Decentralized Patronage: Incentivizing Ethical and Effective Philanthropy of Crypto-Assets

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I. Introduction

Cryptocurrencies conjure up a variety of images. To some they are shadowy currencies, born of vice and crawling out of the corners of the dark web to sew anarchy into the traditional financial system. To others they are harbingers of a new wave of financial tools better suited to the digital age. Regardless of how one views these monetized bits of code, they have made a lot of people very rich and become significant taxable assets. As of March 2020 market capitalization for cryptocurrencies is over $166 billion.1 Some of these assets are trickling into the nonprofit realm2 as cryptocurrency holders look to either reduce their taxable income and/or support causes they find meritorious.

The 2019 Global NGO Technology Report found that 2% of nonprofits accept cryptocurrency, up from 1% in 2018.3 Donors and nonprofits utilize cryptocurrency to interact with one another in a variety of ways which, at the most basic level, are essentially comprised of donors giving, generating, or buying digital tokens for the benefit of the nonprofit. The I.R.S. code encourages the public to support charitable entities by allowing donors to utilize their donation to reduce their federal income tax burden.4 Section 170 states: "there shall be allowed as a deduction any charitable contribution (as defined in subsection (c)) payment of which is made within the taxable year."5 The code defines charitable contribution as "a contribution or gift to or for the use of ... (2) A corporation, trust, or community chest, fund, or foundation ... ."6 While many people think of a contribution only in terms of monetary gifts, contributions can be made in many forms and facilitated by a variety of vehicles.7 Many donative mechanisms come with specified rules and conditions which can present a host of opportunities and challenges for both the tax code and nonprofit organizations.8 For example, direct donations of cryptocurrency may seem straightforward and desirable, but they have new IRS guidance which must be

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4 See I.R.C. § 170.

5 I.R.C. § 170(a)(1).

6 I.R.C. § 170(c).

7 See I.R.C. § 170.

8 Detailing every nuance for each type of donation is beyond the scope of this note but more information on the deduction limitations in certain cases and special rules may be found in 26 U.S.C. §170(f).
adhered to. Further many nonprofits are not equipped to receive such donations. Donor advised funds (DAFs) present simple ways of donating appreciated assets such as cryptocurrencies, and they also provide the donee a with an immediate tax benefit, but distributions from DAFs to qualified charitable organizations are rarely contemporaneous with DAF deposits. Other donative schemes hinge on donating the use of one’s computer to allow a nonprofit to mine cryptocurrency on a patron’s personal devise presenting challenges in quantifying the donation. Finally, many cryptocurrencies themselves are technically operated as charitable foundation, thus opening a host of questions regarding the “purchasing” of a token.

The rapidly evolving nature of the use, type and regulation of cryptocurrencies creates both significant opportunities and challenges for nonprofits seeking to incorporate the ability to utilize the asset into their fundraising efforts. Each donative mechanism enabled by cryptocurrencies presents unique challenges that can be mitigated with particularized regulatory changes. Within each donative option, the need to create ethical flexible standards is evident. To understand the tax and nonprofit implications of each method, some of which are more ambiguous than others it is essential to understand how each donative transaction type proceeds. The following section analyzes these issues in the context of direct donations. Section III considers Donor Advised Funds. Section IV examines charitable mining operations, and section V takes a closer look at tokenized fundraising.

II. Direct Donations

A direct donation of cryptocurrency occurs when a donor transfers ownership of a cryptocurrency directly to a nonprofit. The Dec 2018 Crypto Giving Survey revealed several interesting statistics about cryptocurrency owners and philanthropy. Ninety percent of cryptocurrency owners donated some money in 2018, either via cryptocurrency or another form of donation. Of those surveyed 77% were interested in making charitable donations via cryptocurrency, and just over half had done so. While some nonprofits report bitcoin holdings on their 990s it can be impossible to tell if those assets were purchased by the nonprofit as an investment or if they were a donation.

It is not uncommon for large direct donations of cryptocurrency to make headlines. In 2017 an anonymous donor created the Pineapple Fund, a onetime charitable funding opportunity designed to give away $55M in bitcoin. Copycat donors followed, including an anonymous

10 Ibid.
11 Ibid.
donor in 2017 who began a 25 days of bitcoin offering in which he would give a bitcoin to a different charity for the 25 days leading up to Christmas.\(^{13}\) The following spring, March 2018, the cryptocurrency Ripple made waves when its leadership decided to fund every request on donorschoose.org.\(^{14}\) The donation totaled roughly $29 Million.\(^{15}\)

The willingness and ability of nonprofits to accept direct donations of cryptocurrency is relatively new, and not all organizations have internal capabilities of doing so. One of the earlier acceptors of cryptocurrency was the Internet Archive, a 501(c)(3) which aims to build “a digital library of Internet sites and other cultural artifacts in digital form.”\(^{16}\) Internet Archive began accepting cryptocurrency donations in 2011.\(^{17}\) Initially the donations were small and made via Bitcoin. Internet Archive liquidated the bitcoin by selling it for cash to employees who were active in the cryptocurrency space.\(^{18}\) Later they began actively attempting to pay bills in cryptocurrency.\(^{19}\) In Fall of 2017 they received a Bitcoin donation worth roughly $1M donation from the Pineapple fund.

