Contents lists available at ScienceDirect







journal homepage: www.journals.elsevier.com/journal-of-economic-criminology

# A multi-jurisdictional perspective: To what extent can cryptocurrency be regulated? And if so, who should regulate cryptocurrency?



# Thomas Burgess<sup>1</sup>

Postgraduate Researcher at Cardiff University, UK

ARTICLE INFO	A B S T R A C T
Keywords: Cryptocurrency Regulation CBDC Cryptoasset	This article addresses the need for effective cryptocurrency regulation considering its volatile nature, recent investment surges, and subsequent financial crashes. It explores various approaches to cryptocurrency regulation, examining different jurisdictions' approaches towards cryptocurrency's classification as a security, commodity, or property. For countries to efficiently regulate the global threat that cryptocurrency has the potential to be, regulatory methods that are currently being used on a domestic scale need to be addressed and evaluated for international effectiveness. The article begins by defining cryptocurrency and reviewing the recent events that have intensified the regulatory race, such as crypto crazes and crypto crashes. It analyses different regulatory approaches, highlighting which countries view cryptocurrency as a security, commodity, or property, and examines the necessity for international harmonisation. It then examines the introduction of Central Bank Digital Currencies, evaluating it as the potential step forward and identifying the impact it could have.

# Introduction

The term 'Cryptocurrency' refers to a digital currency that utilizes a tool known as cryptography to regulate the generation of units of currency and verify the execution of payment transactions on a decentralized network, (Geva, 2019) known as a distributed ledger, such as the blockchain. This decentralized network allows for online payments to take place directly from one cryptocurrency wallet holder to another, without going through a bank or any other centralized third-party (Nian and Chuen, 2015). Cryptography also utilizes encrypted algorithms to maintain both security and fidelity of a cryptocurrency, which enables it to function as both a form of currency and a virtual accounting system (FATF, Virtual Currencies - Key Definitions and Potential AML/CFT Risks', 2014). One of the most notable examples of cryptocurrencies is Bitcoin, (Hanl, 2018) with it being known as the first and still the most popular cryptocurrency Benjamin). The creation of Bitcoin is attributed to an entity or group that adopt the pseudonym 'Satoshi Nakamoto,' who released a white paper under the name "Bitcoin: A Peer-to-Peer Electronic Cash System," which delineated a blueprint for a decentralized cryptographic currency, leveraging blockchain technology to resist centralized control (Nakamoto, 2008). This differentiates cryptocurrency from 'Fiat Currency' which is a government-issued centralised currency (You, 2022). Unlike cryptocurrency, the value of a fiat currency hinges on the intricate dynamics of supply, demand, and the stability of the issuing government, (Mann and Blunden, 2015) which provides central banks with enhanced control over the economy by influencing the money supply through printing (Gross and Siebenbrunner, 2019).

Cryptocurrencies, such as Bitcoin, are known for their enticing return on investment and it is no surprise that cryptocurrency gained notoriety on an international scale. However, while there have been various 'crypto crazes,' which refers to instances of significant public interest and popularity in cryptocurrencies, blockchains and decentralized finance (DeFi), there have also been numerous 'crypto crashes' which are a drop in price of over 10 % of a cryptocurrency over the course of a single day (Sohail and Mayor, 2022). These 'crypto crashes' are often as a result of sudden changes in the crypto market that cause panicked investors to cash out their cryptocurrency investments. Both crypto crazes and crypto crashes have varying effects such as increased popularity from the crazes, and the subsequent notice on the lack of consumer protection when a crash occurs. Furthermore, the popularity is also a double edged sword as the popularity is not only for the licit usage of cryptocurrencies, but also for the illicit usage as well.

This article compares domestic approaches to the classification of cryptocurrencies, and the implications of domestic classification for the Financial Action Task Force framework. By determining the classification of cryptocurrencies and the appropriate forum for their regulation, it will enable this article to provide an analysis on the regulation of

https://doi.org/10.1016/j.jeconc.2024.100086

Received 31 May 2024; Received in revised form 12 July 2024; Accepted 15 July 2024

2949-7914/Crown Copyright © 2024 Published by Elsevier Ltd. This is an open access article under the CC BY license (http://creativecommons.org/licenses/by/4.0/).

E-mail address: BurgessTS@Cardiff.ac.uk.

<sup>&</sup>lt;sup>1</sup> Postal Address: Cardiff, Wales.

cryptocurrencies and showcases ways to improve consumer protection, and financial crime prevention. This article focuses on how cryptocurrency could be regulated, whether as a security, commodity, or property, and who should regulate cryptocurrency, whether it be on a domestic scale or international scale. This article argues that the regulatory methods that are being used on a domestic scale need to be addressed and evaluated for international effectiveness to efficiently regulate the global threat that cryptocurrency has the potential to be.

In order to answer the research question posed in this article, it will first analyse the different 'crypto crazes' and 'crypto crashes' in order to outline the volatile nature of cryptocurrency, and the instability of its value, (Luther, 2018) which has led to an increased desire for regulation in order to improve consumer protection and financial crime prevention. Secondly, the article will then look at the regulatory approaches towards cryptocurrency from four different jurisdictions, to discuss the extent that cryptocurrency can be regulated, and how different jurisdictions have attempted to regulate this unruly horse. The jurisdictions that will be reviewed are the United States of America (US), the United Kingdom (UK), Japan, and China. These jurisdictions have been selected as they have advanced economies and can be considered among the leaders of financial technology regulation and innovation. Thirdly, the article deals with regulating cryptocurrency on an international level, in order to assess the potential implications of domestic classifications on the international legal framework. Finally, this article with delve into and analyse the potential implications of Central Bank Digital Currencies, which are digital currencies that are issued by a central bank, with its value being fixed by the central bank and equivalent to the country's fiat currency (Yibin and Angela, 2022).

## The crazes and crashes of cryptocurrency

The first recorded cryptocurrency craze would be the 'Bitcoin Boom of 2017', where Bitcoin experienced an unprecedented surge in value, with a singular Bitcoin skyrocketing to \$20,000 (James, 2017). The hype revolving around this craze was fuelled by media coverage and interest from both various institutions and retail investors. Alongside this was the emergence of various alternative cryptocurrencies, otherwise known as altcoins, such as Ethereum, Ripple (XRP), and Litecoin. Much like Bitcoin, altcoins experienced significant price increases (Santos-Alborna, 2022). However following this peak in 2017, the cryptocurrency market entered a prolonged 'Crypto Winter' which saw prices dropping significantly, with the price of main crypto-assets such as Bitcoin and Ethereum falling sharply, and resulted in the entire crypto-asset markets losing \$1.7 trillion in market value compared to its peak (OECD, 2022).

As the Crypto Winter came to pass, two of the most notable cryptocurrencies, Bitcoin and Ethereum, reached an all-time high value with Bitcoin valued at more than \$73,000, (Bitcoin Price History, 2024) and Ethereum almost \$4500 (Ethereum Price, 2024). The reasoning behind this substantial increase in value can be attributed to two of many different examples (The Author acknowledges). Firstly, the endorsement of cryptocurrency by celebrities such as Elon Musk who invested into both Dogecoin and Bitcoin, (Lee, 2024) and announced accepting Bitcoin as a payment method for Tesla (This Is How the Top Cryptocurrencies Performed in, 2021). This endorsement triggered mass popularity of both Bitcoin and Dogecoin which made the value and notice of cryptocurrency increase drastically. Secondly, the increase in popularity also helped in driving up the price of both Bitcoin and Ethereum. In turn, countries such as Argentina and Chile accepted Bitcoin as a method of payment in certain transactions, (Joaquín and Juan Barredo, 2023) and El Salvador accepted Bitcoin as a legal tender alongside the US Dollar (In El Salvador the, 2021). The rationale behind this adoption and acceptance seemed to stem from the desire to encourage companies to invest and develop markets in these developing nations (Alvarez et al., 2023).

