Research Report | XXVIII Annual Session

Special Committee 2

The Question of Measures to Regulate the Use of E-Currencies such as Bitcoin

MODEL UNITED NATIONS
THE INTERNATIONAL SCHOOL OF THE HAGUE

Evelyn Stumpff
Anke van Vliet

Forum: SPC2

Issue: Measures to Regulate the Use of E-Currencies such as Bitcoin

Student Officer: Evelyn Stumpff

Position: President Chair

Introduction

Initiating the rise of digital currencies, Bitcoin was started in 2009 by an anonymous figure going by the name of Satoshi Nakamoto, the true identity of whom is still unknown. Unlike traditional currencies, it has no central bank, nation state, or regulatory authority to back it up. Navigating the world of digital currencies has become increasingly pressing as the realm has expanded beyond Bitcoin and has become more prevalent in global economies, especially considering the boom and bust of 2017 and 2018. Bitcoin has been cited as being part of a “gradual, technological shift in the way we think about money,” and it’s important to understand how it works and how to regulate it (Mahdawi, 2013).

Definition of Key Terms

Digital Currency

Currencies which have no physical manifestation for example coins or banknotes, and are stored in a digital wallet. Bitcoin cannot be manipulated or altered, but the exchanges can become vulnerable to hacking, similarly to online bank accounts.

Digital Wallet

Wallets which exist either in the cloud or on computers, and are linked to bank accounts. These are what store the digital keys that are Bitcoin.

Private Key

A secret code which allows the user to prove ownership of their e-currency, and is generated by computer algorithms.

Blockchain

A public ledger which records transactions that take place using Bitcoin. The core blockchain algorithm underpins all cryptocurrencies, creating irreversible and traceable transactions (Frankenfield, 2017).

Miners

People who use their computers to make coins and record transactions. Once they have verified the data, they are rewarded with some amount of the cryptocurrency.

GDAX

Global Digital Asset Exchange Company. These provide venues to buy and sell digital currencies as well as storing information which can be used to verify transactions.

Bubble

A bubble is an economic term used to describe something which surges in price to levels which are significantly above the intrinsic value of that asset (NASDAQ, 2018).

General Overview

The way Bitcoin and other digital currencies tend to work is that the “coins” are made by computers solving complex math problems in order to generate them. To spend them, users buy bitcoin and conduct transactions with vendors who accept Bitcoin, and there are some Bitcoin ATMs which allow Bitcoin to be exchanged for cash and vice versa in places such as London, Bristol, Brighton, and Glasgow in the UK (Finch, 2017). The list of firms which accept Bitcoin has been growing steadily, and now includes large companies such as Tesla and Microsoft.

Part of the appeal of Bitcoin is the limited nature of it; there is a finite supply of 21M, of which more than 15M are in circulation (Jones, 2016). Supporters argue that this makes it more stable than government backed currencies which can be devalued by central banks printing more or overprinting the currency, further arguing that this means the value of such coins will only rise, following traditional supply and demand characteristics.

In August of 2017, the digital currency Bitcoin split into two currencies : Bitcoin Classic (BTC), and Bitcoin Cash (BCH). This split was largely due to rising tensions between those within the industry, with one side wanting the limit to be raised to allow Bitcoin to scale with growing demand, while the other side maintained that allowing Bitcoin to grow too quickly would result in its centralisation and shift to corporate control, something which some of those involved in management of Bitcoin wanted to avoid (Smith, 2017). BCH retains the one-megabyte limit, while BTC has increased the limit to eight megabytes. Anyone who held bitcoin at the time of the split received identical amounts of each new coin, which was successful in allowing both versions of Bitcoin to compete in free markets.

However, Bitcoin has generally been quite volatile in its fluctuations within the global economy. Recently, it came into the public eye as it rapidly rose in stock prices and then fell again abruptly. During the first quarter of 2018, it has fallen under intense pressure, going down just over 50% (Aslam, 2018). There has since been a lot of uncertainty regarding governmental regulations or potential bans of cryptocurrencies, as well as for investors who are uncertain about the future of this product and their potential for significant loss of money. The rise and fall of Bitcoin has been compared by some as being similar to the housing bubble and following financial crisis of 2008 for this reason. Nouriel Roubini, one of the few economists attributed with predicting the 2008 crash said in February 2018 that the continued fall of Bitcoin was making it “the mother of all bubbles,” and predicting that the value would continue to plumment until it hit zero (Monaghan, 2018).