Calculating the exact number of nonprofits outside of the world of technology who directly accept cryptocurrency donations is challenging. Top universities such as MIT and Cornell have accepted directly donated cryptocurrency.\(^{20}\) UNICEF France accepts direct donations of nine different types of cryptocurrencies.\(^{21}\) Three major museums, Museum of the Coastal Bend in Texas and St. Petersburg Museum of History in Florida, and the Great Lakes Science Center in Cleveland accept Bitcoin not only for donations but also as an overall payment method.\(^{22}\) The number of organizations donors can directly donate cryptocurrencies to, and cultural institutions where cryptocurrencies may be directly spent at is


\(^{14}\) Drew Lindsey, CRYPTOCURRENCY GIANT’S $29 MILLION GIFT FUNDS EVERY REQUEST ON DONORSCHOOSE.ORG (March 18, 2018), https://www.philanthropy.com/article/Record-Donation-to/242946.

\(^{15}\) Ibid.

\(^{16}\) About the Internet Archive, https://archive.org/about/ (last accessed Mar. 31, 2019).


\(^{18}\) Ibid.

\(^{19}\) Ibid.


still relatively small, but will likely continue to grow.

A. Tax Considerations

Despite the common usage of the word cryptocurrency, cryptocurrencies are in fact not currency but currently classified\(^23\) as property.\(^24\) Given this, direct donations of cryptocurrencies are subject to the rules that apply to property donations. These laws are found in 26 U.S.C. § 170,\(^25\) and IRS guidance on determining the value of donated property is provided in Publication 561.\(^26\) Generally, the code and IRS guidance states that the value of property donations is calculated at fair market value, subject to a host of special exceptions and considerations.\(^27\) In December 2019 the IRS released updated guidance on calculating the value of cryptocurrency donations.\(^28\) This guidance states that a “charitable contribution deduction is generally equal to the fair market value of the virtual currency at the time of the donation if you have held the virtual currency for more than one year.”\(^29\) If you have held the virtual currency for one year or less at the time of the donation, your deduction is the lesser of your basis in the virtual currency or the virtual currency’s fair market value at the time of the contribution.”\(^30\) Fair market value is defined as “the price the property would sell for on the open market.”\(^31\) Additionally, as with the donation of stocks, donors are permitted to directly donate cryptocurrency without recognizing income gain or loss.\(^32\) This benefit is similar to the benefit a donor received when donating assets into a donor advised fund.

For a nonprofit, donations of cryptocurrencies are treated as non cash donations and subject to the acknowledgement requirements found in

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\(^23\) Cryptocurrency’s classification as property may not be a longstanding situation. For example, the Oglala Sioux Nation has introduced their own cryptocurrency called MazaCoin. If MazaCoin is adopted as the official currency of the tribe then U.C.C. § 1-201(b)(24) would require the U.S. to recognize MazaCoin as a foreign currency, thus removing it from the realm of property. This could in turn cause a ripple effect result in cryptocurrency being universally treated as a foreign currency, a designation some scholars view to be a more natural fit for the asset. Sami Ahmed, *Article: Cryptocurrency & Robots: How to Tax and Pay Tax on Them*, 69 S.C. L. Rev. 697 (2018).


\(^25\) I.R.C. § 170.


\(^27\) I.R.C. § 170(e) – (f).


\(^29\) Ibid.

\(^30\) Ibid.


Publication 526 Charitable Contributions. Single donations of under $250 do not require a written acknowledgement from the 501(c)(3), or proof of donation in order for a charitable tax deduction to be claimed. Regardless of the amount of money a charity receives, currently the donor gets a deduction currently pinned to the date of the donation. For cryptocurrency donations over $5000 the nonprofit must sign the donee’s Form 8283.

It is important to note that the designation of cryptocurrency donations as noncash property means that if the nonprofit sells, exchanges, or liquidates the cryptocurrency for real currency within three years of receiving the property then they must file a Form 8282 Donee Information Return and give a copy to the original donor. There are two filing exemptions, items valued under $500, and items consumed by the charity (i.e. a donation of medical masks which is used by a medical charity).

One cannot ignore the fact that cryptocurrencies remain new and untested in the long term. The 2018 market fluctuations highlighted this fact. Given this instability, and the current system of allowing a donor to claim the value of cryptocurrency at the point of transfer as opposed to the charity’s value receipt the situation is rife to create economic deadweight loss. Deadweight loss, at its simplest, is a “cost to society created by a market inefficiency.” Here the cost to society is that charitable organizations possibly may receive less than the intended value of the contribution whereas the contributor may capitalize on the full deduction of the asset. In this situation the government would receive less income tax than it should, further costing society in terms of tax revenue. This in an inefficiency in the “market” for effectively incentivizing, and essentially subsidizing, charitable contributions. While this dead weight loss hypothetical is not guaranteed, given the March 22, 2020. https://www.irs.gov/individuals/international-taxpayers/frequently-asked-questions-on-virtual-currency-transactions. See Also I.R.S Pub 526 (Rev 12-2019).

36 I.R.S form 8282 (Rev. 4-2009).
volatility of the asset, it presents a risk for inefficiency in tax incentivization.

B. Proposed Regulatory Improvements

The Dec 2018 Crypto Giving Survey revealed that nearly 1 in 4 of those surveyed said they would be willing to donate more to charity if that charity was able to accept cryptocurrency.41 To support these would-be philanthropists it is important to shine a light on some of the grey areas surrounding direct donations of cryptocurrency and taxation.