However, the increasing value and popularity of cryptocurrencies such as Bitcoin was a double-edged sword, leading to the rising

occurrence of various crypto-related scams, (Bartoletti et al., 2021) with more than 46,000 people having reported losing over \$1 billion in crypto to scams (Fletcher, 2022). For instance, cryptocurrency has emerged as a popular tool for perpetrating Ponzi Schemes, (Julia, 2024) seen in cases such as Securities and Exchanges Commission v Shavers, (Securities and Exchange Commission v Shavers Case, 2014) where the United States of America's Securities and Exchange Commission accused Trendon Shavers of running a Bitcoin Ponzi Scheme. Additionally, pump-and-dump schemes have also slowly plagued the cryptocurrency space (Julia G.). While there is limited knowledge on pump-and-dump schemes in crypto, (Kamps and Kleinberg, 2018) it has been theorised that these schemes are easier to achieve in the crypto world as a result of the lack of regulatory oversight (Mackenzie, 2022). One such example of a pump-and-dump scam would be the Centra Tech where the three co-founders, Sam Sharma, Robert Farkas, and Raymond Trapani, fabricated information in an attempt to attract investors to artificially increase the price of their coin "CTR" (Abdel-Oader, 2021).

This increased acceptance and usage of cryptocurrency had also prompted concerns regarding consumer protection. One of the most high-profile cryptocurrency crashes and scams is the collapse of the FTX cryptocurrency exchange and the FTX token in November 2022. Samuel Bankman Fried, the founder of FTX, was convicted with money laundering and multiple fraud counts in connection with the collapse of FTX (Julia G.). The charges revolved around allegations that Bankman-Fried was placing customers' money into FTX's sister trading firm, called Alameda Research (ibid). The resulting collapse of FTX was responsible for more than halving the value of the cryptocurrency market in the wake of its collapse, (Creel and Incrocci, 2024) this subsequently brought even more light on the lack of consumer protection, with how consumers found that they were afforded no protection on their assets when FTX collapsed.

Additionally, during this time Stablecoins, which are cryptocurrencies pegged to a nation's currency, (Mary Elizabeth Burke, 2023) were also brought to the spotlight as a result of the Tether Limited Inc controversy, (Author) and the rapid crash of the \$60 billion crypto ecosystem, known as the Terra network (Ibid, 2022). The controversy revolving Tether Limited Inc and its Stablecoin under the name Tether, stems from the company having been fined by regulators in 2021 for failing to present audits showcasing sufficient asset reserves, (Mary Elizabeth Burke) and allegations of the company attempting to cover up \$850 million in losses (Ibid). The Terra network created a stablecoin by deploying two tokens known as LUNA and TerraUSD (UST), and maintained them by incentivizing arbitrage (Stevens and Kelly, 2022). By incentivizing arbitrage, it promoted the act of buying either LUNA or UST whenever there was arbitrage price discrepancies, as they could always be swapped for one USD (Mary Elizabeth Burke). During the swap, a percentage of either the LUNA or UST would be burned with the rest being deposited into a treasury for investments within the Terra ecosystem (Ibid). Therefore, LUNA and UST's viability was co-dependent on the notion that the Terra ecosystem would drive demand, while the Terra ecosystem was co-dependent on the two tokens to function, resulting in a circular relationship (Ibid and Clements, 2021). Consequently, this co-dependence on an algorithmic circular relationship was the reasoning for the Terra Stablecoins crash. As of May 2022,  $72\,\%$  of UST was deposited into Anchor, which was Terra's liquidity pool, as a result of the offered 20 % yield to anyone who lent UST to the pool (Chow, 2022). Due to the fact that users who lent UST into Anchor would not be able to remove their UST if the token failed (Mary Elizabeth Burke, (Null)). When either a coordinated group or a singular entity performed a major sell-off, approximating to \$85 million, it caused the UST's price to plummet, and as a result of the Anchor platform, it led to a great deal of investors losing their savings (Elizabeth Lopatto, 2022). This then had the knock on effect of the price of LUNA plummeting as they were interchangeable, and therefore the co-dependency leaving both the stablecoin and its ecosystem effectively dead (Mary Elizabeth Burke, (Null)).

## T. Burgess

Overall, while the various cryptocurrency crazes have helped to fuel its popularity and increase the usage of cryptocurrency internationally, its crashes have also brought light onto the lack of consumer protection afforded to investors and weak financial crime prevention. Therefore, it is no surprise that following these events, various countries have attempted to attribute regulation to cryptocurrency in order to provide consumer protection and increase financial crime prevention.

## The current domestic approaches to cryptocurrency regulation

As countries have rushed to determine the best form of regulation, it has led to various approaches towards characterising cryptocurrency: as either property, security, or a commodity. However, one of the common approaches that various countries have taken in order to attribute regulation to cryptocurrencies, would be the increasing usage of the term 'Virtual Assets,' instead of solely referring to cryptocurrencies. By referring to virtual assets, it allows for a broader scope encompassing a wider range of digital representations of value, including cryptocurrency, as well as other tokens and digital assets (Financial Action Task Force). Furthermore, this usage also further allows for regulators to have greater clarity in providing oversight and crafting regulations. Therefore, to ensure clarity in analysis and discussion, as this article discusses the regulatory approach of each jurisdiction, the usage of the term 'Virtual/ Crypto' assets will be used, instead of the term cryptocurrencies, unless the regulatory body specifically refers to cryptocurrencies.

## United Kingdom

The aim of the approach taken by the UK can be outlined as the integration of crypto asset regulation into existing regulatory frameworks. This was done in order to prevent the risk of creating an uneven playing field between crypto asset companies and traditional financial institutions (Xiong and Luo, 2024). In 2018, the UK formulated the "Cryptoassets Taskforce (CATF)", which compromised of the Financial Conduct Authority (FCA), the Bank of England, and the HM Treasury (Treasury, 2018). The CATF recommended that decisive measures were essential to mitigate the risk of cryptoassets and to stay in line with the overall ambition for the UK to be the world's most innovative economy and maintain its current position of being one of the leading financial centres globally ('UK Digital Strategy', Department for Digital, Culture, Media, and Sport, 2017).

This approach is showcased with how the FCA in 2019 stated that cryptocurrencies can be subjected to financial regulation as securities in the UK, (Cryptoassets, 2019) if it falls under the exhaustive list of specified investments under the Financial Services and Markets Act (FSMA) 2000 (Regulated Activities) Order 2001, (The Financial Services and Markets Act, 2000 Regulated Activities Order, 2001a) as they provide rights and obligations that are similar to "specified investments." (The Financial Services and Markets Act, 2000 Regulated Activities Order, 2001b) Following this, in 2023 the HM Treasury released a consultation paper titled "Future Financial Services Regulatory Regime for Cryptoassets," which further outlined the UK governments plan to slowly integrate the regulation of cryptoassets into the FSMA framework (Xihan). The consultation paper went on to state that exchange tokens, such as Bitcoin and Litecoin, and utility tokens, such as Ethereum, would be subject to the Payment Service Regulations 2017, (Payment Service Regulations, 2017) if the tokens are used to facilitate regulated payment services (Xiong Luo). This was shortly followed by the FCA, who stated that all cryptoasset firms marketing to UK customers, including those that are based overseas are required to register with the FCA in order to comply with the UK financial promotions regime (F.C.A., 2023). This enables cryptoasset firms both domestic and international to provide UK customers with the same level of consumer protection that is afforded to traditional financial services.

The landmark decision of AA v Persons Unknown creates precedent to the possibility of exchange tokens being treated as property (Persons, 2019). This case dealt with a propriety injunction to recover Bitcoin used for a ransom, in this case the High Court considered the recent legal statements provided by the UK's jurisdictional task force which looked at the notion, that even if crypto assets are not a 'thing in action,' it does not mean that they cannot be treated as property (Jurisdictional, 2019). This statement was supported by the judge in AA v Persons Unknown who, drawing on Lord Wilberforce's definition of property in National Provincial Bank v Ainsworth, (National Provincial Bank v Ainsworth, 1965) concluded that cryptoassets such as Bitcoin can be considered property. However, while security tokens can be regulated as securities, and exchange tokens have the potential to be regulated as property, utility tokens are still currently unregulated and have not been classified as securities or as property.