While proponents make the claim that this is revolutionary invention which is making strides into the ever-approaching new age of technology, there are many issues which have undermined their arguments. The main issues with Bitcoin is that it’s often misunderstood, there’s a perceived lack of control, it’s often been said to be in a “bubble” similar to the collateralised debt obligation trading trend which led to the financial crisis of 2008, and its unstable market value. In addition, bitcoin mining has been found to have massive environmental impact. Bitcoin uses around 32 terawatts of energy each year, which is enough to power nearly 3 million US households (Digiconomist, 2018). This is due to the incredible amount of processing power which is required in order to generate the ledgers and track transactions. Meteorologist Eric Holthaus has predicted that, unless a significant change in the way Bitcoin is processed occurs, Bitcoin could be consuming enough energy to power the US by mid 2019 (Holthaus, 2017). Another issue which has been outlined is the potential inability of financial institutions to be able to adopt and utilise blockchain technology. Additionally, it is frequently used as a payment service on the Dark Web, on sites such as the Silk Road, due to the untraceable nature of these transactions. The anonymity and current lack of regulation is a massive benefit for criminals.

Since Bitcoin's rise in popularity, it has been an option adopted by countries such as Venezuela in terms of being used as official currency. Other countries have considered it as a possibility but have yet to act on their thoughts and utilise it. The potential for e-currency's success in a global economy is contested by some, although there are strong proponents on either side of the debate.

Major Parties Involved

Coinbase

This San Francisco based company describes themselves as a "secure online platform for buying, selling, transferring, and storing digital currency," and they are one of the leading platforms for such, serving dual purpose as a digital wallet as well (Coinbase, 2018). Coinbase has recently created its own Political Action Committee (PAC), which means they will be able to donate to and support political parties, candidates, legislation, or ballot initiatives.

The Silk Road

An online black market which has been described as the "Amazon.com of illegal drugs" (NPR, 2011). This website is illegal and difficult to access, selling drugs such as cocaine, heroin, and ecstasy. Users of this website conduct transactions with digital currency Bitcoin which is untraceable.

World Bank

The head of the World Bank has expressed doubts and criticisms of e-currencies, comparing cryptocurrencies to Ponzi schemes, a type of fraud.

Ecuador

This was the first government to have a state-run electronic payment system. They use US Dollars as currency and have created the Sistema de Dinero Electronico (System of

Electronic Money) to support this system (Heathman, 2017). This system allows Ecuadorians to pay for public services such as taxes as well as personal services such as taking taxis.

Senegal

They have also launched a version of a national digital currency, which holds the same value as the physical currency and can be stored in e-wallets. The currency is based on blockchain as well.

China

The People's Bank of China has been reported to be conducting trial runs of its own cryptocurrency, also using blockchain to trace transactions and collect data (Bloomberg, 2017).

Sweden

Riksbank, the central bank of Sweden, has reportedly looked into introducing a digital currency which would be called the eKrona. This movement would be in line with the projection of Sweden becoming one of the first countries globally to go entirely cashless. However, the bank would need to work out a significant amount of details and it's estimated that if the currency is launched, it wouldn't be in action until at least 2018 (Heathman, 2018).

Israel

The central bank of Israel has reportedly been considering their own digital currency, which would be intended to reduce the amount of cash in the economy as well as creaing a faster payment system, and will likely be centralised unlike Bitcoin.

Japan

Japanese banks are reportedly planning to introduce a digital currency for the 2020 Tokyo Olympics; the J Coin is intended to facilitate easy transactions during the event which will draw visitors from across the globe (Lewis, 2017).

Tunisia

In 2015, Tunisia made the decision to boost it’s eDinar digital currency using blockchain. eDinar is used to make general monetary transfers as well as to manage official government transactions.

Russia

Turning a new leaf after having attempting to ban bitcoin in the past, the Deputy Chairwoman of the Central Bank of Russia has said that “it’s time to develop national cryptocurrencies” (Business Insider, 2016).

The United Kingdom

The UK has supported efforts of e-currencies through their implementation of ATMS across the country, such as the ones in Edinburgh.

Venezuela

In 2017 during an economic crisis, the President at the time announced the creation of a new virtual currency in order to ease said crisis. In February of 2018, this currency dubbed the *petro* was launched, and it is largely oil backed (Krygier, 2018).

Estonia

Having established itself as one of the most tech friendly governments and countries in the world currently, it was one of the first governments to store data on blockchain as part of its e-Residency programme. Due to this programme’s success, Estonia is looking to launch their own digital currency, dubbed Estcoins.

Timeline of Key Events

January 2009	Bitcoin was started, with the first transaction occurring on 12 January.