The value of cryptocurrencies can change dramatically over time and, as detailed above, this creates challenges for accurately quantifying the donation. One argument is that we should treat directly donated cryptocurrencies the same way we treat donated stocks.42 To calculate the value of donated stocks IRS guidance states that the valuation is calculated on the day of their delivery to an organization,43 and “if there is an active market for the contributed stocks or bonds ... the [fair market value] of each stock or bond is the average price between the highest and lowest quoted selling price on the valuation date.”44 In many ways mirroring stock and crypto tax treatment is logical because stocks and cryptocurrencies both have values that fluctuate, and are traded in an active markets.45 However cryptocurrencies are significantly different from stocks in that they are less regulated, can be independently generated via mining, and despite their alleged security, have been subject to fraud incidents which have led to the generation of entire new cryptocurrencies and arguable windfalls.46 These differences are significant and make fact that both stocks and cryptocurrencies are traded on an open market a less compelling justification for regulating them in a similar manner.

Another possible option is to value direct donations of cryptocurrency in the same manner other highly variable assets such as cars and airplanes are valued.47 Section 170(f)(12)(A)(ii) dictates that the amount of these variable assets allowed to be considered a charitable deduction is considered a windfall. A fork occurs when the chain diverges and begins recording transactions in two segments. The most significant of these types of forks is a hard fork, as famously occurred in when the Bitcoin Blockchain forked and resulted in the creation of Bitcoin Cash. Such forks have been analogized to a stock split. However, when a blockchain forks the resultant currency is allocated in an equal number of units as the holder owned in the parent currency at the time of the split. See Nick Web, Article: A Fork in the Blockchain: Income Tax and the Bitcoin/Bitcoin Cash Hard Fork, 19 N.C. J.L. & Tech. On. 283, 291-292 (2018).

44 Ibid. at 5-6.
45 Pittman, supra note 92, at 53.
46 Numerous cryptocurrencies have been subjected to a fork which sometimes results in what may be
limited to the value that the charitable receives upon the sale of the vehicle. If cryptocurrency contributions were valued in the same manner then, hypothetically, should an organization receive a donation of 10 Bitcoins worth 100,000, place them in their organization’s digital wallet while they thought about what to do with them, and the liquidated the coins 2 months later for a value of $80,000 the donor would have his donation recognized at a value of $80,000. This presents two main challenges. First, unlike most cars and boats, cryptocurrencies have the potential for significant up swings in addition to the potential for rapid significant devaluation. Therefore that 10 Bitcoin donation worth $100,000 when given could potentially balloon to a $200,000 value in a short time period. This is certainly a boon for the charitable organization, however if the donor was aware that the ultimate value of that donation would be so much greater that it was when he gave it he may have followed a different philanthropic strategy. Second, some charitable organizations choose to invest in cryptocurrencies as part of their financial management strategy. For example, according to Internet Archives’ 990 they hold assets in Bitcoin. Should a receiving organization choose to hold the donated cryptocurrency in their portfolio for a significant period of time the donor may not be able to calculate the value of their gift in manner to reasonably contemporaneous to the donation in order to facilitate claiming their tax deduction.

Due to the volatility of cryptocurrencies and their somewhat unique position as an asset class it may be more efficient to consider an alternate to the current value at the time of donation strategy. An alternate idea would be to calculate the value of a direct donation of cryptocurrency as consisting of an average of the asset value at two distinct points of time, the date of donation and the date the charity sells or chose to retain the asset. First, the average value of the cryptocurrency on the date of the donation must be considered because this is the value that the donor objectively decided to relinquish control over. At the moment of the donation this is the only number the donor could reasonably take into consideration when evaluating the personal and tax implications of the decision to donate. Therefore, to respect the donor and encourage future philanthropic considerations we must acknowledge the value calculations that lead to their decision to give. Second, charitable organizations should be allowed 31 days to decide whether they want to keep or sell the cryptocurrency, and relay that decision and the resultant value acknowledgment to the donor. The 31-day window is reasonable because it allows the charity time to decide what it wants to do with the asset and it ensures that the donor will receive a reasonably contemporaneous

acknowledgement for their gift. For example, if the charity decided on day 15 to sell the asset they would then do so, and subsequently issue a donation acknowledgement to the donor which would include the total value the charity received for the asset, and the date upon which it was sold. Should the charity decided to retain the asset as a cryptocurrency they would then issue an acknowledgement of the gift and a quoted amount of the fair market value of the asset calculated as an average market rate of the asset on the day the decision was made to retain the asset, or on the 31st day after the gift was received. The value of the donation a donor could claim as a tax deduction would then be the average of the value of the asset on the day it was given, and the value of the asset on the day it was sold or the decision was made to retain the asset as a cryptocurrency.

Fixing the value of a cryptocurrency donation to an average of the value of the asset on these two dates is appropriate because it respects the knowledge and charitable intent of the donor, but it also allows the charity to decide how much of the risk associated with a cryptocurrency it is willing to accept, and gives them time to decide what the best way to handle the asset is in accordance with their mission.

While it is not unheard of for cryptocurrencies to swing widely in value over the course of one month it is timeframe that will likely provide the donor with a contemporaneous acknowledgement reasonably close to the value of the asset on the day it was donated and the window is short enough that a charity would be strongly encouraged to liquidate the asset or bear all the risks associated with its volatility independently.

