DELPHI DIGITAL

Treasuries

Thematic Insights

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Analysts

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Preface

Understanding the dynamics of projects' treasuries in crypto is vital given funding is the lifeblood of developers, ecosystems and a protocol's long term potential.

The two main forms of differentiation stem from whether a treasury is off-chain or on-chain, and if token holders have control. **Prudent treasury management is key, given numerous projects in the space have mismanaged their holdings and have had to shut down.** Further, a long term, continuous funding strategy, such as with Decred and others, may be a solution for funding woes as it ensures an ever flowing stream of funding. This idea is bolstered by the issues projects face as they look to change or implement funding mechanisms, such as Zcash, a community that has faced serious friction when attempting to re-implement a new founders reward.

While tracking project treasury balances is difficult, the vast majority of ICO balances have disappeared as projects aggressively spent funds. This also follows the narrative that ICO as a funding mechanism has fallen out of favor.

For insights into off-chain treasuries we break down all of the Ethereum Foundation's funding rounds to glean insight into where the development focus areas are. **For an on-chain example, we look into the dynamics of Decred's on-going treasury design.** Treasury balances may also feature a positive externality of fork resistance, as forks to a project can not fork the value of a treasury.

Treasury Core Tenants

Off-chain vs On-Chain Treasury

Sustainability

Token Holder Control

Off-Chain vs On-Chain Funding

ethereum

deCRED

Treasury Control

Treasuries for crypto projects vary in the 1) level of control token holders have over the treasury itself and 2) if the treasury is off-chain or on-chain. Given protocols are enforced by code, token holders can only have set control over a treasury if it is on-chain, since off-chain denotes it is in control of a centralized party. Bitcoin launched with no treasury, whereas Ethereum's treasury is held off-chain in the hands of the Ethereum Foundation. Projects such as Decred and Dash feature on-chain treasuries where token holders have coded control over how funds are used. Some projects have a mix, for instance 0x under V3 will have an on-chain treasury but governance will be off-chain. The revitalization of The DAO will require sign off from three different groups (Venture League, Treasury League, and Compliance League), denoting it as having an on-chain treasury with off-chain governance.

	No Treasury	Off-Chain Treasury	On-Chain Treasury
Token Holder Control Over Funds			deCRED Dash
Token Holders Do Not Have Control Over Funds	Bitcoin	ethereum Tezos	The DAO (Aug 2019)

Source: 0x under V3.

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Sustainability

Long term, sustainable funding for core developers and an ecosystem is paramount for the success of a project. Projects that have run out of funding have failed, and those which have to revisit the funding process (zCash) face significant friction within their respective communities during the process which derails growth.

Treasury Cornerstones

- **Initial fundraising event (ICO, IEO, private sale) to supply a project's treasury with capital.**
- ICOs on Ethereum raised billions of dollars (15.1M ETH) and since then IEOs or initial exchange offerings have taken over.
- Some projects raised too much money and can not allocate it efficiently (RChain).
- Some off-chain treasuries are not transparent, such as EOS where its impossible to find accurate or real time data on the project's $3B+ in holdings.

