

ESG Series Social Part 1: Bitcoin's Social Impact

Research & Insights

MONOCHROME ASSET MANAGEMENT

0.25 CPD Hours | FPA Accredited

Learning Outcomes

In this session, you will learn how Bitcoin can be a tool for social impact, including:

- The UN's 17 Sustainable Development Goals and how Bitcoin fits in
- Bitcoin as an enabler of diversity and inclusion
- Bitcoin as a humanitarian force
- Bitcoin as a facilitator of Economic Empowerment

Note: This activity meets the guidelines for qualifying CPD, and has been accredited for continuing professional development by the Financial Planning Association of Australia (FPA). This does not constitute FPA's endorsement of the activity.

Introduction

It is often claimed that Bitcoin offers little use to a society that traditionally operates using fiat currency. Others maintain the perspective that Bitcoin is solely an investment tool used to generate capital gains or diversify a portfolio. Whilst the latter perspective may be valid, it is limited. Bitcoin can be viewed as a highly disruptive technology which may have the potential to evolve our financial system, described by some as a digital, social phenomenon. Its unique, decentralised, ‘peer-to-peer’ (i.e. absent of a third party) transaction mechanism allows Bitcoin to promote social impact where current systems are not succeeding. In this first of our series, we provide insight into the key ways that Bitcoin can potentially deliver social empowerment around the world.

Relevance

The United Nations (UN) recognises the need for social advancement and has attempted to describe it through its 17 Sustainable Development Goals, with aims to eliminate poverty and reduce inequalities, among other goals.¹ Unfortunately, despite progress, we are a long way from achieving either. In practice, the UN lacks the means and the sovereign power to enact real change; the responsibility ultimately falls into the hands of governments, central banks and global institutions such as the International Monetary Fund (IMF) to make such decisions. However, when some of these governments or institutions are corrupt and unstable, and countries are left impoverished as a result of war or residual effects from their colonial past, then we often see existing systems fail. Could Bitcoin have the potential to help society on a humanitarian level and empower the financially disenfranchised?

Diversity and Inclusion

We typically connote the idea of ‘diversity and inclusion’ with initiatives undertaken by schools or companies. In essence, it is an effort to promote an acceptance of others regardless of their differences (gender, race and ethnicity, age, etc) whilst also empowering them to actively participate and engage. In the context of Bitcoin however, it isn’t a matter of solving the problem of how can we promote diversity and inclusion, rather it is the core concept that applies to a broader discussion of how does Bitcoin enable diversity and inclusion in itself?

Bitcoin’s pseudonymous creator, Satoshi Nakamoto, designed the digital asset in a way that essentially enables anyone around the world to use and own it. Whilst mining bitcoin requires an expensive initial outlay and is energy intensive, transacting only requires two key components: an internet connection and a communications device, preferably a basic smartphone. Promisingly, the smart-

¹ United Nations, ‘Sustainable Development Goals (<https://sdgs.un.org/goals>)’, United Nations, 2021, accessed 19 November 2021.

-phone is being adopted at a rapid rate. At present, 6.37 billion people, or roughly 80% of the world population, use a smartphone, an invention that was only introduced in the last few decades.² When we couple this fact with continued internet accessibility, then transacting with Bitcoin will continue to become more accessible over time.

Of course, we cannot have this discussion without addressing the millions of people who remain unbanked or underbanked, a majority of those who live in developing countries. They have been excluded from the current financial system due to the extensive hurdles they face when opening a bank account. Left with essentially no alternative except to use cash in an economy moving towards a cashless system, these people are being left behind. As many try to figure out how to bank the unbanked, Bitcoin is already providing people with an avenue to digitalise their finances - with just a phone and the internet.