III. Donor Advised Funds

Many cryptocurrency donors utilize donor advised funds to facilitate their charitable endeavors. Donor advised funds (DAF) are 501(c)(3)s, referred to as sponsoring organizations, which accept donations and subsequently disperse those funds to other charitable entities per the recommendations of the original donor. Socially, DAFs have existed in the form of community chests and similar entities since the 1930s, yet the first legal definition and guidance on DAFs was not issued until the Pension Protection Act of 2006. To qualify as a donor advised fund, the fund must be (1) a fund or account owned and controlled by a sponsoring organization, (2) which is separately identified by reference to contributions of the donor or donors, and (3) where the

51 I.R.S. Donor Advised Fund Guidance Sheet Explanation (July 31, 2008).
donor (or person appointed or designated by the donor) has or reasonably expected to have advisory privileges over the distribution or investment of the assets. All three facets of the definition must be met. Further specific I.R.S. authorization for, and definitions of “sponsoring organizations,” the charitable organizations that operate DAFs themselves, can be found in 26 U.S.C. § 170(f)(18)(2012).

From a practical prospective, DAFs are popular among donors and charitable organizations because they can take in a wide variety of assets, including art, real estate, and practically everything in between. Many charities do not have the ability to easily liquidate these types of assets, and thus the DAF provide a service to both the donor and the receiving charity because they can take on the responsibility to liquidate the asset and facilitate contribution of the proceeds of the sale.

Fidelity Charitable’s 2018 giving report noted that in 2017 donors gave roughly $69B in cryptocurrency through their DAFs. This represented nearly a 10-fold increase from 2016 giving. Much of this increase appears to be related to Bitcoin’s astronomical increase in value from around $1,000 per coin in early 2017, to over $19,000 per coin toward the end of the year. In 2017 the Canadian DAF CHIMP became the first Canadian DAF to accept cryptocurrency and accepted over $2.5CD in donations. While the rapid appreciation of cryptocurrencies has leveled off to a more steady pace, as we enter what is becoming known as the token economy and the age of cryptoeconomics it is probable that cryptocurrencies will become a more common aspect of personal and charitable financial planning, and that those who receive windfalls will seek to utilize DAFs in order to mitigate some of the capital gains complications because of the specific tax advantages DAF’s provide.

A. Tax Considerations

Donor advised funds are increasing in popularity with philanthropically inclined persons who wish to donate highly appreciated assets because they allow donors to count the entire value of the asset as a donation, and the donor does not pay capital gains tax. It is this tax incentive that makes DAFs popular for donors who which to donate their cryptocurrency.

Donor advised funds are specifically authorized by the I.R.S. In a DAF situation the donor relinquishes equitable and legal title to the property, so they may claim a

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53 I.R.C. 4966(d)(2).
54 Ibid.
57 Ibid.
59 Ibid.
60 Admin, How to Donate Cryptocurrency to Charity with CHIMP, CHIMP (Jan. 9, 2018) https://chimp.net/blog/donate-cryptocurrency-charity-chimp/.
61 BARRASSO JR. supra note 26, at 1550.
charitable donation at the moment of the DAF deposit, and because a DAF is a nonprofit the donor avoids capital gains tax on any stock or asset donated. The ability to avoid capital gains tax has made DAFs a particularly attractive option for persons who hold their wealth in highly appreciated assets as opposed to those who hold their wealth in liquid assets. Cryptocurrency owners fall into this category. The top performing cryptocurrency of 2017, Ripple, increased in value from $0.0065 in December 2016 to $2.25 in December 2017. This is an increase of 28,963%. For those who caught the ripple wave early, donating the cryptocurrency through a DAF and avoiding paying the capital gains tax allows those who received a windfall to efficiently pass it on to others as opposed to pay tax on their massive gains and then donate what is left over.

Adding further potential benefit for charities and donors, assets held in DAFs are not taxed as they appreciate. This is logical since the donor and relinquished title to the DAF, which itself is a charitable organization. Proponents of DAFs point out that this ability to funds to grow tax free in invested accounts may mean that ultimately more money flows into nonprofit.

The 2017 Tax Cuts and Jobs Act (TCJA) doubled the standard deduction to $12,000 for individuals and $24,000 for couples. This change meant that fewer people would benefit from itemizing their deductions, and therefore the tax benefits for making donations to charitable organizations would be reduced. As a result many philanthropic minded people chose to make their charitable contributions via a DAF in 2017 so that they could take advantage of the tax deduction before the new law went into effect in 2018, but still space out their giving over time. Looking forward, TCJA cause an increase of “bunching” actions in donor advised funds. For example, if a couple historically gave $5,000 per year to their favorite charity it is possible that if this couple itemized under the 2018 tax structure that they would not gain a greater deduction than the standard $24,000 deduction. However, if they “bunched” together $30,000 and donated it to a DAF they could take the $30,000 deduction in one year and continue to distribute $5,000 per year for 6 years to the charity of their choice plus any additional interest the funds accrued while sitting in the DAF. For donors of

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63 Ibid.
65 Ibid.
66 NATIONAL PHILANTHROPIC TRUST supra note 28. See also I.R.C. § 170.
68 BAROSSO JR. supra note 26, at 1555.
69 Ibid.
cryptocurrency assets these changes mean that if they want to make philanthropic contributions it would have tax advantages to donate a substantial sum of cryptocurrency to a DAF in a single year when the market is high and then request charitable fund disbursements at their leisure as opposed to liquidate cryptocurrency assets for donation, or make a DAF donation in small transactions spread out over several years.