August 2010	Bitcoin was hacked, exposing existing weaknesses in the new system. Later, a monetary value was attached to a cryptocurrency for the first time.
2011	Other forms of cryptocurrencies began to emerge. After publicity surrounding its use on the Silk Road, bitcoin prices rose and then crashed back down again.
2013	Miscommunications within bitcoin holders led to a drop in value. Countries began to figure out how to deal with it : Thailand banned bitcoin, Germany didn't accept it as an official currency, the People's Bank of China prohibited financial institutions from using bitcoins - leading to another drop in value, and in Vancouver the first bitcoin ATM was launched.
December 2014	Microsoft began allowing users to buy video games with the currency, marking a shift in the way it was used commercially.
2015	Cryptocurrencies continue gaining popularity, with the number of bitcoin ATMs rising by 400.
2016	Ethereum, a rival e-currency, grew rapidly.
July 2017	In July, the Securities and Exchange Commission in the USA issued an investor bulletin, issuing three enforcement actions against ICO sponsors.
October 2017	In October, the Financial Services Regulatory Authority of Abu Dhabi issued guidance on the regulation of digital currencies.
November 2017	In November, US Treasury Secretary Steven Mnuchin said he had established working groups looking at Bitcoin.

December 2017	In December, the price of one unit of Bitcoin passed $11,500, and continued to rise close to $20,000. Banks such as Barclays, Citi, and Deutsche announced they were investigating ways to work with Bitcoin (Marr, 2017).
January 2018	In January, Bitcoin's value fell below $10,000.
February 2018	In February, it fell to its lowest value since it peaked in 2017, dropping below $6,000.
	Exemplifying increased efforts to regulate cryptocurrencies, the Bermuda government has begun regulating virtual currencies (McKenna, 2017).

Previous Attempts to Resolve the Issue

Not many successful attempts have been made to resolve this issue. Many governments such as Taiwan resorted to outright banning the currencies, but this has proven to be unsustainable on a global scale due to the growing popularity of Bitcoin and other competing cryptocurrencies. The US government has been making more coordinated efforts in order to regulate bitcoin, with Treasury Secretary Steven Mnuchin taking the lead on bringing together government agencies to coordinate this regulation. In mid-January of 2018, Mnuchin said that a virtual currency working group had been formed within the Treasury Department's Financial Stability Oversight Council (CNBC, 2018). Part of the aim of this is to ensure that criminals and others with bad intentions cannot use the bitcoin technology for illegal activities.

Possible Solutions

The US Department of the Treasury has suggested that Bitcoin administrators should follow the FinCEN (Financial Crimes Enforcement Network) guidelines. These state that any payment services must include an identification registration process between the two parties and must obtain the Money Transmitter License (Cakrawala, 2018).

Some ways to potentially combat the problem of having no secure measures to regulate bitcoin have been outlined by the digital magazine Wired, as follow (Manthorpe & Hussein, 2018). The first of which is to clear up the tax situation, and ensure that the tax laws in regards to cryptocurrencies are clarified. Member states could do so by implementing measures to regulate exchanges, making sure that the flow of transactions are recorded and regulated properly. Wired makes the case that this will lead to making cryptocurrencies more accessible to big banks, which in turn will make using these currencies easier for investors and those using them. A further suggestion is to establish a working group of blockchain investors, economists, and policy workers in order for a comprehensive approach to be taken in regards to this issue.

Bibliography

Aslam, Naeem. “Bitcoin: The Harder The Fall, The Higher The Rise: $35K By Q4.” *Forbes*, Forbes Magazine, 10 Apr. 2018, www.forbes.com/sites/naeemaslam/2018/04/10/bitcoin-the-harder-the-fall-the-higher-the-rise-35k-by-q4/.

“The Bitcoin Cash Hard Fork Will Show Us Which Coin Is Best.” *Fortune*, Fortune, fortune.com/2017/08/11/bitcoin-cash-hard-fork-price-date-why/.

“Bitcoin Energy Consumption Index.” *Digiconomist*, digiconomist.net/Bitcoin-energy-consumption.

Cakrawala, Buka. “Should Bitcoin Be Regulated? – The Startup – Medium.” *Medium*, Augmenting Humanity, 26 Mar. 2018, medium.com/swlh/should-bitcoin-be-regulated-9e1155c1d56e.

Cheng, Evelyn. “The US Government Is Trying to Get Coordinated in Its Efforts to Regulate Bitcoin.” *CNBC*, CNBC, 7 Feb. 2018, www.cnbc.com/2018/02/06/us-government-is-trying-to-get-coordinated-in-its-efforts-to-regulate-bitcoin.html.