Therefore, the current regulatory landscape in the UK currently regulates a majority of cryptoassets as either securities, or as property depending on their intrinsic structure and intended use. Furthermore, from the lack of discussion in both literature and policy papers, it is apparent that the UK does not consider cryptocurrency as a commodity. However, with how the UK has been slowly integrating cryptoasset into the same regulatory framework that fiat currency and traditional banking is part of, it also slowly grants the same consumer protection and financial crime prevention to cryptoassets that traditional financial institutions currently have.

## United States of America

Similar to the UK, the US approach appears to be integrating cryptoasset regulation into existing regulatory frameworks, with how the Commodity Futures Trading Commission (CFTC) treating Bitcoin as a commodity, (Cryptocurrency As a Commodity, 2024) the Internal Revenue Service (IRS) treating Bitcoin as property, ('Digital Assets and Internal Revenue Service', 2024) and the Securities and Exchange Commission (SEC) treating cryptocurrencies as securities under the Securities Exchange Act (Securities and Exchanges Act, 1934). The reasoning behind the CFTC treating Bitcoin as commodities under the Commodities Exchange Act (CEA), (Commodity Exchange Act, 1936) came from an enforcement action where it was stated that 'individuals who had created a platform for the purchase and sale of Bitcoin were operating a facility for the trading or processing of swaps,' (CFTC Docket, 2015) which led to the CFTC finding the Bitcoin can come under the broad definition of commodity laid out in the CEA. The CFTC's jurisdiction covers the oversight of trading platforms, ensuring market integrity, preventing manipulation, and protecting investors in commodity-linked cryptocurrency markets (Xihan Junliang).

Alternatively, the Securities Exchange Act regulates cryptocurrencies by evaluating whether a particular cryptocurrency can meet the definition of a "security" or "investment contract." (Securities and Exchanges Act) This approach gained traction with the support from the Howey test, (Howey, 1948) and has enabled the SEC to crack down on crypto with two particularly high-profile cases being the recent ripple case, (SEC.Gov, 2024) and the Kim Kardashian SEC fine ('SEC.Gov, 2024). More recently, the U.S. Department of Treasury and IRS issued "final regulations," (Internal Revenue Service, 2024a) that requires custodial brokers to report the sales and exchanges of digital assets, including cryptocurrency. These regulations were stated as being an important part of the larger effort on preventing the usage of digital assets being used to hide taxable income and has also led to the IRS classifying cryptocurrency as property (Internal Revenue Service, 2024b).

Therefore, the regulatory approach between the SEC, CFTC, and IRS showcases a fragmented approach, and a lack of a clear regulatory guidelines for cryptocurrency. Therefore, when reviewing the US approach to cryptocurrency regulation, it is unclear on what the US classifies cryptocurrencies as, with how there is no united approach from each organization. This result in the potential undermining of providing consumer protection and financial crime prevention, as there is no clarity on which approach to cryptocurrency classification should be followed. While the attempt to regulate different cryptocurrencies as either a security, commodity, or property can be seen as an attempt by the US to establish a regulatory framework that provides consumers with protection and helps in the prevention of financial crime. The current patchwork approach and lack of clarity has a negative impact on providing any consumer protection or financial crime prevention, as both consumers protection and financial crime prevention with be depended on which approach a federal state follows.

#### Japan

Holding a similar approach as the UK, Japan also seems to regulate cryptocurrencies as either a security under the Financial Instruments and Exchange Act, (Financial Instruments and Exchange Act, 2020) or as legal property under the Payment Services Act, (Payment Services Act, 2019) both of which are preexisting legislation amended as part of Japan's Crypto Asset Recovery Framework approach. The key difference however stems from the decision as to which cryptocurrencies fall under regulation either as a security or as legal property. For investors to evaluate their digital tokens particular characteristics, to determine whether they would consider their cryptocurrency as either a security or property would require (Library of Congress: Law, 2022). The approach to regulate cryptocurrency in Japan stems from the three legal reforms, the "1st Legal Reform of the Crypto Asset Regulatory Framework in 2016," the "2nd Legal Reform of the Crypto Asset Regulatory Framework in 2019," and the "3rd Legal Reform of the Crypto Asset Regulatory Framework in 2022." (Tomoko Amaya, 2024)

The first legal reform was in response to both the G7 Elmau Summit Leader's Declaration in June 2015, (Leaders' Declaration G7, 2024) the FATF Guidance in June 2015, (FATF, 2015) which sought to ensure greater transparency to the regulation of virtual currencies by creating an obligation to verify a customer's identity on virtual currency exchanges. This reform was also in response to the aftermath of the MT GOX Incident in early 2014, (Rao, 2021) where a Bitcoin exchange based in Japan that handled approximately 70 % of all Bitcoin transactions worldwide abruptly ceased operations amidst allegations of theft, fraud, mismanagement, (Ibid) following its involvement in the disappearance of thousands of Bitcoins. As a result of these events, the Japanese government aimed to increase consumer protection by (Amaya) amending the Payment Services Act and the Act for Prevention of Transfer of Criminal Proceeds, (Act on Prevention of Transfer of Criminal Proceeds, 2007) and by introducing a registration system for Crypto Asset Exchange Service Providers.

Japan then followed this in 2019 with its second legal reform which addressed the increase in speculative transactions, the insufficient internal management capabilities for expanded business, and the emergence of new types of transactions such as Initial Coin Offerings. These events transpired around Coincheck, (Tomoko Amaya) another exchange service based in Japan, which was hacked in 2018 resulting in the theft of approximately 500 million NEM token, equivalent to (\$530 million) (Tsuchiya and Hiramoto, 2021). This incident resulted in two of Japan's cryptocurrency trade groups, the Japan Cryptocurrency Business Association and Japan Blockchain Association merging into a new self-regulating organization, known as the Japanese Cryptocurrency Exchange Association, that would be registered with the country's financial watchdog, the Financial Services Association (FSA) (Goto et al., 2019). These issues resulted in further amendments to the Payment Services Act and the Financial Instruments and Exchanges Act, (Financial Instruments and Exchange Act, 1948) which is the main statue codifying securities law and regulating securities companies in Japan. These amendments aimed to include crypto asset derivatives transactions into the scope of Japanese regulation, and strengthen consumer protection requirements, by including advertising and solicitation regulations (Tomoko Amaya).

The final reform took place in 2022, which addressed the expanded usage of stablecoins abroad, international agreements such as the Financial Stability Board's high-level recommendations, the increased risk to financial stability and user protection posed by stablecoins, and the increased discussion of stablecoin regulations in various jurisdictions (Ibid). This led to the amendment of the Banking Act, (Banking Act, 1981) the Payment Services Act, and the Trust Business Act, (Trust Business Act, 2004) in order to introduce a regulatory framework with fund transfer service providers, trust companies, and banks as issuers of stablecoins. A registration system for stablecoin intermediaries was also introduced that requires identity verification.

Therefore, Japan's continued integration of cryptoasset regulation into existing regulatory frameworks prioritises financial stability. This is similar to the UK in that it focuses on keeping the playing field level. However, the approaches deviate with the stronger focus on consumer protection in Japan, which can be seen as a result of the MT GOX and Coincheck incident. Furthermore, with the outlining of which cryptoassets are regulated by pre-existing regulatory frameworks helps in providing clarity, with Stablecoins being regulated by the Banking Act, Payment Services Act, and Trust Business Act. Security tokens being regulate under the Financial Instruments and Exchanges Act, and tokens other than stablecoins and security tokens would be regulated under the Payment Service Act Tomoko Amaya).