B. DAF Criticism and Proposed Regulatory Improvements

From a market efficiency perspective, donor advised funds are a bit of a two-sided coin. On one hand they can provide vital assets to nonprofits by creating easy and tax incentivized donation mechanisms for contributors. On the other hand, DAF’s are controversial because only disperse a fraction of the assets they hold. In fact, DAFs aren’t required to ever distribute the money they take in. A recent estimate Schwab Charitable said that roughly 16-20% of the funds in DAFs are not allocated within 10 years. Greater use of DAFs for donations of cryptocurrency further exacerbate the amount of charitable donations being held as opposed to being distributed immediately to a charitable entity.

The National Philanthropic Trust’s 2018 Donor Advised Fund Report states that there are roughly $110.01 billion dollars of funds sitting in DAFs. Many DAFs have significant initial deposit requirements, some upwards of $25,000. In 2017 donors contributed over $29B to DAFs. The average DAF in 2017 held $237,356. Donors of cryptocurrency assets have extensively utilized DAFs. In 2017 Fidelity Charitable accepted over $70 million in cryptocurrency donations. In 2018 an additional $30 million of cryptocurrency assets were placed in Fidelity DAFs bringing their total DAF cryptocurrency donations to $106 million since 2015.

Despite their large holdings, grants from DAFs comprise only 3% of the philanthropic assets allocated in the United States. In 2017 just over $19B was distributed by DAFs to other charities. Overall DAFs paid out just over 22% of their

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72 Ibid.
73 BAROSSO JR., supra note 26, at 1535-36.
74 Ibid. at 1545.
76 Ibid. at 11
78 Fidelity Charitable, 2019 GIVING REPORT (2019).
79 NATIONAL PHILANTHROPIC TRUST, What is a Donor-Advised Fund (DAF)?, supra note 28.
80 NATIONAL PHILANTHROPIC TRUST, 2018 Donor Advised Fund Report, supra note 105, at 12.
However many of these distributions appear to come from a small number of DAFs. In 2012 only 8% of DAFs actually made distributions. This means that a substantial portion of the assets contributed to DAFs, assets for which tax payers have already received a charitable deduction for donating, are just sitting there in investment accounts. None of that money is serving the underlying motives of charitable exemption until it is distributed.

To prevent the pooling of wealth in DAFs, particularly the pooling of cryptocurrency wealth, a monitory fine for non-distribution could be imposed. This would not be an exceptional move. The tax code imposes a variety of fines, including significant fines on those who make improper distributions from DAFs. For example, § 4967 imposes an excise tax on any transactions that accrue to the benefit of a disqualified person such as the donor, their family, or the donor’s advisor. Expanding on the fines matrix, a general fine could be imposed on assets which are not donated within 10 years. This would encourage the flowing of DAF funds to charities that serve the public good, while not imposing overly strict timetables on the donors. Such a tax on nondistributed assets would encourage not only cryptocurrency donors but all donors to ensure that funds donated through DAF will be utilized by organizations actively serving the public good. However, this type of solution is not supported by the Council on Foundations who state that “[t]he Council strongly opposes any proposals that require a DAF to pay out a percentage of funds each year, or to exhaust funds within a specified period of time. Such proposals are misguided as to the realities of donor-advised funds, and would be more harmful than helpful to supporting charitable causes in communities across the country.” A variety of unique solutions for encouraging DAF payouts ranging from requiring payouts upon the donor’s death to creating new charitable information marketplaces have been proposed, but are beyond the scope of this research.

Alternatively, the simplest way to discourage significant cryptocurrency donations from being donated to DAFs as opposed to direct donations is simply to reduce the standard deduction so that donors may be encouraged to donate smaller, regular donations to charities directly as opposed to one lump sum to a DAF and then disbursing the funds. It is exercise substantial influence, only that the person be in a position to do so.” Disqualified Persons – Intermediate Sanctions, IRS, https://www.irs.gov/charities-non-profits/charitable-organizations/disqualified-person-intermediate-sanctions (last updated May 15, 2018).

81 Ibid. at 29.
82 BAROSO JR., supra note 26, at 1559.
83 Ibid.
84 Ibid. at 1542.
85 A disqualified person is defined as “any person who was in a position to exercise substantial influence over the affairs of the applicable tax-exempt organization at any time during the lookback period. It is not necessary that the person actually

86 Ibid.
87 EISENBERG supra note 101.
88 BAROSO JR., supra note 26.
worth reiterating that DAFs do provide a valuable service to both the donor and charities because they can accept and liquidate a wide variety of assets. This alleviates a significant burden from both the donor and the donee. Therefore, while some of the assets in DAFs may be delayed in reaching a charity and subject to fund management fees, the DAFs are also providing a service to the charitable marketplace that is difficult to replicate. Therefore, for assets like cryptocurrencies where a limited number of charities have the ability to directly accept the asset DAFs may be a reasonable and useful donative vehicle worth incentivizing by maintaining the current applicable tax regulations.

IV. Charitable Mining

A less conventional way for nonprofits to receive donated cryptocurrency involves mining tokens for charity. Mining cryptocurrency is a labor and resource intensive process.\(^\text{89}\) Proof of work mining systems involve a competition between members to solve a cryptographic hash puzzle resulting in the right to add the latest block to the chain, and subsequently receive a coin or token as compensation for their work. This cryptographic hash solving and block adding involves an enormous amount of computing power, and has resulted in miners joining together to pool their resources and split the payout.\(^\text{90}\) In mining for charity schemes donors allow a charity, or charitably minded group, to place mining software on their personal computers and use the donor’s computers to mine cryptocurrency, the payout of which is donated to charity.\(^\text{91}\)

Some well recognized charities have experimented with donative mining schemes. UNICEF Australia launched The Hope Page which allows the page, with user permission, to use a visitor’s computer to mine cryptocurrency for as long as the visitor stays on the page.\(^\text{92}\) To date over 31,000 users have donated the use of their computer.\(^\text{93}\) The back end of the donative scheme is run by Coinhive, a company that is less positively known for creating software responsible for “cryptojacking”\(^\text{94}\) Cryptojacking is a process whereby a user’s computer processing power is usurped when they visit a website, typically without


\(^{91}\) For an example of a charitable mining operation See Mining for Charity http://miningforcharity.org/ (last accessed March 29, 2019).