Humanitarian Power

Remittances

As a way of background, El Salvador does not have its own sovereign currency and the USD became the adopted currency in 2001. In June 2021, El Salvador's President Nayib Bukele made headlines by officialising Bitcoin as legal tender, with a cost saving of US\$400 million a year in remittances fees for Salvadorans being a key motivator.³ While his decision was met with criticism, reducing the cost of remittance is undeniably appealing, especially for the 360,000 Salvadoran households benefiting from remittances.⁴ Consider a Salvadoran working in the US for example: in order to send money home via Western Union, they may have to pay up to 9% for a \$200 transfer, but if they want to use the country's native Chivo wallet, it is completely free. If they opt for an alternative lightning wallet, the fee is still negligible.⁵ Thanks to Bitcoin, they and their families can both be better off with these significant savings.

El Salvador is of course only one of many countries whose citizens rely on remittances. It is a source of income for millions of households around the world, and for many, it is critical for basic survival. The tenth UN Sustainable Development Goal is to reduce inequalities by targeting a global average remittance fee of 3%. However, the average remittance fee is currently double that.⁶ The UN esti

² Statista, 'Number of smartphone users from 2016 to 2021 (<https://www.statista.com/statistics/330695/number-of-smart-phone-users-worldwide/>)', Statista, 6 August 2021, accessed 19 November 2021.

³ ABC News, 'El Salvador becomes first country in the world to accept cryptocurrency bitcoin as legal tender (<https://www.abc.net.au/news/2021-09-07/el-salvador-adopts-bitcoin-cryptocurrency-as-legal-tender/100441472>)', ABC News, 7 September 2021, accessed 19 November 2021.

⁴ AP News, 'Remittances to El Salvador rebound after early pandemic drop (<https://apnews.com/article/san-salvador-coronavirus-pandemic-el-salvador-1623416c0ddc7aa238911f8a422b6c8b#:~:text=Remittances%20account%20for%202023%25%20percent,and%20benefit%20about%20360%2C000%20households>)', AP News, 19 January 2021, accessed 9 November 2021.

⁵ World Bank, 'Country Corridors (<https://remittanceprices.worldbank.org/en/countrycorridors>)'. Remittance Prices Worldwide, 15 June 2021, accessed 13 January 2022.

⁶ United Nations, 'The Sustainable Development Goals Report 2021 (<https://unstats.un.org/sdgs/report/2021/>)', United Nations, n.d., accessed 9 November 2021. 15 June 2021, accessed 13 January 2022.

mates that a remittance of \$200 can incur an average fee between 5% and 9%, depending on the type of service used and the destination country. To provide a clearer picture, of the US\$540 billion worth of remittances paid out to low- and middle-income countries in 2020, there were billions of dollars of income lost, collected by international money transfer companies such as Western Union.⁷

Clearly there is an opportunity for a cheaper and more efficient way of cross-border transfers. In this way, Bitcoin may provide a comprehensive solution. The proliferation of second layer protocols such as The Lightning Network or Liquid, the technology is at the stage where money can be sent near-instantly and inexpensively, with major platforms like the US\$54 billion publicly-listed Block's (formerly Square) CashApp, the most popular finance app on the US Apple and Google App Stores, integrating Lightning with zero-fee transactions in January 2022.⁸ Given how widely available the Lightning Network is becoming, there is evidently a strong use-case for Bitcoin in the context of remittances.

Foreign Aid

According to data from the OECD, US\$161.2 billion was directed to foreign aid in 2020.⁹ However, effectively reducing poverty and raising living standards is not simple. History has taught us that whilst, ideally, those in need are recipients of monetary aid, this isn't always the case. In fact, foreign aid has been criticised from a variety of standpoints. Namely, many criticise its lack of transparency, waste and misuse, and funding's reliance on the donor governments' political will and bargaining position - just to name a few.