# China

The People's Republic of China can be seen as having the most unique approach towards cryptoasset regulation. In 2013, the People's Bank of China (PBC) issued the "Notice on Preventing Bitcoin Risk" which was the first official document in China to address the legal status of cryptocurrencies ("Notice on Preventing Bitcoin Risk" People's Bank of China, 2013). The notice was created in order to protect the legal tender status of China's currency, the Renminbi (RMB), prevent money laundering risks, and maintain financial stability. The notice stipulated that Bitcoin does not hold the same legal status as the RMB, and that Bitcoin is a specific virtual commodity, and cannot and should not be used as a currency in the market (Ibid). The notice then went on to state that the trading platform of Bitcoin, is required to be filed with the telecommunications regulatory authority in accordance with the provisions of the Telecommunications Regulations of the People's Republic of China, (Telecommunications Regulations of the People's Republic of China, 2000) and the Measures for the Administration of Internet Information Services (Measures for the Administration of Internet Information Services, 2000). Similar to Japan, the notice required relevant institutions to fulfil statutory anti-money laundering obligations such as customer identification and suspicious transaction reporting, (Supra) in accordance with the requirements of the Anti-Money Laundering Law of the People's Republic of China (Anti-Money Laundering Law of the People's Republic of China, 2006).

Further action was then taken with the rise of ICOs with the PBC released an announcement known as the "Announcement on Preventing Risks of Token Issuance Financing" which labelled ICOs as an unauthorized fundraising tool that may involve financial fraud, illegal issuance of securities, and other criminal activities ("Announcement of the People's Bank of China and other seven departments on preventing the risk of token issuance and financing" People's Bank of China, 2017). This announcement further reiterated the banning and criminalising of the usage and exchange of "virtual currencies" such as Bitcoin and Ethereum, and further criminalised any type of virtual asset service providers (Ibid).

More recently, the PBC issued a more comprehensive notice known as the "Notice on Further Preventing and Handling the Risk of Speculation in Virtual Currency Transactions." (Notice on Further Preventing and Handling the Risk of Speculation in Virtual Currency Trading" People's Bank of China, 2021) This notice further highlighted the Chinese Government's approach towards cryptoasset regulation, with the reiteration that virtual currency-related business activities are illegal financial activities (Ibid). This notice further underscored cryptocurrency mining, outlined it as an illegal financial activity, and also stated that overseas virtual currency exchanges that provide services to residents within the territory of China through the internet are committing illegal financial activities (Ibid).

Therefore, the approach to cryptocurrency regulation by the People's Republic of China is one that aligns with the goals of the other jurisdictions, with regards to improving consumer protection and financial crime prevention. However, the manner that the People's Republic of China addresses cryptocurrency regulation is not one that is shared with the other discussed jurisdictions, as China outright bans all crypto-related activities such as mining, trading, and owning.

Overall, the different jurisdictions have addressed cryptocurrency regulation in order to increase consumer protection and financial crime prevention. However, deciding the classification of cryptocurrency is something that has been taken from different routes between the four jurisdictions. This can be seen with how The People's Republic of China have outright criminalised cryptocurrencies and its related activities, while still classifying cryptocurrencies as a specific virtual commodity. The only other jurisdiction discussed that partially views cryptocurrency as a commodity is the US where the CFTC treats Bitcoin as a commodity. However, while the CFTC treats Bitcoin as a commodity, the entirety of America is divided with the IRS treating cryptocurrency as property, and the SEC treating cryptocurrency as securities, which overall results in a fragmentated view from the US. Thus, the US framework struggles to provide clarity on the subject of cryptocurrency regulation. Alternatively, the two remaining jurisdictions seem to agree on slowly integrating cryptoasset regulation into existing regulatory frameworks, which enables the market and stakeholders to adjust over time, avoiding sudden disruptions. Between Japan and the UK, the UK would be seen as having weaker clarity currently on the topic of cryptocurrency when compared to Japan. This is because Japan has clearly separated crypto regulation into Stablecoins being regulated as property, security coins being regulated as a security, and all other tokens being regulated under the under the Payment Service Act.

However, as can be seen with the recent notice by China, the exchange of cryptocurrencies is at an international level and any cryptocurrency regulations would need to have international coordination to ensure that the regulations put in place can be effective in a globally interconnected financial system (Cryptocurrencies and Blockchain, 2024). While it may be broadly accepted globally that cryptocurrency needs more regulation, different regulatory standpoints could create instability, prevent harmonisation, and cause a lack of effectiveness on regulating cryptocurrency due to its decentralised nature.

There is no international cohesion to form a collective approach to regulating cryptocurrency; different countries approach cryptocurrency as either a commodity, security or even as property. The resulting fragmented series of domestic responses exemplifies a complete lack of a level playing field and showcases a fault in the domestic approach towards regulating cryptocurrency, which has resulted in there being no guardrails or preventive measures to stop crypto actors from migrating towards friendlier jurisdictions that have softer regulations. This could, in turn, lead to cryptocurrency returning to the secrecy and darkness it came from and create further uncertainty when faced with financial crime. Therefore, for cryptocurrency regulation to provide the consumer protection and financial crime prevention that is needed, it requires an analysis of the cryptocurrency regulation at the international level, such as with the FATF, and EU.

# Regulating cryptocurrency on an international and regional level

When reviewing the regulation of cryptocurrencies, it is essential to consider the diverse approaches taken by different countries, as well as the efforts made by international and regional organizations to harmonize these regulations. Cryptocurrencies, being inherently global with its decentralized and borderless nature, necessitates a coordinated approach to address their unique challenges and leverage their potential benefits.

# Financial action task force

As an intergovernmental organization dedicated to combating money laundering and terrorism financing, the FATF has been at the forefront of addressing the regulatory challenges posed by the rise of cryptocurrencies (Georgia Mantalara, 2021). As a policy-making body, the FATF holds a pivotal role in setting the international standards for AML and CTF compliance, as well as encouraging the implementation of legal, regulatory, and operational measures against money laundering and terrorist financing (Ibid). Since 2014, the FATF has focused on understanding and mitigating the risks that arise from all types of virtual assets by publishing specific Recommendations addressed to both industry participants and national supervisors (Ibid, 2021).

Recommendation 15 discusses virtual assets and addresses the risks associated with new technologies and virtual assets, such as cryptocurrencies (The FATF Recommendations, 2024). The Recommendation calls for countries and financial institutions to identify and assess the money laundering and terrorist financing risks that may arise with the development of new products, business practices, and delivery mechanisms (Ibid). The Recommendation further highlights the need for awareness of how criminals may exploit these new technologies and business practices, particularly in the financial sector (Ibid). This recommendation can be seen as being centred around financial crime prevention, as the characteristics of cryptocurrency such as increased anonymity levels, decentralisation and their inherently global nature, makes them favourable for criminal purposes (FATF).

Recommendation 16 on the other hand focuses on wire transfers, (The FATF Recommendations', 2024) which requires countries to ensure that financial institutions include accurate originator and beneficiary information on wire transfers and related messages, which should remain throughout the payment chain. This is otherwise known as the know-your-customer protocols that have currently been adopted in the discussed jurisdictions. It recommends that financial institutions should monitor wire transfers to detect transfers lacking required information and take appropriate measures. It also recommends that financial institutions should take freezing actions and prohibit transactions with designated persons and entities as per United Nations Security Council Resolutions (Ibid). The overall aim is to prevent terrorists and other criminals from having unrestricted access to wire transfers for moving their funds and to detect such misuse when it occurs. The key thing to note about the FATF Recommendations, is that they are non-binding, however, through the usage of sanctions the implementation of some recommendations such as Recommendation 16 can be made mandatory (Alexander, 2001).

Therefore, the FATF is pivotal in setting global standards for combating money laundering and terrorist financing, particularly in response to the challenges posed by cryptocurrencies. Through Recommendations 15 and 16, the FATF emphasizes the importance of assessing risks associated with virtual assets and ensuring accurate information in wire transfers to prevent misuse by criminals and provide increased consumer protection. Although non-binding, these recommendations, supported by potential sanctions, significantly influence the adoption of necessary measures worldwide to enhance financial security, international cohesion, and financial integrity.