\(^{92}\) The Hope Page https://www.thehopepage.org/ (last accessed March 22, 2020).

\(^{93}\) *Ibid.*

their permission or knowledge. UNICEF requires an opt in for a user to donate their processing power and thus lets the user control the donation to an extent.

Charity.org created a similar program, but in the form of a screensaver. To participate users download the screensaver, and when it is operational the software uses the computer’s processing power to mine cryptocurrency. The donations are sent directly to change.org. The group estimates that if 10,000 computers run the screensaver for 12 hours a day that would result in $10,000 in donations per month for the charity. It is a surprisingly small amount given the volume of user acquiescence needed.

A. Tax Considerations

Schemes that involve mining cryptocurrency for nonprofits are recent and ambiguous (from a tax perspective) schemes. They first wielded their pickaxes in 2018, and as such are not addressed in the current tax code. Additionally, charitable mining schemes come in many forms and present varying tax challenges.

Some mining for charity schemes facilitate donations through the mining of their own cryptocurrency. Allanite, a charity focused cryptocurrency allows users to buy and directly donate their cryptocurrency, or mine their currency and then directly donate it. In this situation the mining is separate from the donation and coins donated through allanite would likely be taxed according to the rules governing direct donations of cryptocurrency.

One could also argue that Allanite and similar coin-based charity organizations are pseudo DAFs in that donors turn over legal title to their fiat currency, retain an advisory interest in how that donation is to be distributed, and authorizes those distributions when they spend their coins. However, to be considered a DAF, the DAF must maintain legal and equitable title over the donation. In a mining for charity scheme the coin organization is required to “pay out” when “owners” “spend” their tokens and a such the coin organization does not exert any control or final say over how those distributions are to be made.

Other schemes have donors directly mining established cryptocurrencies for charities. For example, in early 2018 UNICEF launched Game Changers, a plan that asked gamers to use their computers to directly mine Ethereum for UNICEF. There is very
little consensus on what, if any, of the mining process could count as a tax-exempt charitable donation. Volunteers in traditional nonprofits generally cannot deduct the value of the time they donate to an organization; however, they can deduct any costs they incur while serving.104 The rhetoric of mining for charity fundraising revolves around the idea of “volunteering” one’s “extra” computer space. While the charities do not generally acknowledge a discernable tax benefit for the user, the costs incurred by the volunteer during their “service” may be tax deductible. Out of pocket expenses incurred while rendering charitable service are deductible if 1.) the cost is unreimbursed; 2.) the amount is directly connected with the services; 3.) the service provider only incurred the expenses because of services rendered; and 4.) the expenses are not personal, living, or family expenses.105 The actual costs incurred by the “donor” while performing the service of mining bitcoin for charity can be astronomical and highly variable subject to energy costs.106 Based on the average energy costs in the United States as of May 2018, it costs miners an estimated $4,758 to mine a single Bitcoin.107 Since the value contributed by the donor in terms of CPU usage and energy consumption is unreimbursed, directly connected with the service rendered, has the possibility of causing the service provider to incur significant and calculatable expenses, and the expenses are not personal, living or family expenses, expenses incurred due to cryptocurrency mining likely tax deductible as out-of-pocket expenses incurred while performing charitable service. A donor would need written acknowledgement of the value of their out-of-pocket expenses incurred from the charitable organizations in order to claim this deduction.108 However none of the charitable structures involving this backdoor CPU mining currently acknowledge this cost, or provide any form of donation recognition or acknowledgement mechanism for tax purposes.

B. Proposed Regulatory Improvements

Mining for charity schemes present a tax policy question, in terms of what behaviors do we, as a society, want to incentivize. Mining cryptocurrency has an enormous electrical cost. In May of 2018, the Bitcoin blockchain alone utilized about as much energy as the country of Ireland.109


104 Tres. Reg. § 1.170A-1(g).


106 Aaron Hankin, Here's How Much It Costs to Mine a Single Bitcoin in Your Country, MARKETWATCH (May 11, 2018; 9:18 AM)


107 Ibid.


109 Lee, Timothy B., Seniorius Lurkius, and UTC, New Study Quantifies Bitcoin’s Ludicrous Energy
Scholars estimated that by the end of 2018 the Bitcoin mining would consume nearly half the world’s electricity. On a planet with limited resources, this upward spiral of energy consumption seems unsustainable and therefore counter to any environmental efficiencies we could use the tax code to incentives.

Further, charitable mining schemes do not make economic sense. Even when partnered with a software company to manage the cryptojacking back end, the campaigns do not appear to generate significant revenues. UNICEF’s Game Changers initiative which encouraged gamers to mine Ethereum for UNICEF ran during February and March 2018. During that time UNICEF raised just over $31,000. UNICEF Australia launched the Hope Page in April 2018, and as of March 2019 under 29,000 persons have participated in some way shape or form. By March of 2020 this number was barely over 31,000. It is unclear exactly how much revenue this amounts to given some participants may have given over their CPU power for a minute, and others may be consistent “donors.”

