0B295669a9FD93d5F28D9Ec85E40f4cb697BAe.

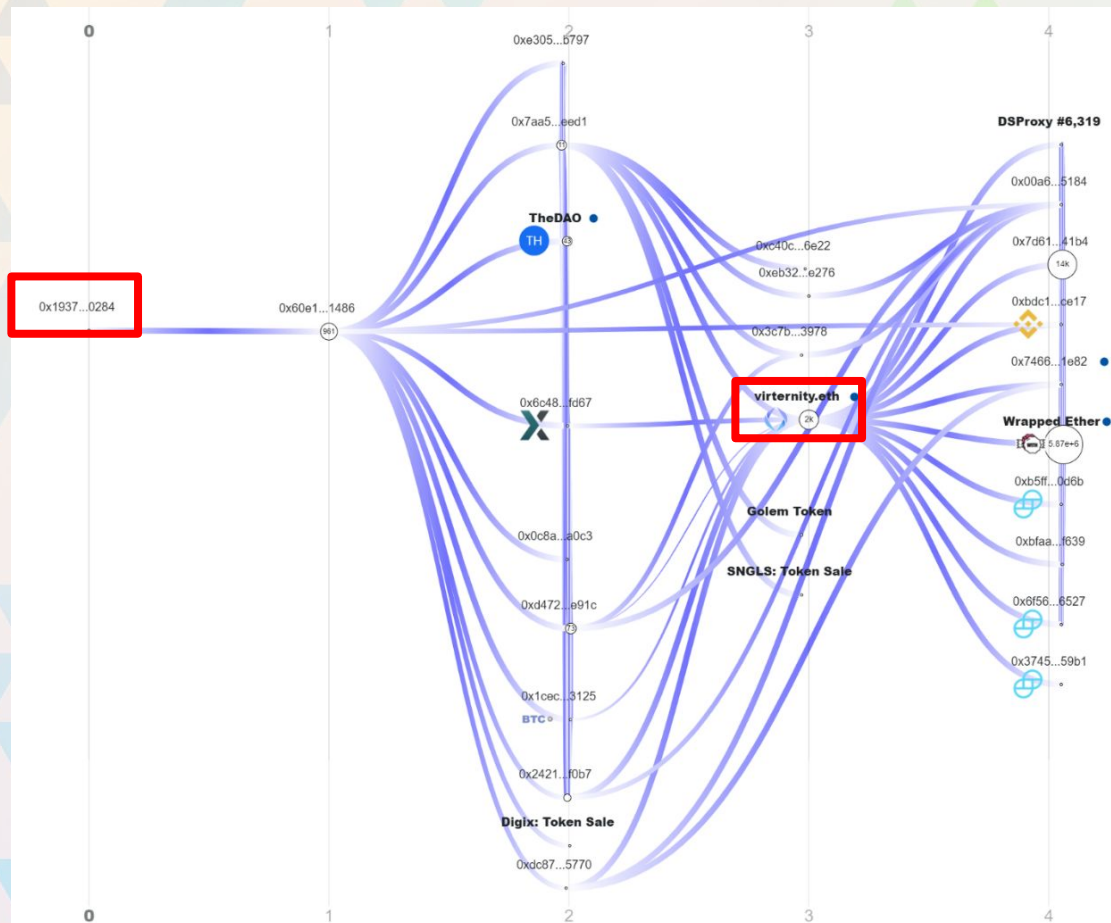
Self-Reported EF Treasury Breakdown



Source: Ethereum Foundation

*Data as of March 31, 2022

Flows Originating from Largest ETH ICO Recipient

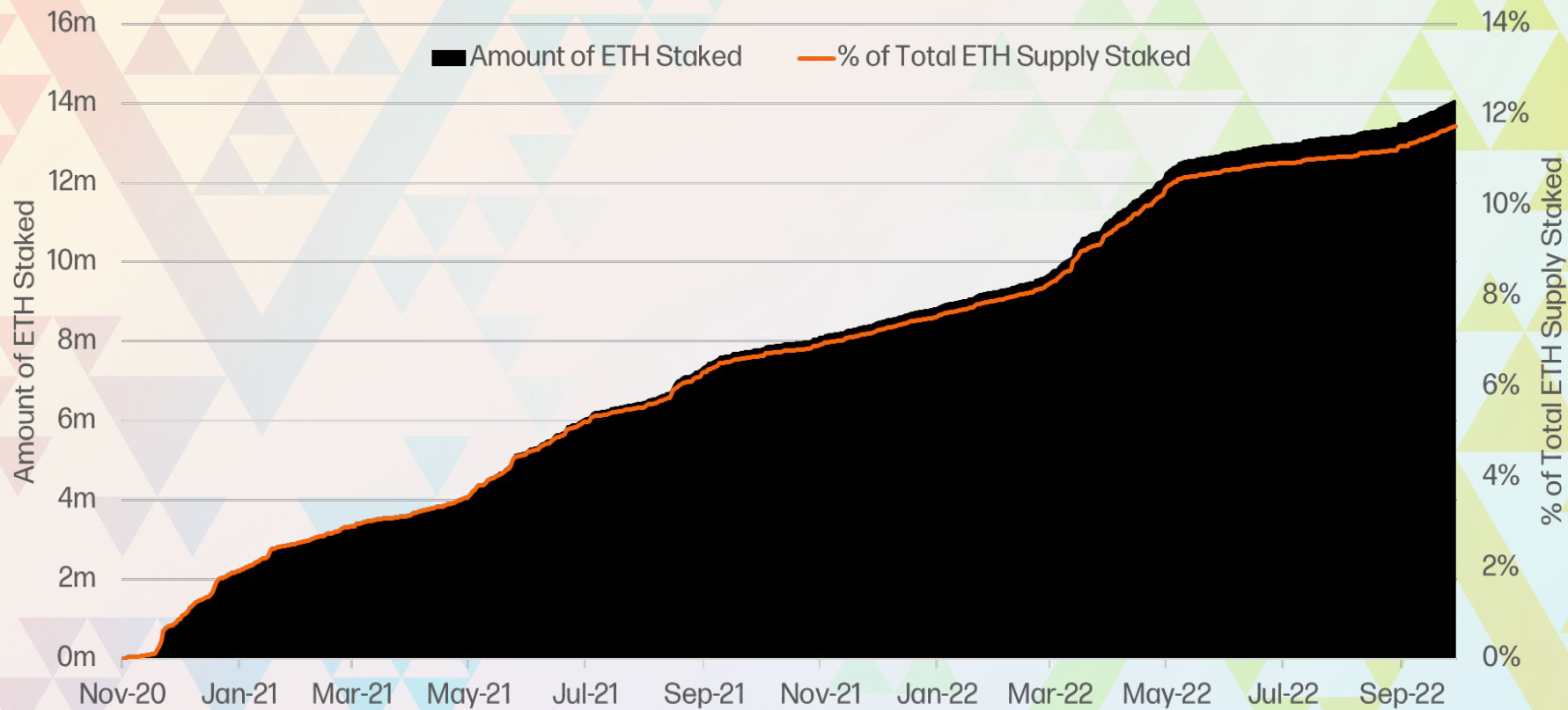


Top 10 Receiving Entities of ETH Genesis Supply

Receiving Entity	Sum of First Outgoing Txns from Premine Participants (ETH)
Kraken	7,253,531.81
Unknown	5,757,417.04
Poloniex	2,851,646.45
TheDAO: TheDAO Token	388,694.33
Augur: Token Sale	128,354.05
Bittrex	95,677.99
Bitfinex	70,634.96
Gemini	41,870.15
ENS: Old Registrar	20,106.60
BTC-e	18,496.63