# **European Union**

As a political and economic union of 27 European countries, the EU's role with regards to cryptocurrency regulation would be the harmonisation or direction of the regulations belonging to its Member States, by crafting a series of Directives and Regulations that are aimed at integrating cryptoassets within the existing domestic regulatory frameworks. In 2018, the EU published its Fifth Anti-Money Laundering Directive, (Directive EU, 2018) which required the usage of 'know your customer' protocols and due diligence measures to be applied to virtual exchange platforms. The aim of this Directive was to address the rising concerns over the usage of cryptocurrencies for subversive tactics and the evolution of new tokens known as private coins that would enable higher anonymity in transactions (Sinha, 2022). The directive also introduced Anti-Money Laundering (AML) and Counter Terrorism Financing (CTF) regimes for custodial wallet providers, and providers engaged in the exchange of virtual currency and fiat currency (Xihan Xiong). However, due to Member States having the ability to interpret and adapt directives at their own discretion, this leads to regulation potentially being unharmonized with other members of the EU.

To resolve the absence of harmonisation, the Markets in Crypto Assets (MiCA) Regulation was enacted in May 2023, (Regulation (EU), 2023a) with the aim to enhance financial stability and provide a higher level of consumer protection. It covers three types of cryptoassets: asset reference tokens, E-money tokens, and utility tokens. Asset-reference tokens are tokens that stabilize their value by referencing the value of one or more assets, while E-money tokens are tokens that stabilize their value by referencing the value of a single fiat currency. However, MiCA does not extend to cryptoassets that are regulated by existing financial services legislation, such as security tokens being regulated under the Markets in Financial Instruments Directive II (Directive, 2014). MiCA further apples to cryptoasset issuers and Cryptoasset Service Providers, with the requirement that both must acquire authorization from the National Competent Authorities in Member States in order to operate (Regulation (EU), 2023b).

Therefore, sharing similarities to the UK and Japan, the EU began its regulatory approach towards cryptocurrencies by integrating them into pre-existing financial frameworks, and later recognised the weakness in sole domestic regulation with regards to a lack of harmonisation. This recognition then led to the formulation of MiCA and the establishing of a unified and harmonised regulatory framework that aimed to provide consumer protection, and financial crime prevention, while still preserving technical innovation.

Overall, the EU, recognizing the limitations of purely domestic regulations, has adopted a harmonized approach to cryptocurrency regulation through the formulation of MiCA. This framework aims to integrate cryptocurrencies into existing financial structures, providing consumer protection and financial crime prevention while fostering technical innovation. Similarly, the FATF sets global standards to combat money laundering and terrorist financing, particularly in the context of cryptocurrencies. Through Recommendations 15 and 16, the FATF highlights the need for risk assessment and accurate information in financial transactions. Although these Recommendations are nonbinding, their influence, supported by potential sanctions, promotes the global adoption of measures that enhance financial security, international cohesion, and integrity. Moving from the discussion on the regulation of cryptocurrency both domestically and internationally, the next step would be to consider the introduction of Central Bank Digital Currencies which have recently sparked debate in literature on being a potential step forward with regards to cryptocurrency regulation.

## The introduction of central bank digital currencies

As cryptocurrencies have continued to evolve, (Dr Alexandros L, 2024) this has led to governments and central banks to explore the possibility of recreating their version of a digital currency which would be government-backed and attached to their currency (Anthanassiou, 2023). Examples of this include both the Bank of England and the European Central Bank examining the benefits and downsides of CBDCs and possible design choices (Brill and Toms, 2022). The People's Republic of China currently have a digital version of the yuan (e-CNY), (https, 2024) and US President Joe Biden issued an executive order detailing his government's policy with respect to a

US CBDC (Mark Hallam, 2022). An opportunity that CBDCs provide for consumer protection and financial crime prevention would be the fulfilment of every jurisdictions central banks missions, which is to provide a safe and reliable means of payment, and counter the growing influence of stablecoins which can jeopardise monetary sovereignty (Executive Order on Ensuring Responsible Development of Digital Assets, 2024). The impact on jeopardising monetary sovereignty arises from how the US dollar is either used directly for settlement or indirectly as an intermediary currency for settlement of 88% of all FX transactions globally, (Dr Alexandros) this reliance enables the US to exercise a significant degree of extraterritorial economic and political power in terms of sanctions enforcement and influence. Jeopardising monetary sovereignty arises with how jurisdictions such as Russia and China are exploring CBDCs for crossborder payments as a means of insulating themselves from the extraterritorial economic and political power of the (US Russia Plans to Use Digital Rouble in Settlements with China, 2022).

This emergence of a digital currency that is backed by a central bank, has the potential to be a new alterative to cryptocurrency and its related assets. However, while it can be a potential alternative to cryptocurrency, it will not be a replacement as both have different intended usages for two different groups of people. CBDCs will be more popular and favourable for corporations and governments as it will allow for the pros of cryptocurrency transactions, such as faster speeds to be used alongside the protection of a central bank.

Furthermore, one potential pitfall would be the facilitation of sanctions evasion by reducing reliance on banks as intermediaries and the Swift payment network (Bertaut and Beschwitz, 2021). For instance, Russia is currently in the process of launching a digital rouble, which will be used for mutual settlements with China (Dr Alexandros). As countries continue to navigate the complex landscape of digital currencies, the balance between innovation and regulation will be crucial. Ensuring that CBDCs enhance the efficiency and security of financial systems without enabling illicit activities will be a key challenge for policymakers. The ongoing developments in CBDC initiatives will undoubtedly shape the future of global finance, offering both opportunities and challenges in equal measure.

Therefore, the rise of CBDCs signifies a major shift in global finance, with countries like the UK, China, and the US exploring their potential. CBDCs promise enhanced consumer protection, improved financial crime prevention, and a stable alternative to private stablecoins. However, they also pose challenges, such as the risk of facilitating sanctions evasion by bypassing traditional banking systems. As CBDCs develop, striking a balance between innovation and regulation will be crucial to ensure they enhance financial system efficiency and security while mitigating associated risks.

## Conclusion

The overall aim of this article was to address the regulation of cryptocurrencies by establishing how different countries classify and regulate cryptocurrencies, to then analyse how the regulation of cryptocurrencies in different countries has an impact on improving consumer protection and financial crime prevention. This grounded a discussion on the current state of international regulation and underscored the need for cohesion and harmonisation between regulatory frameworks. By exploring the different crypto crazes and crypto crashes, this article demonstrated the dangers of cryptocurrency with regards to a lack of consumer protection and financial crime prevention. It then analysed the UK, US, Japan and the People's Republic of China's approach towards cryptocurrency regulation and classification. The analysis of each jurisdiction showcased an integration-based approach that is shared by the UK, Japan, and China, which slowly integrated cryptoasset regulation into existing regulatory frameworks. This integration approach seemed to prioritise addressing the lack of consumer protection and financial crime prevention by affording the same protection to

crypto actors that is afforded to the traditional banking systems.

Following this was also an analysis of the US' approach towards cryptocurrency regulation. Due to the lack of unity and cohesion in its regulatory bodies, this article recommends that the US follows the other jurisdictions' approach to ensure clarity in its cryptocurrency regulation. This would also be in line with both the EU and FATF approach towards harmonisation between domestic regulatory frameworks. An additional recommendation would be for the US and the UK to follow Japan's approach with ensuring even more clarity in cryptocurrency classification, by outlining regulation for all types of cryptocurrencies as well as creating an obligation for all Virtual Asset Service Poroviders to become self-regulating organizations. By fulfilling both aspects, it would allow for a greater ease in cryptocurrency classification and regulation and provide higher levels of both consumer protection and financial crime prevention. Finally, the potential utility of CBDCs is something that should be addressed by the FATF, as they have the potential to become a significant sanctions avoidance method as well as disrupting the global financial security and financial integrity.