Beyond low revenue generations, the energy consumption costs relative to realized donations balance does not tilt in favor of charitable mining schemes. Based on the average energy costs in the US as of May 2018, it costs miners an estimated $4,758 to mine a single Bitcoin. In May 2018 a Bitcoin was worth roughly $7,500, as of Dec 2018 a Bitcoin was worth about $3,700. The high volatility of cryptocurrencies means that it is a very real possibility it could cost more in energy to mine a coin than it is worth. Negative return on energy consumption is highly inefficient. Normally one would presume that the market will adjust to this inefficiency and therefore fewer coins would be mined (for profit or for donation) in general. However, because of the high variability of energy costs it is very possible that the volume of mining will not change, just the location of the mining operations.

It is theoretically possible to calculate the cost of mining cryptocurrency that has been donated to charity. After all, Cryptocurrency miners currently have mechanisms for quantifying and reporting

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*Consumption, ARTS TECHNICA* (May 17, 2018)

110 Ibid.

111 Conor Maloney, *Gamers Raise Over $30,000 for Syria by Mining ETH*, CHEPICAP (May 3, 2018)

112 Aaron Hankin, *Here’s How Much It Costs to Mine a Single Bitcoin in Your Country*, MARKETWATCH (May 11, 2018; 9:18 am)

113 Evelyn Cheng, *Bad News for Bitcoin Miners: It’s No Longer Profitable to Create the Cryptocurrency, by Some Estimates*, CNBC (March 18, 2018 2:24PM)
their income and mining expenses. The real question is, do we want to encourage this donative mechanism by allowing for energy costs, or other generative costs, of charitable cryptocurrency gifts to be considered a tax-exempt donation? Given the high environmental costs and its extreme inefficiency at charitable revenue generation, the answer must be no.

V. Tokenized Fundraising

A final sphere between cryptocurrency and philanthropy being exploited is tokenized fundraising. Conceptually, tokenized fundraising floats between traditional nonprofit fundraising and venture capital for startups. Many cryptocurrencies themselves are organized as foundations. Ideologically, this fits with cryptocurrencies mantras of decentralization, public ownership, and divorce from traditional governmental backings. Foundations exist for both new and well established blockchains. For example, Ethereum operates the Ethereum Foundation, with a mission “to promote and support Ethereum platform and base layer research, development and education to bring decentralized protocols and tools to the world that empower developers to produce next generation decentralized applications (dapps), and together build a more globally accessible, more free and more trustworthy Internet.”

Many of these cryptocurrency foundations operate out of Switzerland and are known as Stiftung. Stiftung are nonprofits, but they are not chartable entities under Swiss law. The Ethereum Foundation notes that while they accept donations, the donations are not tax-deductible charitable contribution. In 2017 about $375M was raised through Swiss initial coin offerings (ICOs), representing about 25% of the global ICO market. Beyond Switzerland, cryptocurrency foundations are becoming more popular in locations such as the Seychelles, Mauritius, and Singapore.

Cryptocurrency foundations are often created to oversee the initial coin offering of a new entity. An ICO is somewhat similar to an initial stock


\[118\] Ibid.


offering, but governed by a distinct set of laws. Importantly, unlike US law, Swiss law distinguishes between payment tokens which are not treated as securities, asset tokens which represent a derivative or share in the value of the company, and utility tokens intended to provide digital access to a service which are generally not treated as securities. Under Swiss Law a token can have more than one function and is thus categorized as a hybrid token.

During a pre-financing ICO of a foundation, the foundation accepts donations and, once the blockchain is up and running, it “recommends” to the decentralized network that the donor be awarded a token. Once the blockchain launches and the token is issued, the owner has an enforceable property right in the token. This type of offering is controversial, and has resulted in some organizations heading into litigation over claims of unregistered securities sales because under Swiss guidance any pre-financing ICO, regardless of token type, will be treated as a security if the token is “standardized and suitable for mass trading.”

While museums and theatres currently are not issuing their own tokens in effort to fundraise there are many theoretical applications for how tokenized fundraising could be utilized in the cultural sector. In a situation akin to crowdsourcing, a new exhibit could be funded through a utility or payment token offering and the purchasers could then “spend” the tokens for admission tickets to the exhibit or used them for discounts in the gift store. In a Broadway production scenario, and recognizing that Broadway productions are not in and of themselves nonprofits, a new play could be produced through an asset tokenized offering, and should the play become the next Hamilton or Cats, token owners could utilize their tokens like an equity share to claim profit distributions, or sell them to other investors. The tax implications, and ethical considerations, of such donations are nontrivial.

A. Tax Considerations
The tax implications of tokenized fundraising somewhat murky. For a nonprofit itself, funds raised through a Swiss Foundation ICO are not taxed as long as

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122 Ibid. at 4-5. See also, Thijs Maas, Want to do an ICO in Switzerland? Read this First!, HACKERNOON (Feb. 20 2018) https://hackernoon.com/ico-switzerland-regulation-56c2ae1e3e33.
123 Ibid.
124 See Id. for Swiss law on pre-financing.