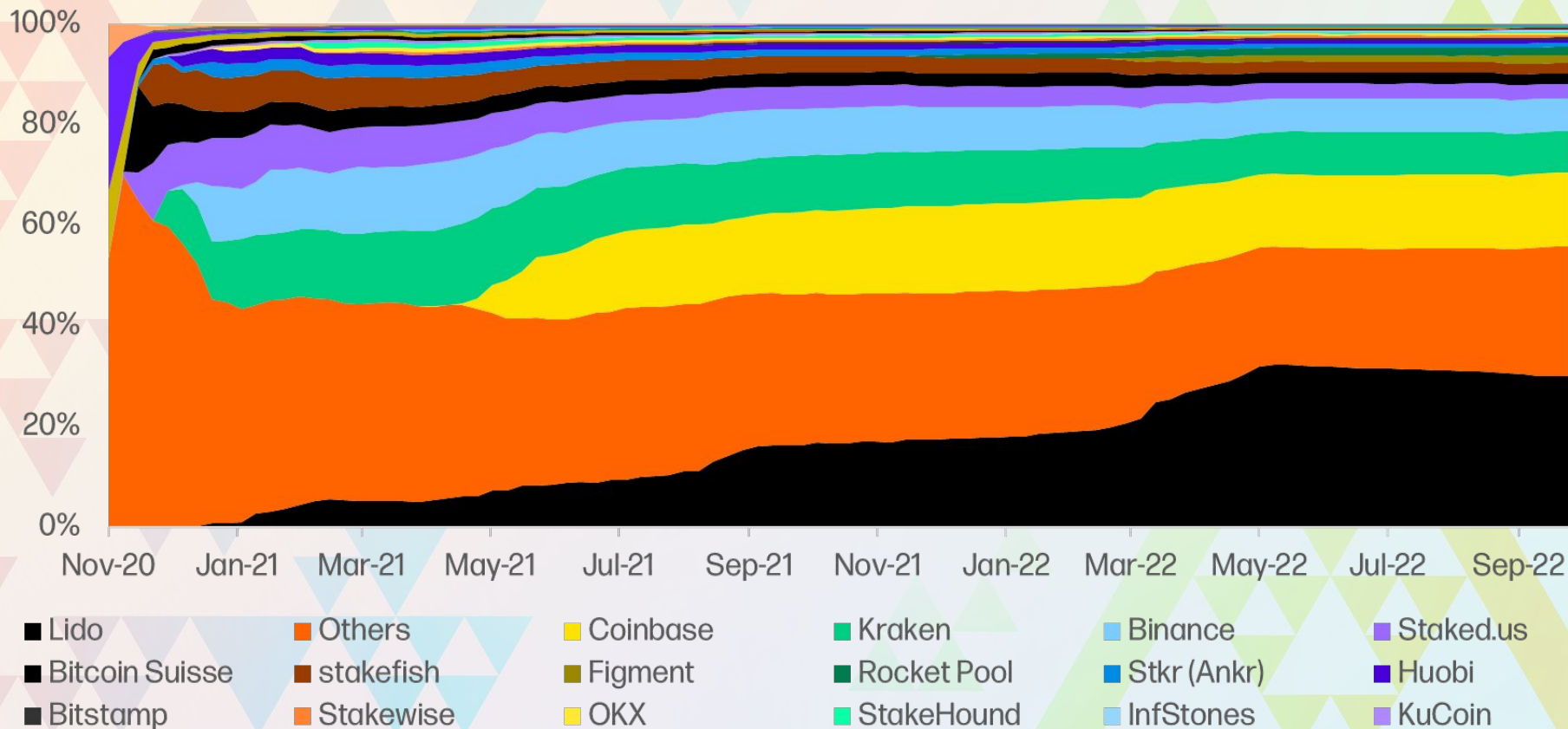
Data: Nansen. Note: The above data sums the first outgoing transaction between 2015 to 2018 from Ethereum accounts that had received ETH from the genesis block..

Total ETH Supply Staked



Data: Glassnode

Beacon Chain Deposits by Entity



Potential Solutions to Decentralize Stake

1. LSD, protocol-level support for liquid staking - Enables independent validator node operators to benefit from liquid staking without relying on centralized staking providers.
2. Altruism and social pressure - Short-term reliance on staking pools to self-regulate and impose staked ETH deposit caps or increased fees.
3. DVT, distributed validator technology - Breaks up operations of a validator across multiple node operators.



research

Liquid solo validating

Proof-of-Stake



JustinDrake

1 Jun 3

Special thanks to [@vbuterin](#), [@fradamt](#) for design ideas and to [@djrtwo](#), [@timbeiko](#), Vasily Shapovalov, Isidoros Passadis, Kelly Olson for feedback.

TLDR: We propose a fungible and governance-free liquid staking derivative (LSD) compatible with solo validating. The LSD is secured via hardware-based slashing protection and enjoys higher capital efficiency than Lido's stETH.



Should Lido on Ethereum be limited to some fixed % of stake?

Department of Decentralisation





Thank you!