## Reference to domestic legislation

US

- Securities and Exchanges Act 1934 15 U.S.C. § 78a et seq.
- CFTC Docket No. 15-19, 2015 WL 5535736 (Sept. 17, 2015)
- Commodity Exchange Act 1936 49 Stat. 1491
- Securities and Exchanges Act (n 64), Section 3.
- Securities and Exchanges Act 1934 15 U.S.C. § 78a et seq.

## UK

- Payment service regulations 2017 (2017/752)

## Japan

- Act on Prevention of Transfer of Criminal Proceeds 2007
- Banking Act (Act No. 59 of 1981)
- Financial Instruments and Exchange Act (2020) Act No. 66
- Financial Instruments and Exchange Act (Act No. 25 of 1948).
- Payment Services Act (2019) Act No. 2
- Trust Business Act (Act No. 154 of December 3, 2004)

# China

- Anti-Money Laundering Law of the People's Republic of China 2006.
- Telecommunications Regulations of the People's Republic of China 2000.
- Measures for the Administration of Internet Information Services 2000

## El Salvador

- Lei 2303/15 (2021)
- Lei No. 12.865, de 9 de Outubro de 2013

## Reference to international legislation

# European Union

- Directive (EU) 2018/843 of the European Parliament and of the Council of 30 May 2018, amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing and amending Directives 2009/138/EC and 2013/36/EU

- Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast) Text with EEA relevance, Section C of Annex I
- Regulation (EU) 2023/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 (Text with EEA relevance)
- The Financial Services and Markets Act 2000 (Regulated Activities) Order 2001

# Reference to cases

- AA v Persons Unknown [2019] ewhc 3556.
- National Provincial Bank v Ainsworth [1965] A.C. 1175.
- SEC v W.J. Howey Co [1948] 328 U.S. 293
- Securities and Exchange Commission v Shavers Case (Dist. Court ED Texas, 18 September 2014) No.4:13-CV-416.

# Reference to journal articles

- A. Abdel-Qader, "Sam Sharma Gets 8-Year Prison Term in Centra Tech ICO Scam" *Finance Magnates (4 March 2021).*
- Alexander, "The International Anti-Money-Laundering Regime: The Role of the Financial Action Task Force" (2001) 4(3) JMLC 231, 231;
- Andreas Hanl, "Some Insights into the Development of Cryptocurrencies" (2018) MAGKS Joint Discussion Paper Series in Economics No 04–2018.
- Andrew R. Chow, "The Real Reasons Behind the Crypto Crash, and What We Can Learn from Terra's Fall" *TIME* (May 17, 2022).
- Dr Alexandros L. Seretakis, "Central bank digital currencies: opportunities and risks" (2024) Journal of International Banking Law and Regulation 39(7), 241 245.
- Fernando E. Alvarez, David Argente, Diana Van Patten, "Are Cryptocurrencies Currencies? Bitcoin as Legal Tender in El Salvador" (2023) NBER Working Paper 29968.
- Gauri Sinha, "Cryptocurrencies and anti-money laundering regulation: the cat and mouse game" (2022) Comp. Law 43(12), 377 – 384.
- Georgia Mantalara, "An overview of the ML/TF risks and regulatory responses in the crypto-asset landscape (2021) Journal of International Banking Law and Regulation 36(11), 487 – 492;
- Henry Hillman, "Pass or play: should regulators address the money laundering risks posed by cryptocurrencies themselves or await legislative reform? (2024) Journal of Business Law 4, 301 – 328.
- https://www.skadden.com/insights/publications/2022/01/2022insights/regulation-enforcement-and-investigations/central-banksconsider-digital-currency-pros-and-cons Accessed 5th July 2024.
- Izuru Goto, Yasuyuki Kuribayashi, Takashi Saito, "Virtual currencies: regulators make their move" (2019) Int'l Fin. L. Rev. 75.
- James Dean, 'Bitcoin experiences historic boom' Financial Times (London, 8 December 2017), 1, 2, 14–15.
- Jeffrey A. Brill, Simon Toms, "Central Banks Consider Digital Currency Pros and Cons in US and Europe", Skadden's 2022 Insights (19 January2022),
- Joaquín Arriola, Juan Barredo-Zuriarrain, "From 'Crypto-Alternatives' to a Regional Unit of Account: Monetary Proposals in Latin America for a Greater Shared Autonomy" (2023) Value, Money, Profit, and Capital Today 39.
- Julia G. Campbell "At the crossroads of the cyberworld and the underworld: classifying crimes involving cryptocurrency" (2024) Company Lawyer 45(3), 75–85.
- Kamps and Kleinberg, "To the Moon: Defining and Detecting Cryptocurrency Pump-and-Dumps" (2018) Crime Science 7(1), 18.
- Mackenzie, "Criminology Towards the Metaverse: Cryptocurrency Scams, Grey Economy and the Technosocial" (2022) The British Journal of Criminology 62(6), 1537–1552, 1546.

- Marco Gross, Christoph Siebenbrunner, 'Money Creation in Fiat and Digital Currency Systems' (IMF Working Paper, 2019) WP/19/285.
- Mary Elizabeth Burke, "From Tether to Terra: The Current Stablecoin Ecosystem and the Failure of Regulators" (2023) Fordham Journal of Corporate and Financial Law 28(1), 107.
- Massimo Bartoletti, Stefano Lande, Andrea Loddo, Livio Pompianu, Sergio Serusi, "Cryptocurrency Scams: Analysis and Perspectives" (2021) Ieee Access.
- Nicholas Barry Creel, Gavin Incrocci, "When it comes to cryptocurrency, regulation is futile" (2024) Journal of International Banking Law and Regulation 39(2), 47–49.
- OECD, "Lessons from the Crypto Winter: DeFi versus CeFi" (OECD Publishing, Paris, 2022) OECD Business and Finance Policy Papers, No. 18.
- Phoebus L. Anthanassiou, "Retail central bank digital currencies: core assumptions and legal implications" (2023) Buttersworths Journal of International Banking & Financial Law 38(6), 414 – 415.
- Robert Stevens, Liam J. Kelly, "What Is Terra? The Chaotic Algorithmic Stablecoin Protocol Explained" *DecryptU* (11 May 2022).
- Ruixiang You, 'A New Dimension in the World Economy Fiat Digital Currencies: A Review' (2022) BCP Business & Management 30, 705–711.
- Ryan Clements, "Built to Fail: The Inherent Fragility of Algorithmic Stablecoins" (2021) Wake Forest Law Review 11.
- Sam Sutton, "House punts on stablecoin bill after Yellen raises flags over key provision" *Politico* (25 July 2022).
- Satoshi Nakamoto, 'Bitcoin: A Peer-to-Peer Electronic Cash System'(2008).
- Sohail Ali, Suhail Mayor, "The 'crypto crash': a catalyst for further crypto litigation?" (2022) Butterworths Journal of International Banking & Financial Law 37(8).
- William J. Luther, "Is Bitcoin Intrinsically Worthless?" (2018) AIER Sound Money Project Working Paper No. 2018–07.
- Xihan Xiong, Junliang Luo, "Global Trends in Cryptocurrency Regulation: An Interview" (Cornell University, 2024), 13, Accessible at: [2404.15895] Global Trends in Cryptocurrency Regulation: An Overview (arxiv.org) Accessed 4th July 2024.
- Yibin Mu, Angela Mu, "CBDC: Concepts, Benefits, Risks, Design, and Implications" (2022) Available at SSRN: http://dx.doi.org/10.2139/ ssrn.4234876
- Yoichi Tsuchiya, Noaki Hiramoto, "How cryptocurrency is laundered: Case study of Coincheck hacking incident" (2021) Forensic Science International Reports 4, 100241.
- Yuliva Prokopyshyn, "Crypto Scams: Don't ignore the red flags" (2022) Solicitors Journal 165(7).