- **Prudent management of existing funds (goal of treasury value increasing faster than funds are spent)**
- Frequently we come across projects that mismanaged their treasuries and ran out of money. A few examples are NEM, which spent the majority of its budget on marketing before cutting its 150 person staff and Rchain shutting down after spending the majority of its treasury on a 5 year lease for an audio codec for $23.5M.
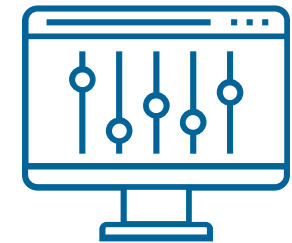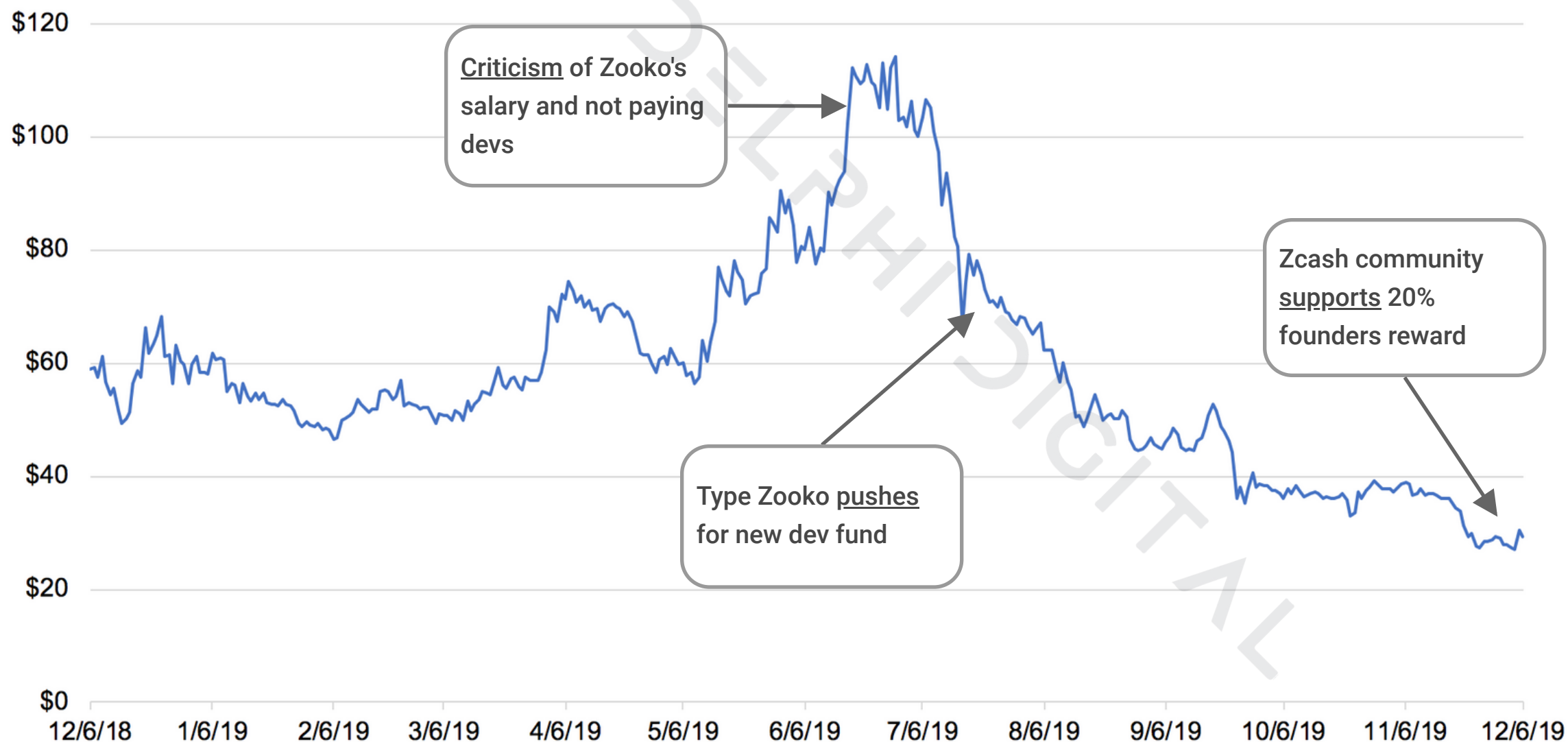
- **Continuous inflow of funds to treasury (percent of issuance)**
- Select projects feature an on-going funding mechanism to ensure the project has funds over the long term.
- A key example of this is Decred, where 10% of all block rewards are put into a treasury which token holders have control over.
- On-going funding removes the need to productize upgrades (i.e. get paid in the protocols token instead of having to create a for-profit entity to profit)

Sustainability - Zcash Funding

Zcash is a privacy focused cryptocurrency which featured a founders reward where 10% of the token supply (2.1M) would go to the founders to support the network. The founder's reward is set to end in October 2020. Due to this, Zooko Wilcox, CEO of Electric Coin Company, which underpins Zcash has proposed increasing and extending the reward.

