

Can investors embrace both cryptocurrencies and ESG?

2020 saw a surge in the price of cryptocurrencies, but also increased consciousness about the impact that investing in cryptocurrencies can have on the environment, society, and the governance of firms (ESG investing). Martin Walker analyses whether the two trends are compatible.

Cryptocurrencies are a close-to-unique asset class. They provide no coupons or dividends, give no ownership rights and have no utility. They can, however, provide amazing returns, which is their primary attraction to investors. Bitcoin, the most popular cryptocurrency, increased over 300% in value during 2020. Other cryptocurrencies also saw spectacular gains. Some, such as Stellar and Dogecoin, saw 100% gains over a few hours at the beginning of this year.

Another hot topic for the investment management industry is ensuring that investments meet criteria related to improving the environment, dealing with social concerns, and improving corporate governance (ESG). Short-term gains are given lower priority than investments that improve our world and, in the process, generate higher longer-term returns. ESG has steadily been gaining attention due to concerns about climate change, but there was also an explosion in interest last year due to factors such as the Black Lives Matters movement. A [recent survey](#) of 600 people in the fund management industry found that 96% expected their firms to increase the prioritization of ESG this year. One of the more challenging questions facing investors is whether ESG and cryptocurrency are compatible investment strategies.

The case for cryptocurrencies supporting ESG objectives, not surprisingly, mostly comes from those with material interest in their value appreciation. To put those claims into context, it is first necessary to break down and elaborate the ESG criteria, something that is only possible to do with a degree of simplification because there are no legal standards defining ESG.

Environment

The major environmental concerns of ESG relate to reducing the impact of climate change and ensuring sustainable development. The uncomfortable truth about cryptocurrencies is that the process of validating transactions used by the leading cryptocurrencies such as Bitcoin, Ethereum and Litecoin (generally referred to as “mining”) is incredibly energy inefficient and generates vast amounts of carbon dioxide. The numbers looked at in aggregate are bad enough. According to the [Digiconomist](#) website, Bitcoin mining alone generates as much CO₂ as New Zealand, and uses as much electricity as Chile, a middle income nation of 18 million people. The inefficiency and waste look even worse compared to existing financial infrastructure. The CO₂ produced processing one bitcoin transaction is the same as that generated processing 722,705 Visa card transactions.

The arguments used in favour of cryptocurrencies from an environmental perspective are that they mostly use renewable energy, and that their energy consumption acts as an incentive to develop more environmentally friendly forms of energy production.

It is true that a significant proportion of Bitcoin mining is powered by renewables, according to research by the [University of Cambridge](#), but most is not and the heavy concentration of Bitcoin mining in China means a great deal of the mining is powered by burning coal, particularly during seasonal fluctuations in the output of hydroelectric power. Hence the alarming estimates of energy use and CO₂ production. One of the more creditable arguments for Bitcoin mining encouraging innovative forms of energy generation is the [use of natural gas](#) produced as a by-product of shale oil production to power bitcoin mining. This a superficially persuasive argument, but the reality is that shale oil production is environmentally damaging in itself. Bitcoin mining is subsidising more production of shale oil is not necessarily good for the environment.

Social

The “social” in ESG typically includes areas such as diversity, human rights, consumer protection and financial inclusion. It is [possible to argue](#) that the pseudo-anonymous nature of most cryptocurrencies protects the vulnerable from oppressive regimes and that the ability of anyone with an internet connection to own cryptocurrency promotes financial inclusion. Some enthusiasts will also point to donations made by various cryptocurrency firms to charities and other good causes. There is truth to the privacy benefits of cryptocurrencies but the flip side in countries with the rule of law is that they facilitate criminal activity including tax evasion and evasion of exchange controls. Claims about the promotion of financial inclusion are illusory. The necessity to own a smart phone and an internet connection does nothing to help the world’s poorest inhabitants. Even for those that can afford to access cryptocurrencies they face severe price volatility and the costs of converting cryptocurrencies into real-world money to buy goods and services.

Perhaps the worst conflict with social concerns relates to consumer protection. Assets with the volatility of cryptocurrencies are simply not suitable investments for the vast majority of investors. Prices appear highly manipulated due to much of the cryptocurrency operating in grey areas that are not properly regulated. Cryptocurrencies are bought and sold at “exchanges” that are not regulated as exchanges, leverage is provided by a shadow bank (stable coin issuer Tether) that is not regulated as a bank, and the creators of these assets largely avoid being held responsible for the misinformation spread to encourage sales. Misinformation that would be illegal if provided by those offering other classes of assets for investments. “Influencers” spread stories such as, ‘central banks adopting cryptocurrencies’, ‘banks and companies are using blockchain technologies and increasing the value of cryptocurrencies’ and ‘everything about the conventional finance system is bad, from inflation to a corrupted banking system, so cryptocurrencies are the solution’. These stories are demonstrably false.

Governance

It is conceptually very hard to apply concepts of corporate governance to cryptocurrencies. It has been claimed that cryptocurrencies from Bitcoin onwards are decentralised, i.e., there is no central party in control of them. The reality of decentralisation is very different. Many cryptocurrencies are clearly centralised and have a single organisation that acts as their creator, maintainer of the network, and prime beneficiary from their sales. In some cases, particularly with those cryptocurrencies originating in the initial coin offering (ICO) craze of 2017-2018, complex legal structures, including notionally independent foundations, were set up to avoid the creators of cryptocurrencies from appearing to be issuers of unregistered securities. In others, cryptocurrency firms launched vocal PR campaigns to [obscure the connection](#) between the cryptocurrency and the company created to profit from it. Even Bitcoin itself has highly concentrated control over the mining process (by a very small number of mining “pools”), over the sales process (through cryptocurrency exchanges), and over the maintenance of the code (the ‘Bitcoin Core’ group). Looked at in detail, the difference between the perception/illusion created and the reality is the truly worrying thing about cryptocurrencies from a governance perspective. Cryptocurrencies rate extremely poorly on any measure of governance.

In short, cryptocurrencies and ESG principles are far from compatible and any mainstream fund manager or pension fund seeking to place a portion of their portfolio in crypto risks severely undermining their ESG credentials.



Notes:

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