Evidently, the problems of foreign aid are complex and extensive. However, there are two standout problems that are undoubtedly resulting in inefficiencies in the current system; the lack of financial transparency and the dependence on third party intermediaries. Whether we examine the process of an individual donating to charity or one government directing foreign aid to another, it is difficult to follow the trail of funds to its ultimate user. It isn't unusual that within this process funds are lost or stolen, simply wasted, or blatantly misused by corrupt institutions and leaders. In fact, a study from the World Bank has found that as much as a sixth of foreign aid intended for the world's poorest countries has flowed into bank accounts in tax havens owned by elites, with an average leakage of 7.5% for highly aid-dependent countries - a figure that rises with the ratio of aid to GDP.¹⁰

The current monetary foreign aid system requires change and innovation to overcome its challenges. By employing the peer-to-peer, decentralised power of Bitcoin, transactions can become fully transparent and more flexibly allocated. The removal of intermediaries in particular, can allow foreign aid to be more cost-effective as well as less corruptible.

⁷ World Bank, 'Defying Predictions, Remittance Flows Remain Strong During COVID-19 Crisis (<https://www.worldbank.org/en/news/press-release/2021/05/12/defying-predictions-remittance-flows-remain-strong-during-covid-19-crisis>)', World Bank, 12 May 2021, accessed 2 November 2021.

⁸ S Perez, 'Block's Cash App adopts Lightning Network for free bitcoin payments (<https://au.news.yahoo.com/blockscash-app-adopts-lightning-140012113.html>)', Yahoo News, 19 January 2022, accessed 23 January 2022.

⁹ OECD, 'COVID-19 spending helped to lift foreign aid to an all-time high in 2020 but more effort needed (<https://www.oecd.org/newsroom/covid-19-spending-helped-to-lift-foreign-aid-to-an-all-time-high-in-2020-but-more-effort-needed.htm>)', OECD, 13 April 2021, accessed 8 November 2021.

¹⁰ World Bank, 'Country Corridors (<https://remittanceprices.worldbank.org/en/countrycorridors>)'. Remittance Prices Worldwide, 15 June 2021, accessed 13 January 2022.

Inflation

Bitcoin has often been labelled ‘digital gold’, but what does the yellow metal have in common with the digital asset? Whilst there are glaring differences between the two, people are turning to bitcoin for the same reasons people turn to gold; to curb inflationary pressure and protect their wealth. However, whilst it is investors that typically purchase gold as a hedge against inflation, in many cases it is your everyday, average citizen that is utilising bitcoin. Though Bitcoin’s price exhibits volatility, it is not tied to a currency or economy, and once new bitcoins cease to be mined, there will be no way to create new bitcoin. This unique characteristic means bitcoin supply is finite, yet also infinitely divisible. No government or central authority can devalue it by creating more.

Indeed, in the absence of reliable monetary policy and in circumstances of high inflation (or even hyper-inflation) where people’s buying power is diminishing, it seems opportune for individuals to use Bitcoin in order to take control of their wealth. This is already occurring, particularly in the developing world, where spikes in the use of digital assets have been observed in countries such as Lebanon, Turkey, Afghanistan and Venezuela. These people are not aspiring to fulfill a ‘get rich’ narrative, they are simply trying to protect themselves from their highly inflationary sovereign currencies. For example, amidst the 80% drop in the Lira’s value, Lebanese downloads of the Bitcoin wallet BlueWallet grew by 1,781% in 2020.¹¹

To more clearly understand the true value lost to inflation, consider how the worth of \$100 diminishes at different annual inflation rates:

Annual Inflation Rate	Value After 5 Years	Value After 10 Years
5%	\$77	\$60
10%	\$59	\$35
20%	\$33	\$11

The above table depicts the value of \$100, compounding annually, after 5 years and after 10 years at rates exemplified by what we are already observing globally: 5% in the Eurozone, 10% in Brazil and 20% in Turkey.^{12,13,14}

¹¹ UArabian Business, ‘Cryptocurrencies offer Lebanese a place to put their cash amid hyperinflation (<https://www.arabian-business.com/money/money-wealth/alternative-assets/463079-cryptocurrencies-offer-lebanese-place-to-put-their-cash-a-mid-hyperinflation>)’, Arabian Business, 5 May 2021, accessed 8 December 2021.