The idea of a new founders reward sparked a lot of controversy, and signaling events (community governance panel, community poll, miner signaling protocol, Coin-Holders Petition) to gauge support of a new dev fund. Ultimately, it appears the Zcash community are in support of a new dev fund (20% of rewards). **We note that uncertainty around funding, and the friction and distraction these conversations cause is detrimental to a project's long term growth**. Regardless the enactment of a new dev fund would be positive.

Zcash Price Chart

Criticism of Zooko's salary and not paying devs

Type Zooko pushes for new dev fund

Zcash community supports 20% founders reward

Source: CoinMetrics

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Treasury Balance Trends

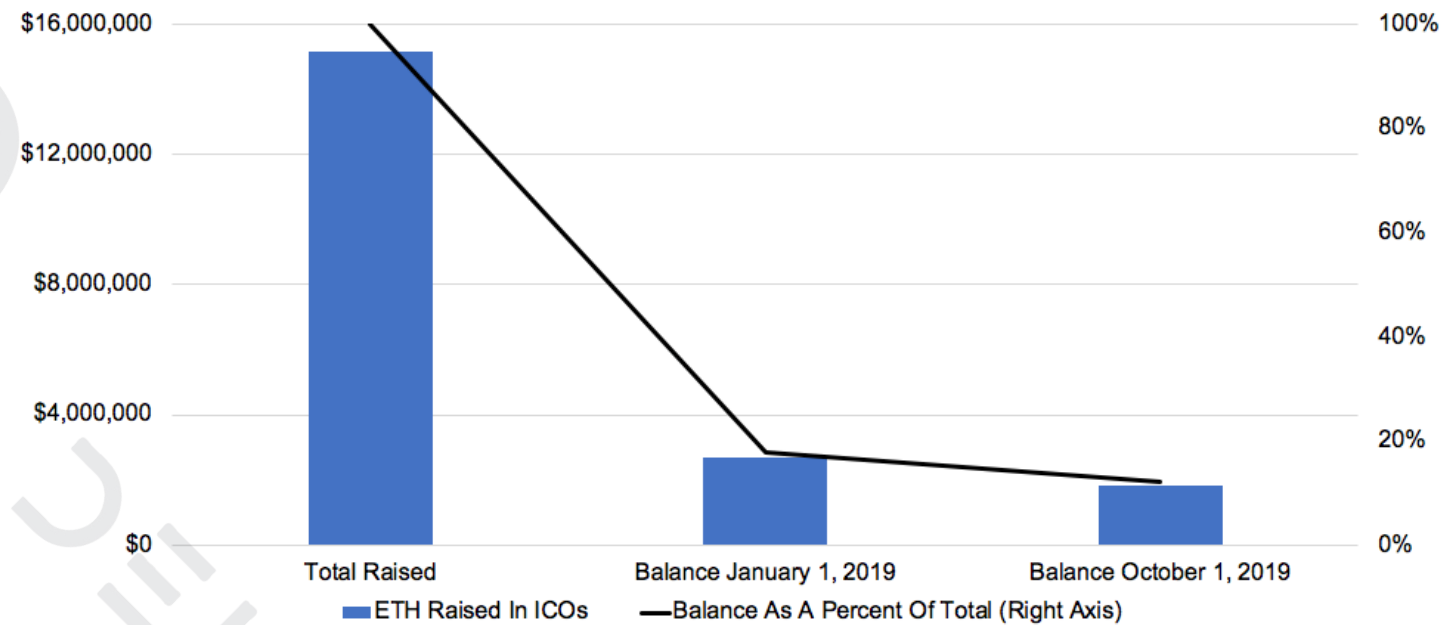Historically token sales have been a medium for projects to raise large amounts of funds, quickly. **ICOs on Ethereum raised 15.1M ETH to date** ($2.3B at current prices and over $21B at ETH's highest prices) **which make up the treasury balance for projects which raised funds.**

Tracking ICO balances is difficult as funds can be moved around in various wallets, sent to exchanges where they are out view but can either be sold or held there or projects raised through private sales or off of a transparent blockchain. Regardless we can gleam insights from the data we do have available.