## Reference to books

- Ariel Santos-Alborna, Understanding Cryptocurrencies: Bitcoin, Ethereum, and Altcoins as an Asset Class (Business Expert Press, 2022)
  Benjamin Geva, "Cryptocurrencies and the Evolution of Banking, Money and Payments" in Chris Brummer (ed.), Crypto-Assets. Legal, Regulatory and Monetary Perspectives (Oxford: Oxford University Press, 2019).
- Lam Pak Nian, David Lee Kuo Chuen, "Introduction to Bitcoin" in David Lee Kuo Chuen, (ed), *Handbook of Digital Currency: Bitcoin, Innovation, Financial Instruments and Big Data* (Amsterdam: Academic Press is an imprint of Elsevier, 2015), 5, 8.
- Sandeep Rao, "Mt. Gox The Gall of a giant" in Shaen Corbet, Understanding cryptocurrency fraud: The challenges and headwinds to regulate digital currencies (2021), 71 – 82.
- Trischa Mann, Audrey Blunden, (ed), Australian Law Dictionary (Oxford University Press 2015), 69.

## Reference to reports

- 'Cryptoassets: Our Work' (*FCA*, 22 January 2019) < https://www. fca.org.uk/firms/cryptoassets > accessed 31 May 2024

- 'Cryptocurrencies and Blockchain' (World Bank) < https:// documents.worldbank.org/en/publication/documents-reports/ documentdetail/293821525702130886/Cryptocurrencies-andblockchain > accessed 21 May 2024.
- 'Cryptocurrency As a Commodity: The CFTC's Regulatory Framework' (*Docslib*) < https://docslib.org/doc/11514391/ cryptocurrency-as-a-commodity-the-cftcs-regulatory-framework > accessed 21 May 2024.
- 'Digital Assets | Internal Revenue Service' < https://www.irs.gov/ businesses/small-businesses-self-employed/digital-assets > accessed 21 May 2024.
- 'Fintech Sector Strategy', HM Treasury (2018), Accessible at Fintech Sector Strategy - GOV.UK (www.gov.uk) Accessed 4th July 2024.
- 'SEC.Gov | SEC Charges Kim Kardashian for Unlawfully Touting Crypto Security' < https://www.sec.gov/news/press-release/ 2022–183 > accessed 21 May 2024.
- 'SEC.Gov | SEC Charges Ripple and Two Executives with Conducting
   \$1.3 Billion Unregistered Securities Offering' < https://www.sec.</li>
   gov/news/press-release/2020-338 > accessed 21 May 2024.
- 'The UK's Industrial Strategy', Department for Business, Energy, and Industrial Strategy (2017), Accessible at The UK's Industrial Strategy
   GOV.UK (www.gov.uk) Accessed 4th July 2024
- 'This Is How the Top Cryptocurrencies Performed in 2021' (*World Economic Forum*, 26 January 2022) < https://www.weforum.org/ agenda/2022/01/top-cryptocurrencies-performance-2021/ > accessed 21 May 2024
- 'UK Digital Strategy', Department for Digital, Culture, Media, and Sport (2017), Accessible at UK's Digital Strategy - GOV.UK (www. gov.uk) Accessed 4th July 2024
- "Announcement of the People's Bank of China and other seven departments on preventing the risk of token issuance and financing" (People's Bank of China, 2017) Accessible at Announcement of the People's Bank of China and Other Seven Departments on Preventing the Risk of Token Issuance and Financing\_Departmental Government Affairs\_Chinese Government Network (www.gov.cn) Accessed 5<sup>th</sup> July 2024.
- "Notice on Further Preventing and Handling the Risk of Speculation in Virtual Currency Trading" (People's Bank of China, 2021) Accessible at Notice on Further Preventing and Handling the Risk of Speculation in Virtual Currency Transactions\_Documents of the State Council\_Chinese Government Network (www.gov.cn) Accessed 5<sup>th</sup> July 2024.
- "Notice on Preventing Bitcoin Risk" (*People's Bank of China*, 2013) Accessible at The People's Bank of China and other five ministries and commissions issued a notice on preventing Bitcoin risks (www. gov.cn) Accessed 5th July 2024.
- Carol Bertaut, Bastian von Beschwitz, Stephanie Curcuru, "The International Role of the US Dollar" (Federal Reserve, 2021) Accessed at The Fed - The International Role of the U.S. Dollar (federalreserve.gov) Accessed 12th July 2024.
- Elizabeth Lopatto, "How the Anchor Protocol Helped Sink Terra" *Verge* (20 May 2022)
- Emma Fletcher, "Reports show scammers cashing in on crypto craze" *Federal Trade Commission (3 June 2022)*.
- Executive Order on Ensuring Responsible Development of Digital Assets (9 March 2022), https://www.whitehouse.gov/briefing-room/presidential-actions/2022/03/09/executive-order-on-ensuring-responsible-development-of-digital-assets/Opens in a new window Accessed 5th July 2024.
- FATF, 'Virtual Currencies Key Definitions and Potential AML/CFT Risks' (2014) Virtual currencies – Key Definitions and Potential AML/CFT Risks (fatf-gafi.org), 4. Accessed 21 May 2024.
- FATF, "Guidance for a Risk Based Approach to Virtual Currencies" (25th June 2015) Accessed at Guidance for a Risk-Based Approach to Virtual Currencies (fatf-gafi.org) Accessed 21st May 2024.
- FATF, Updated Guidance for a Risk-Based Approach. Virtual Assets

#### T. Burgess

and Virtual Asset Service Providers (October 2021), https://www.fatfgafi.org/media/fatf/documents/recommendations/Updated-Guidance-VA-VASP.pdfOpens in a new window

- FCA "Finalised non-handbook guidance on cryptoasset Financial Promotions" (November 2023) FG23/3.
- HM Treasury, Cryptoassets Taskforce: final report (October 2018) Accessible at Cryptoassets Taskforce: final report - GOV.UK (www. gov.uk) Accessed 4th July 2024.
- Internal Revenue Service, "Gross Proceeds and Basis Reporting by Brokers and Determination of Amount Realized and Basis for Digital Asset Transactions" (9 July 2024) 2024-14004. Accessible at Federal Register:: Public Inspection: Gross Proceeds and Basis Reporting by Brokers and Determination of Amount Realized and Basis for Digital Asset Transactions Accessed 9th July 2024.
- Internal Revenue Service, "Treasury, IRS issue final regulations requiring broker reporting of sales and exchanges of digital assets that are subject to tax under current law, additional guidance to provide penalty relief, address information reporting and other technical issues" (28 June 2024) IR-2024–178. Accessible at Treasury, IRS issue final regulations requiring broker reporting of sales and exchanges of digital assets that are subject to tax under current law, additional guidance to provide penalty relief, address information reporting and other technical issues | Internal Revenue Service Accessed 9th July 2024.
- Leaders' Declaration G7 Summit (7 8 June 2015), 9. Accessible at 7320LEADERS STATEMENT\_FINAL\_CLEAN.pdf (un.org) Accessed 4th July 2024.
- Lee I, 'The Top 5 Wildest Crypto Moments of 2021' (Markets Insider) < https://markets.businessinsider.com/news/currencies/top-5wildest-crypto-moments-2021-nft-bitcoin-dogecoin-shiba-2021-12 > accessed 21 May 2024
- Library of Congress: Law. 'Regulation of Cryptocurrency: Japan' (2022) Accessed at Regulation of cryptocurrency around the world | Library of Congress (loc.gov) Accessed 4th July 2024.
- Mark Hallam, "China Test Drives National Digital Currency" Deutsche Welle (17 June 2022), https://www.dw.com/en/china-test-drivesnational-digital-currency/a-62168123 Accessed 5th July 2024.
- UK Jurisdictional Taskforce 'Legal Statement on the Status of Cryptoassets and Smart Contracts' (2019).

## Reference to presentations

Tomoko Amaya, "A Speech on 'Regulating the crypto assets landscape in Japan' at the crypto asset roundtable hosted by OMFIF" (10 November 2022), 5. Presentation material accessible at: A speech on "Regulating the crypto assets landscape in Japan" at the crypto asset roundtable hosted by OMFIF : FSA Accessed 5th July 2024.