¹² Eurostat, ‘Euro area annual inflation up to 4.9% (<https://ec.europa.eu/eurostat/>)’, Eurostat, 30 November 2021, accessed 8 December 2021.

¹³ Brazilian Institute of Geography and Statistics, ‘Dashboard of Indicators (<https://www.ibge.gov.br/en/indicators#ipca>)’, Brazilian Institute of Geography and Statistics, October 2021, accessed 8 December 2021.

¹⁴ Turkish Statistical Institute, ‘Consumer Price Index, November 2021 (<https://data.tuik.gov.tr/Bulton/Index?p=Consumer-Price-Index-November-2021-37389&dil=2>)’, 3 December 2021, accessed 8 December 2021.

Economic Empowerment

According to recent data, there are over 15,000 businesses worldwide that accept Bitcoin as a valid form of payment.¹⁵ Unlike credit card payments, Bitcoin payments are analogous to a transfer of cash, where money is exchanged directly between the two parties without having to go through a financial institution. Businesses stand to benefit from this in a few ways: payment is instant and irreversible, and there are savings to be made in processing fees. It's common to see Bitcoin payment processing providers charging 0.5%-1% per transaction or sometimes none at all, rivalling debit and credit card transactions.¹⁶

However, it takes two to tango. For businesses to realise the potential benefits of Bitcoin, there needs to be demand from the consumers' side. Consumer demand for Bitcoin is growing, particularly for instant foreign transactions which will enable businesses to more easily expand trade into new markets as well as pay employees without many of the barriers that cross-currency payments usually entail. This is particularly promising for emerging businesses that run on small margins and would otherwise be limited to smaller, local markets.

Conclusion

The examples identified in this introductory piece in our series on The S in ESG have introduced several ideas and ways in which Bitcoin may provide some benefit on a humanitarian level. Through its decentralised, peer-to-peer system, anyone in the world can transact with Bitcoin, and do so without the complications of a third party centralised system. In particular, there are use-cases for developing countries and disadvantaged communities as it provides a financially inclusive solution which makes remittance and foreign aid more efficient and cost effective, as well as providing a store of wealth and a potential hedge against inflation. For businesses or aspiring entrepreneurs, Bitcoin also provides a new way to trade, and enables them to broaden their market reach. Indeed, Bitcoin has already begun to break down problems that we haven't been able to solve previously, and may just be what the UN needs to help achieve its 17 Sustainable Development Goals.

¹⁵ Coinmap, '(https://coinmap.org/?_ga=2.143846835.744533571.1642386150-925151526.1642386150#)', n.d., accessed 17 January 2022.

¹⁶ S Bhattacharyya, 'Crypto creeps into the checkout line (<https://www.bankingdive.com/news/crypto-creeps-check-out-line-marqeta-visa-mastercard-bitpay/609409/>)', Banking Dive, 10 November 2021, accessed 8 December 2021.

CPD Quiz

1. Which of the following statements about the accessibility of Bitcoin is true?

- a) Bitcoin can only be used in countries where it is legal tender
- b) Bitcoin can be used by anyone around the world with an internet connection and a basic communications device.
- c) A bank account is required to transact with Bitcoin
- d) None of the above

2. El Salvador's president, Nayib Bukele, cited reducing the cost of remittance as one justification for making Bitcoin legal tender. How much does it cost a Salvadoran to remit using the country's Chivo wallet?

- a) 0%
- b) 3%
- c) 6%
- d) None of the above

3. Which of the following is a characteristic of Bitcoin?

- a) Bitcoin's supply is finite
- b) Bitcoin is not controlled by a central bank or authority
- c) Bitcoin is infinitely divisible
- d) All of the above

4. Which of the following statements about businesses accepting Bitcoin as a form of payment is true?

- a) Businesses can charge their customers more
- b) Bitcoin payments must go through a financial institution
- c) Less than 500 businesses currently accept Bitcoin as a form of payment
- d) Payment is instant and irreversible

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Monochrome Asset Management

Email. info@monochrome.co **Tel.** +61 7 3608 5599

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