“China Is Developing Its Own Digital Currency.” *Bloomberg.com*, Bloomberg, 23 Feb. 2017, www.bloomberg.com/news/articles/2017-02-23/pboc-is-going-digital-as-mobile-payments-boom-transforms-economy.

“Coinbase - Buy/Sell Digital Currency.” *Buy/Sell Digital Currency - Coinbase*, www.coinbase.com/.

“Definition of ‘Economic Bubble " - NASDAQ Financial Glossary.” *NASDAQ.com*, Nasdaq, 2018, www.nasdaq.com/investing/glossary/e/economic-bubble.

Finch, Julia. “From Silk Road to ATMs: the History of Bitcoin.” *The Guardian*, Guardian News and Media, 14 Sept. 2017, www.theguardian.com/technology/2017/sep/13/from-silk-road-to-atms-the-history-of-bitcoin.

Frankenfield, Jake. “Coinbase: What Is It and How Do You Use It?” *Investopedia*, Investopedia, 22 Dec. 2017, www.investopedia.com/tech/coinbase-what-it-and-how-do-you-use-it/.

Heathman, Amelia. “These Countries Are Creating Their Own Digital Currencies.” *Verdict*, Verdict, 4 Jan. 2018, www.verdict.co.uk/bitcoin-countries-digital-currency/.

Holthaus, Eric. “Bitcoin Could Cost Us Our Clean-Energy Future.” *Grist*, Grist, 19 Dec. 2017, grist.org/article/bitcoin-could-cost-us-our-clean-energy-future/.

Hussein, Akram, and Rowland Manthorpe. “Six Ways to Regulate Cryptocurrency without Killing It.” *WIRED*, WIRED UK, 11 Jan. 2018, www.wired.co.uk/article/six-ways-to-regulate-cryptocurrency-without-destroying-its-future.

Intelligence, Business Insider. “Russia Changes Its Mind on Bitcoin Ban.” *Business Insider*, Business Insider, 8 Sept. 2016, www.businessinsider.com/russia-changes-its-mind-on-bitcoin-ban-2016-9.

Jones, Harvey. “Is Bitcoin the Answer If Traditional Investments Are Letting You down?” *The Observer*, Guardian News and Media, 22 Aug. 2016, www.theguardian.com/money/2016/aug/22/bitcoin-investments-cryptocurrency-traded-digital-money.

Krygier, Rachelle. “Venezuela Launches the 'Petro,' Its Cryptocurrency.” *The Washington Post*, WP Company, 20 Feb. 2018, www.washingtonpost.com/news/worldviews/wp/2018/02/20/venezuela-launches-the-petro-its-cryptocurrency/?noredirect.

Lewis, Leo. “Japan's Big Banks Plan Digital Currency Launch.” *Financial Times*, Financial Times, 26 Sept. 2017, www.ft.com/content/ca0b3892-a201-11e7-9e4f-7f5e6a7c98a2.

Mahdawi, Arwa. “Bitcoin: More than Just the Currency of Digital Vice.” *The Guardian*, Guardian News and Media, 4 Mar. 2013, www.theguardian.com/business/2013/mar/04/bitcoin-currency-of-vice.

Marr, Bernard. “A Short History Of Bitcoin And Crypto Currency Everyone Should Read.” *Forbes*, Forbes Magazine, 6 Dec. 2017, www.forbes.com/sites/bernardmarr/2017/12/06/a-short-history-of-bitcoin-and-crypto-currency-everyone-should-read/3/.

McKenna, Francine. “Here's How the U.S. and the World Regulate Bitcoin and Other Cryptocurrencies.” *MarketWatch*, MarketWatch, 28 Dec. 2017, www.marketwatch.com/story/heres-how-the-us-and-the-world-are-regulating-bitcoin-and-cryptocurrency-2017-12-18.

Monaghan, Angela. "Bitcoin Biggest Bubble in History, Says Economist Who Predicted 2008 Crash." *The Guardian*, Guardian News and Media, 2 Feb. 2018, www.theguardian.com/technology/2018/feb/02/bitcoin-biggest-bubble-in-history-says-economist-who-predicted-2008-crash.

"These Countries Are Creating Their Own Digital Currencies." *Verdict*, Verdict, 4 Jan. 2018, www.verdict.co.uk/bitcoin-countries-digital-currency/.

Wood, Aaron. "Coinbase Now Has Its Own Political Action Committee." *Cointelegraph*, Cointelegraph, 22 July 2018, cointelegraph.com/news/coinbase-now-has-its-own political-action-committee.