The majority of ETH held by project treasuries has dwindled. Per data we compiled from Token Analyst, ICO's hold 1.8M ETH as of October 1, 2019. While we mentioned the pitfalls of tracking ICO balances and this is not an exhaustive list, it demonstrates balances have fallen significantly.

The top ten public token sales to date have raised $9.6B to date. Not all of which raised on Ethereum, although EOS was the frontrunner and raised $4.1B. EOS raised in ETH, and sold virtually all of it over time. Since, Block.one has kept the majority of the funds, or $3B in government bonds. We located $263M with of EOS held in an account, and the rest we are unable to locate.

Source: Token Analyst, Bitmex, Diar, Bloxy Coinschedule

Ethereum ICO Project Treasury Balances

Legend: ■ ETH Raised In ICOs — Balance As A Percent Of Total (Right Axis)

Top Ten Largest Token Sales

(Blue = Raised Fully or Partially in ETH)
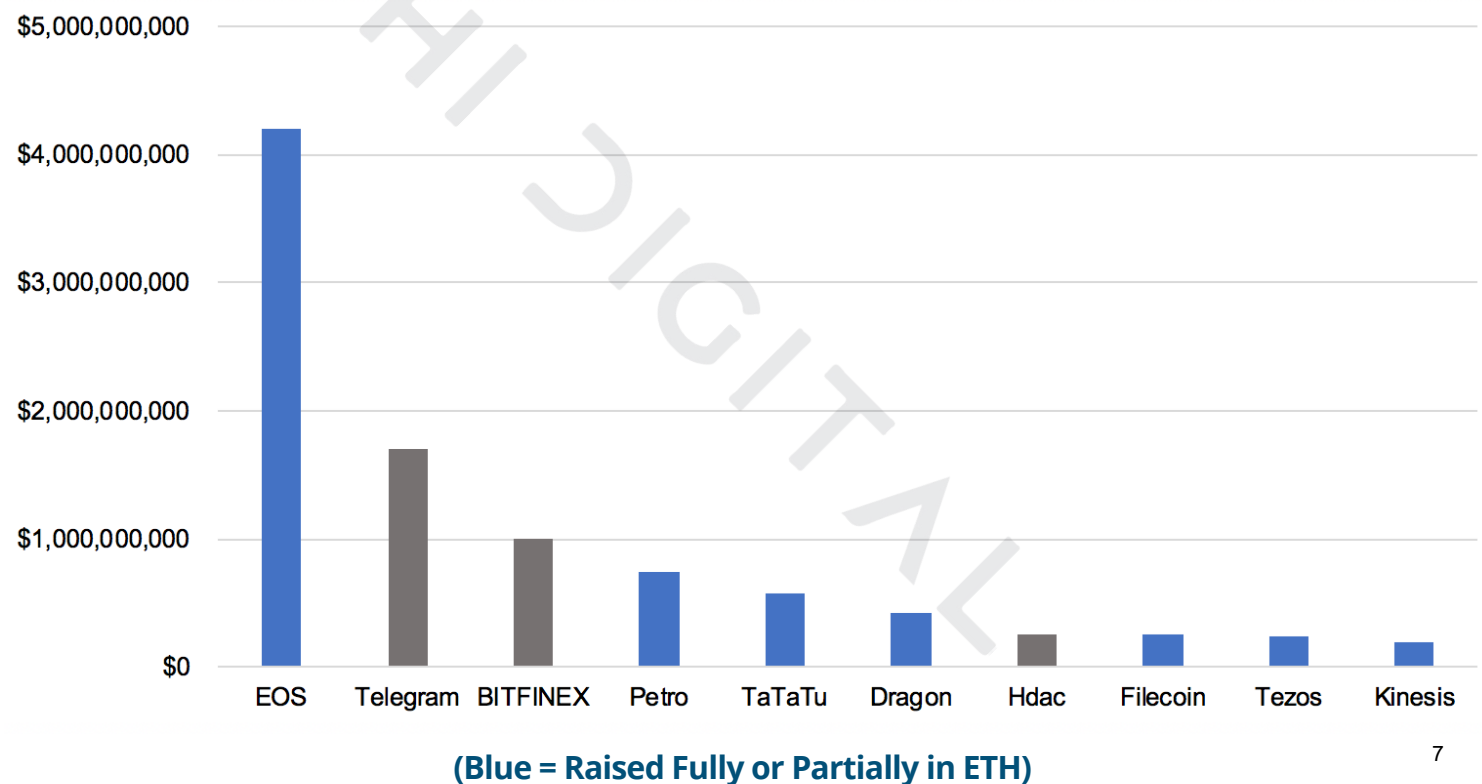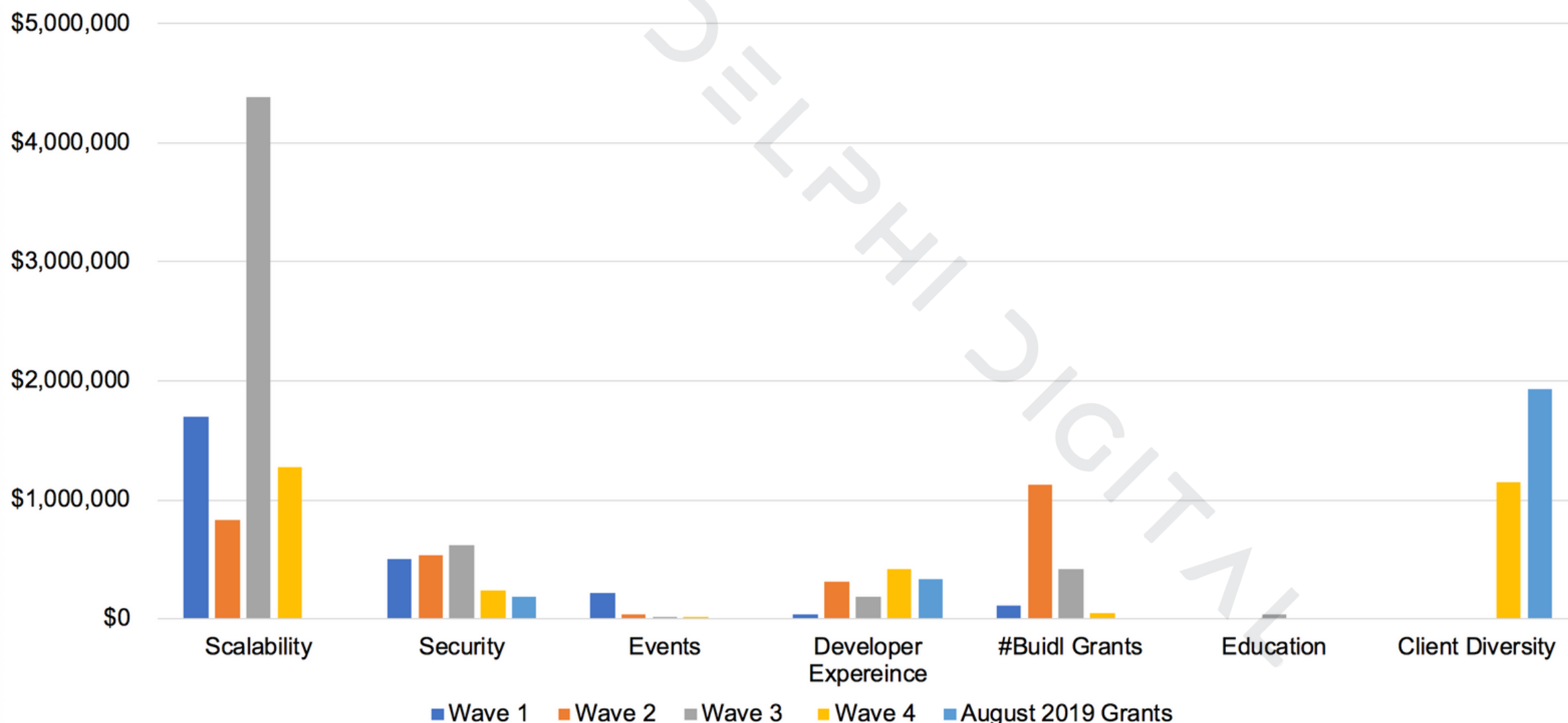
Off Chain Treasury: Ethereum Foundation

