

# CRYPTOCURRENCIES

## From The Trinidad and Tobago Securities and Exchange Commission



A cryptocurrency can be defined as “a decentralized digital currency, which uses cryptography to securely transfer the currency” and such a transfer can occur between individuals through the use of “public and private keys.”

In their current form, cryptocurrencies are a relatively new phenomenon that was borne out of the 2008 Global Financial Crisis. However, the earliest forms of a cryptocurrency were around as early as the 1980s. The first form of internet money, Digicash, was developed by David Chaum in the Netherlands. The company was once the subject of a rejected \$180 million offer from Microsoft to put the company’s eCash product on every Windows machine. Unfortunately, its eventuality went bankrupt in 1998.

One of the main consequences of the Global Financial Crisis was a distrust of the financial system. This led Satoshi Nakamoto to publish a white paper in 2009 on the concept, technology and source code for the implementation of Blockchain, which led to the development of Bitcoin. A Blockchain is defined as “a digitized, decentralized, public ledger of all cryptocurrency transactions”.

Since the publication of the 2009 white paper, there are now 2,127 cryptocurrencies in circulation valued at approximately US\$114 billion as at February 1, 2019. In comparison, there are 180 world currencies recognised by the United Nations<sup>1</sup> with estimated values between \$36.8 trillion and \$90.4 trillion.<sup>2</sup> Bitcoin remains among the most widely traded of the cryptocurrencies as it currently trades at a price of US\$3,482.04 as at February 1, 2019. Current valuations has the market capitalisation of Bitcoin at approximately US\$61 billion as at February 1, 2019. XRP, Ethereum, EOS and Bitcoin Cash make up the remainder of the industry’s top five cryptocurrencies in terms of market capitalisation with current valuations totalling US\$28.02 billion as at February 1, 2019.<sup>3</sup>

The discussion on how cryptocurrencies differ with traditional currencies is based on the three features of traditional currencies. These are:

1. Serving as a medium of exchange;
2. Being a unit of account; and
3. Being a store of value.

One of the main characteristics of cryptocurrencies is that they are decentralized as they possess no governmental ties and they do not derive their value from either gold or government fiat. The absence of a central bank’s “backing” means that a cryptocurrency would not have the intrinsic value associated with traditional currencies (“fiat money”) or precious metals.<sup>4</sup> Fiat money is

---

<sup>1</sup> See the following link: <https://www.travelex.com/currency/current-world-currencies>.

<sup>2</sup> The first estimation is based on physical “narrow money” i.e. bank notes, coins and money deposited in savings and chequing accounts. The second estimation is based on “broad money,” which also includes any money held in easily accessible accounts. See following: <https://www.marketwatch.com/story/this-is-how-much-money-exists-in-the-entire-world-in-one-chart-2015-12-18>.

<sup>3</sup> See <https://coinmarketcap.com/all/views/all/>.

<sup>4</sup> See MP Group’s article, “A Brief History of Cryptocurrency”: <http://mpgroupcpa.com/post/a-brief-history-of-cryptocurrency/>.

currency that a government uses as legal tender for transactions, but it is not backed by a physical commodity. The acceptance of fiat money is entirely discretionary and based on the expectation that others would accept it, even though there is no forced acceptance.<sup>5</sup> This is similar to the manner in which a cryptocurrency's acceptance is determined at any given time.

However, while cryptocurrencies have become more relatively readily accepted as a medium of exchange; there has been difficulty in fulfilling traditional criteria both as a unit of account and as a store of value. In a 2014 article in the MIT Technology Review, David Yermack noted that there were doubts over Bitcoin's staying power because it lacks many attributes of a useful currency. He argued that while it satisfied the criteria of being a medium of exchange, Bitcoin performed poorly as a unit of account and a store of value. These were both due to the extreme price fluctuations. Price volatility in 2013 was three to four times higher than that of a typical stock. One recent example of this volatility can be found in the price of Bitcoin, which fell from US\$6,589.76 as at October 16, 2018 to its aforementioned price as at February 1, 2019 (US\$3,482). Additionally, its exchange rate with the U.S. dollar was about 10 times more volatile than those of the euro, yen, and other major currencies.