126 HUGHES, supra note 48.
127 In Re Tezos, supra note 51.
128 Guidelines supra note 60.
129 SEC regulations for the sale of securities may also come into play if the tokens represent equity shares. While securities regulations is beyond the scope of this research, the laws in this area presents numerous issues an organization should investigate before embarking on a tokenized fundraising program with a novel token.
it “pursues an [altruistic way] a [general public object] within the meaning of Art. 56 lit. g of the Federal Act on Direct Federal Taxation can be termed as a non-profit foundation.130 While currently, no US based museums or cultural organizations are issuing their own cryptocurrencies, it is reasonable to presume that should they do so it would be viewed and regulated according with current state fundraising laws.

Although many token purchasers participate in hopes of finding the diamond in the rough which results in a windfall, in the fine print, their purchase of tokens may be considered a donation. This situation has led to “buyer” confusion, significant controversy, and litigation.131 “Tezos co-founder Kathleen Breitman said that money sent to Tezos shouldn’t be viewed as an investment. Instead, she described it as a contribution or donation to a nonprofit network, with the tokens given in return more like a souvenir than a stock certificate.”132

Therefore, one must ask, if some ICO offerings are to be considered donations to charitable organizations, then can the funds used to purchase start up cryptocurrencies be deducted? Generally, for a donor to receive a tax deduction for donations over $250 they must receive a statement from the nonprofit that no goods or services were received in exchange for the donations. Donations made in an ICO offering, or ones in which donors received tokens with may be considered as having received a good in exchange for the donation. The type of tokens, asset, utility, or payment may make a significant difference in determining if a true good was received, as will other factors such as if the tokens are already established or exist in an already established market. Quantifying the value of the good is another question that bears similar evaluation challenges to that of quantifying the value of cryptocurrency donations directly made, namely when do you timestamp the value of the donation? For ICO donations this can be particularly challenging. For example, if a donor made and ICO purchase of $500 in a payment token 2013 and received tokens “worth” $500, but then in mid-2013 the token value crashed to $50 and the purchaser sold the token, did they make a $450 donation, or did they make a net zero donation because of the initial value? These questions are nearly impossible to answer as the law currently stands.

131 IN RE TEZOS, supra note 51.
B. Proposed Regulatory Improvements

Tokenized fundraising presents a tax challenge because the donor receives a value in exchange for their donation. This in and of itself does not pose a problem. The IRS anticipates that in certain instances a donor may receive something of value and its guidance states that “[i]f you receive a benefit as a result of making a contribution to a qualified organization, you can deduct only the amount of your contribution that is more than the value of the benefit you received.”\textsuperscript{133} The IRS allows charitable organizations to give “token items” to their donors without compromising any of the total value of the donation.\textsuperscript{134} Under this guideline the token gift represents something small like a mug, and is generally capped depending on the value of the gift.\textsuperscript{135} In order for the exemption to be valid the donation must be over $75 and the organization must inform the donor that they can deduct the full value of the donation.\textsuperscript{136} However, if a hypothetical cultural organization were to independently fundraise via tokens that could be exchanged in the giftshop or for admissions to special events then they could fall into the category of payment or utility tokens and thus have more than a trivial value.

There are ethical concerns about the prevalence of blockchain based entities using Swiss foundations to fund what are essentially startup companies and the impact of this on the overall perception of foundations in general. Should more U.S. based traditional nonprofits begin utilizing tokenized fundraising the government may need to distinction between asset, payment, and utility tokens in a similar manner to in Swiss guidance. Cryptocurrencies’ ability to raise significant funds for organizations appears to be tied to two mindsets – the high-risk investor and the donor interested in furthering the technology. It is the donor who is interested in further the technology, and knowledge in general, who should have their contribution incentivized through the tax law as that mindset comports with the values promoted by the language of 501(c)(3), namely purposes that are “charitable, religious, educational, scientific, literary, testing for public safety, fostering national or international amateur sports competition, and preventing cruelty to children or animals.”\textsuperscript{137} Nonprofits who seek to tokenize fundraising with utility that supports the mission of their organization should be allowed to have those contributions qualify as tax-exempt donations provided the tokens are not tradeable on any sort of marketplace external to the organization or network of affiliated organizations. This would allow nonprofits to take advantage of new

\textsuperscript{134} IRS Publication 1771 (Rev. 3-2016); I.R.S. Pub. No. 526, Charitable Contributions 3 (2018).
\textsuperscript{135} IRS Publication 1771 (Rev. 3-2016).
\textsuperscript{137} I.R.C. 501(c)(3).
fundraising methods while limiting the value of the goods or services received by the donor and open new doors for creative donor engagement strategies which may help improve the long-term sustainability of nonprofit organizations.

VI. Conclusion

Cryptocurrencies have moved from the fringes of the internet into the center of common awareness. Although their ultimate role in the global economic ecosystem is yet to be seen, their significant appreciation in recent years has led to growing interactions between those who wish to donate via cryptocurrency and the philanthropic world. The ability for one to support causes they care about by donating cryptocurrency, contributing to a donor advised fund, mine cryptocurrency for charity, or participate in a charitable token offering present a myriad of ways that the world of digital philanthropy is evolving. Each donative mechanism currently has different tax challenges, and can be either encouraged or discourages through tax policy initiatives. As policy makers evaluate and prepare to regulate each mechanism of donating cryptocurrency it is vital to consider how issues such as market volatility, environmental concerns, and the flow of fiat currency vary across mechanisms, and regulate each channel accordingly in order to mitigate dead weight loss and facilitate the effective transfer of wealth from those who are philanthropically inclined to those who can put the funds to work for the greater good of us all.
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