The Ethereum foundation is a non-profit organization with the goal of supporting Ethereum. The foundation has ~$90M currently (at $150 ETH) to fund projects over time. The foundation has announced grants over waves. Historically scalability received the most funding but this has shifted down as 1) funding has shifted towards client diversity and since there are dozens of self funded Layer-2 being built on Ethereum (see Delphi's Layer-2 report). **In May, the EF announced $30M in funding for the ecosystem focused on ETH 2.0 ($19M), Ethereum today ($8M) and on Developer growth ($3M).** These amounts are not reflected in the chart to the right given differing categories but is significant given it its one-third of the foundation's balance. **In August the EF announced $2M+ in grants to support ETH 2.0.**

Ethereum Foundation Grant Program Funding Waves 1-4 and August Grants

Legend: ■ Wave 1 ■ Wave 2 ■ Wave 3 ■ Wave 4 ■ August 2019 Grants

Categories: Scalability, Security, Events, Developer Expereince, #Buidl Grants, Education, Client Diversity

On-Chain Treasury: Decred

One of the most interesting and promising aspects of Decred's network is their treasury, which collects 10% of each block subsidy. To the right, our team has broken out the amount of DCR received by the Treasury through this subsidy, as well as any DCR spent (and it's equivalent value in USD). It's important to note that these numbers were calculated based on Decred's Fiscal Year which ends begins in February (due to their mainnet launching in Feb 2016). Additionally, the USD value spent each year was disclosed by Jake Yocom-Piatt during a presentation at Consensus earlier this year. During the same talk, he mentioned that **the Treasury has spent less than it has taken in from its 10% subsidy every month since launch, except for the Jan. 2019 payout.** As of December 10th, 2019, Decred's treasury had ~643K DCR (~12.4M USD at the time of writing).

Decred's treasury was designed to autonomously and sustainably fund the network's development over time. We view this self-funding mechanism that Decred has embedded into its protocol as one of the key differentiators for the project. We believe that over time, this could result in the network and its stakeholders having a massive war chest while most other protocols are left relying on donations; whether that be time from developers or money from supporters. Additionally, we view it as a huge advantage that Decred had this 10% subsidy from the day its network launched. Not only has this allowed the treasury to amass an impressive repository of capital, it avoided conflicts similar to what we saw in the Ethereum community with EIP-2025, a 2019 proposal to raise the block reward to help fund ETH.1x development efforts.