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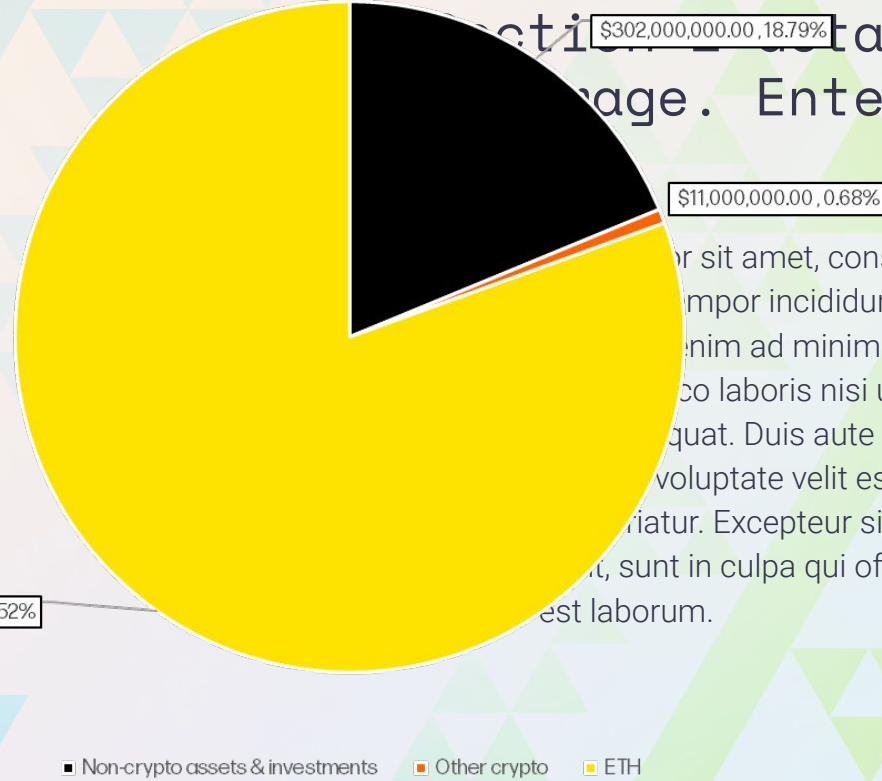


[@christine_dkim](https://twitter.com/christine_dkim)



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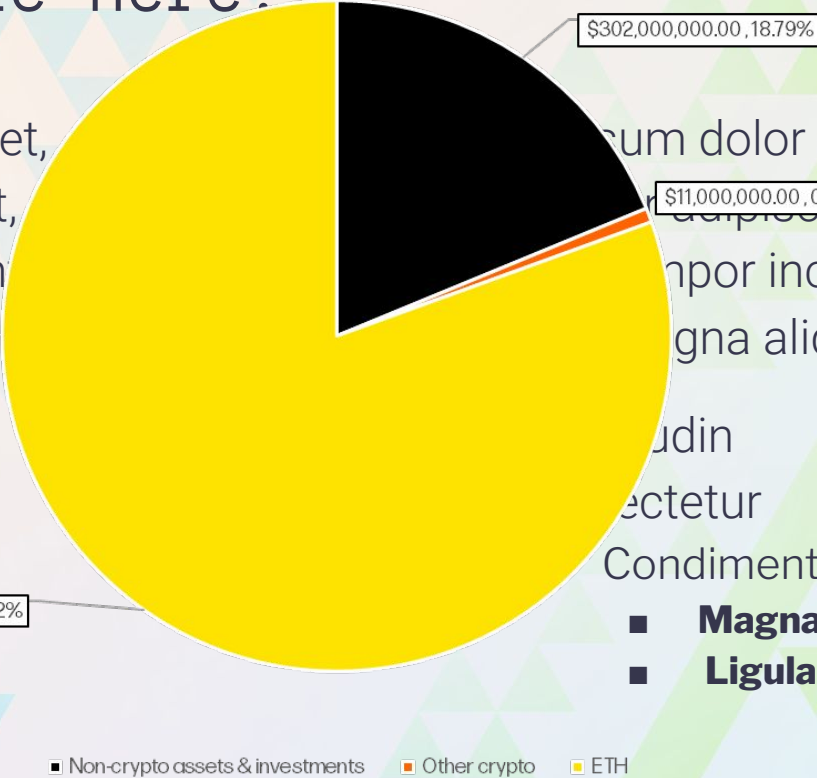
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The background is a complex geometric pattern composed of numerous triangles of various sizes and colors, including shades of orange, yellow, teal, and light blue. These triangles are arranged in a way that creates a sense of depth and movement. Overlaid on this pattern are several thick, diagonal lines in muted colors like light blue and pale green, which further enhance the abstract design.

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Event 1



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