Yermack also stated that Bitcoin also lacks additional characteristics usually associated with currencies. Firstly, it cannot be deposited in a bank, but instead is held in "digital wallets" that have proved vulnerable to thieves and hackers. There are also no protections for Bitcoin that are comparable to the deposit insurance relied on by banking consumers. Lenders have not used bitcoin as the unit of account for consumer credit, auto loans, or mortgages. Neither credit nor debit cards are denominated in bitcoins.

Finally, Yermack argued that even if it overcame the volatility problem, there are only 21 million units that can ever be issued. A fixed money supply is incompatible with a growing economy. In a bitcoin-dominated economy, workers would have to accept pay cuts every year, and prices for goods would gradually fall. Such conditions can arguably lead to public unrest reminiscent of the late 19th century's free-silver and populist movements.<sup>6</sup>

There is a belief among some governments that if cryptocurrencies were granted legal tender status, this would result in a loss of economic power and a shift towards decentralized, global economies. However, there are some benefits being derived from the emergence of cryptocurrencies as its underpinning technology, Blockchain, has been argued to have the potential to revolutionise the world economy.

Cryptocurrencies have received varied regulatory treatments across a number of jurisdictions. While many countries permit them, certain countries (e.g. China) have placed an outright ban on cryptocurrencies. In the United States, the following regulatory developments have occurred:

---

<sup>5</sup> Read more: "Famous Myths of "Fiat Money":

[https://www.jstor.org/stable/3839155?seq=1#page\\_scan\\_tab\\_contents](https://www.jstor.org/stable/3839155?seq=1#page_scan_tab_contents).

<sup>6</sup> See the following link for the article: <https://www.technologyreview.com/s/524666/bitcoin-lacks-the-properties-of-a-real-currency/>.

- The development of its first federally-regulated Bitcoin exchange, LedgerX, by the U.S. Commodity Futures Trading Commission;
- Work being conducted on bills within eight U.S. States for the acceptance or promoting the use of Bitcoin and blockchain technology;
- Recognition of smart contracts in Arizona;
- The use of blockchain as evidence in Vermont;
- The use of blockchain for real estate records in Chicago; and
- An initiative authorising the registration of company shares in blockchain form within Delaware.

The European Union has adopted what was characterised as “*an innovation-first business philosophy*” that seeks to encourage the development of virtual currencies. This would firstly encourage the exploration of use cases to test impact and laws, while providing confidence to entrepreneurs that their “approved” applications will be more trusted by their target markets.

In the Caribbean, cryptocurrencies have also emerged in varied forms. The Barbados-based Bitt has been at the forefront in this market sphere regionally. The company announced the creation of a digital Barbadian dollar<sup>7</sup> in 2016. Bitt also expects to trade Aruban florins and Bahamian dollars on its platform. The Central Bank of Jamaica was building cryptocurrency awareness,<sup>8</sup> while Antigua and Barbuda have drafted laws for the implementation of Bitcoin.<sup>9</sup> Additionally, we have seen the emergence of initial coin offerings in the domestic environment.

Cryptocurrencies will be a topic among industry players and regulators for many years to come, as they each grapple with the disruption caused by this innovation. As cryptocurrencies evolve and its nature changes, this will continue to engage the attention of all regulators.

---

<sup>7</sup> This is a digital asset pegged to the value of its real-world counterpart and that could be traded on Bitt’s blockchain platform (Acheson 2017).

<sup>8</sup> See article via the following link: <https://bravenewcoin.com/news/the-central-bank-of-jamaica-is-actively-building-cryptocurrency-awareness/>.

<sup>9</sup> See article via the following link: <https://antiguaobserver.com/ab-looking-to-embrace-bitcoin/>.