Decred Report Available For Institutional Subscribers

Source: Bloxy, Data as of December 10, 2019
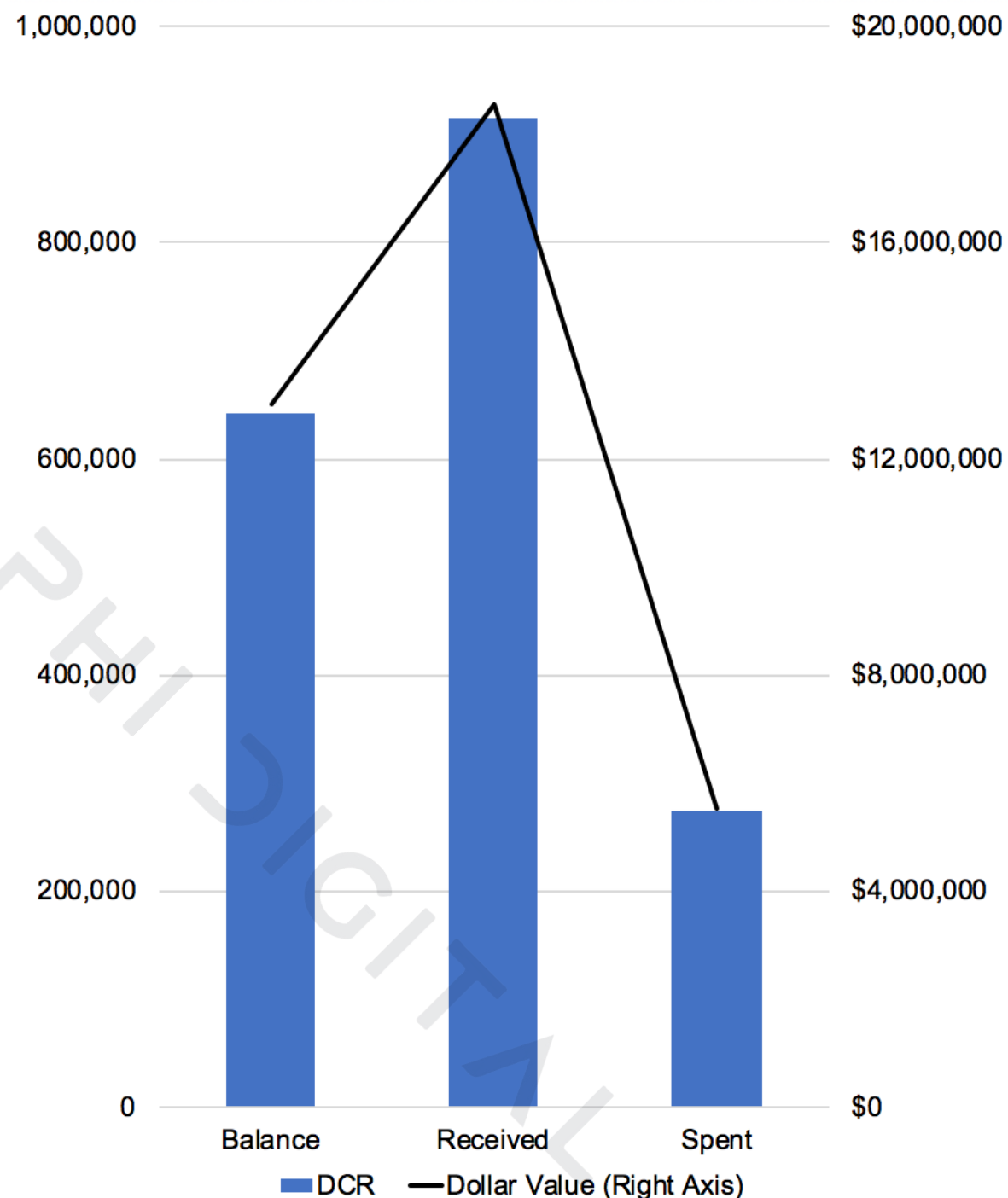
Leader Commentary

Below, we've included commentary from leaders in the space regarding long-term sustainable funding.

Zooko Wilcox
ZCash Co-Founder

"Major breakthroughs typically take about ten years to reach maturity. Any great innovation always needs more work as it gets more and more users and becomes more important to their lives. We talked about defining a perpetual Dev Fund into the initial consensus rules, but I thought that, given enough years or decades, any organization that received a perpetual fund would be in danger of falling into complacency or corruption, so I opted for the initial Dev Fund to sunset itself, so that in the future, if Zcash were a success and a community were to grow up to support it, that community would have to collectively decide what to do next.

I hope that the community will decide to renew the 'Dev Fund' structure, allocating coins from future block rewards for core support functions such as software development, user support, business development, regulatory and government outreach, security auditing and monitoring, educational and marketing initiatives, new protocol development, and so forth."

Source

Jake Yocom-Piatt,
Decred Co-Founder
and Project Lead

"The nature of serious development work is that it occurs over longer timescales and often does not bear fruit quickly. As such, it requires long-term sustainable funding to develop something substantive. Without sustainable funding, short-term thinking is incentivized and leads to questionable engineering, development and business decisions. Particularly in the context of cryptocurrency monetary systems designed to last for decades or more, the network needs to be built-out and maintained over the long-term. Decred's answer to this is a self-funding system that returns 10% of every block reward to the project treasury, which is controlled by stakeholder voting. We've aligned incentives so that what's good for the stakeholders is also what benefits the project overall."

Exclusive Commentary

Disclosures

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