## Reference to webpages

- "Russia Plans to Use Digital Rouble in Settlements with China", Reuters (26)September 2022), https://www.reuters.com/markets/ currencies/russia-plans-use-digital-rouble-settlements-with-chinasays-lawmaker-2022-09-26/Opens in a new window
- 'The FATF Recommendations' < https://www.fatf-gafi.org/en/ publications/Fatfrecommendations/Fatf-recommendations.html > , accessed 5 July 2024.
- 'Ethereum Price History May 20, 2024' (Statista) < https://www. statista.com/statistics/806453/price-of-ethereum/ > accessed 21 May 2024
- 'Bitcoin Price History May 20, 2024' (Statista) < https://www. statista.com/statistics/326707/bitcoin-price-index/ > accessed 21 May 2024

## **CRediT** authorship contribution statement

Thomas Burgess: Writing - review & editing, Writing - original draft.

## **Declaration of Competing Interest**

I have nothing to declare.

## References

- 'Digital Assets | Internal Revenue Service' < https://www.irs.gov/businesses/smallbusinesses-self-employed/digital-assets > accessed 21 May 2024.
- 'SEC.Gov | SEC Charges Kim Kardashian for Unlawfully Touting Crypto Security' < https://www.sec.gov/news/press-release/2022-183 > accessed 21 May 2024.
- 'UK Digital Strategy', Department for Digital, Culture, Media, and Sport (2017), Accessible at UK's Digital Strategy - GOV.UK (www.gov.uk) Accessed 4th July 2024; 'The UK's Industrial Strategy', Department for Business, Energy, and Industrial Strategy (2017), Accessible at The UK's Industrial Strategy - GOV.UK (www.gov.uk) Accessed 4th July 2024; 'Fintech Sector Strategy', HM Treasury (2018), Accessible at Fintech Sector Strategy - GOV.UK (www.gov.uk) Accessed 4th July 2024.
- "Announcement of the People's Bank of China and other seven departments on preventing the risk of token issuance and financing" (People's Bank of China, 2017) Accessible at Announcement of the People's Bank of China and Other Seven Departments on Preventing the Risk of Token Issuance and Financing\_Departmental Government Affairs\_Chinese Government Network (www.gov.cn) Accessed 5th July 2024.
- "Notice on Preventing Bitcoin Risk" (People's Bank of China , 2013) Accessible at The People's Bank of China and other five ministries and commissions issued a notice on preventing Bitcoin risks (www.gov.cn) Accessed 5th July 2024.
- A. Abdel-Qader, "Sam Sharma Gets 8-Year Prison Term in Centra Tech ICO Scam" Finance Magnates (4 March 2021).
- Act on Prevention of Transfer of Criminal Proceeds 2007.
- Alexander, "The International Anti-Money-Laundering Regime: The Role of the Financial Action Task Force" (2001) 4(3) JMLC 231, 231; Henry Hillman, (n 105), 312...
- Fernando E. Alvarez, David Argente, Diana Van Patten, "Are Cryptocurrencies Currencies? Bitcoin as Legal Tender in El Salvador" (2023) NBER Working Paper 29968.
- Anthanassiou, Phoebus L., 2023. Retail central bank digital currencies: core assumptions
- and legal implications. Butter J. Int. Bank. Financ. Law 38 (6), 414-415. Anti-Money Laundering Law of the People's Republic of China 2006.

#### Banking Act (Act No. 59 of 1981).

Bartoletti, Massimo, Lande, Stefano, Loddo, Andrea, Pompianu, Livio, Serusi, Sergio, Scams, Cryptocurrency, 2021. Analysis and Perspectives. Ieee Access, 9; Yuliva Prokopyshyn, "Crypto Scams: Don. 't ignore Red. flags" (2022) Solicit. J. 165 (7), 64-65

Benjamin Geva, (n 1), 33.

- Carol Bertaut, Bastian von Beschwitz, Stephanie Curcuru, "The International Role of the US Dollar" (Federal Reserve, 2021) Accessed at The Fed - The International Role of the U.S. Dollar (federalreserve.gov) Accessed 12th July 2024.
- Bitcoin Price History May 20, 2024' (Statista) < https://www.statista.com/statistics/ 326707/bitcoin-price-index/ > accessed 21 May 2024.
- Jeffrey A. Brill, Simon Toms, "Central Banks Consider Digital Currency Pros and Cons in US and Europe", Skadden's 2022 Insights (19 January2022),
- Julia G. Campbell, (n 26).
- Julia G. Campbell, (n 26). CFTC Docket No. 15-19, 2015 WL 5535736 (Sept. 17, 2015).
- Andrew R. Chow, "The Real Reasons Behind the Crypto Crash, and What We Can Learn from Terra's Fall" TIME (May 17, 2022); Mary Elizabeth Burke, (n 35). Commodity Exchange Act 1936 49 Stat. 1491.

Nicholas Barry Creel, Gavin Incrocci, "When it comes to cryptocurrency, regulation is futile" (2024) Journal of International Banking Law and Regulation 39(2), 47 -49.

Cryptoassets: Our Work' (FCA, 22 January 2019) < https://www.fca.org.uk/firms/ cryptoassets > accessed 31 May 2024.

- Cryptocurrencies and Blockchain' (World Bank) < https://documents.worldbank.org/ en/publication/documents-reports/documentdetail/293821525702130886/ Cryptocurrencies-and-blockchain > accessed 21 May 2024.
- Cryptocurrency As a Commodity: The CFTC's Regulatory Framework' (Docslib) < https://docslib.org/doc/11514391/cryptocurrency-as-a-commodity-the-cftcs-regulatory-framework > accessed 21 May 2024.
- Directive 2014/65/EU of the European Parliament and of the Council of 15 May 2014 on markets in financial instruments and amending Directive 2002/92/EC and Directive 2011/61/EU (recast) Text with EEA relevance, Section C of Annex I.
- Directive (EU ) 2018/843 of the European Parliament and of the Council of 30 May 2018, amending Directive (EU) 2015/849 on the prevention of the use of the financial system for the purposes of money laundering or terrorist financing and amending Directives 2009/138/EC and 2013/36/EU.
- Dr Alexandros L. Seretakis, (n 121).
- Dr Alexandros L. Seretakis, (n 121).
- Dr Alexandros L, Seretakis, 2024. "Central bank digital currencies: opportunities and risks". J. Int. Bank. Law Regul. 39 (7), 241-245.
- Elizabeth Lopatto, "How the Anchor Protocol Helped Sink Terra" Verge (20 May 2022). Ethereum Price History May 20, 2024' (Statista) < https://www.statista.com/statistics/ 806453/price-of-ethereum/ > accessed 21 May 2024.
- Executive Order on Ensuring Responsible Development of Digital Assets (9 March 2022), https://www.whitehouse.gov/briefing-room/presidential-actions/2022/03/09/executive-order-on-ensuring-responsible-development-of-digital-assets/Opens in a new window Accessed 5th July 2024
- F.C.A. "Finalised non-handbook guidance on cryptoasset Financial Promotions" (November 2023) FG23/3.
- FATF, (n 3); Henry Hillman, (n 105).

FATF, "Guidance for a Risk Based Approach to Virtual Currencies" (25th June 2015).

FATF, Virtual Currencies – Key Definitions and Potential AML/CFT Risks' (2014) Virtual currencies – Key Definitions and Potential AML/CFT Risks (fatf-gafi.org), 4. Accessed 21 May 2024.

Financial Action Task Force, (n 3).

- Financial Instruments and Exchange Act (Act No. 25 of 1948).
- Financial Instruments and Exchange Act (2020) Act No. 66.
- Emma Fletcher, "Reports show scammers cashing in on crypto craze" Federal Trade Commission (3 June 2022).
- Georgia Mantalara, "An overview of the ML/TF risks and regulatory responses in the crypto-asset landscape (2021) Journal of International Banking Law and Regulation 36(11), 487 – 492; Henry Hillman, "Pass or play: should regulators address the money laundering risks posed by cryptocurrencies themselves or await legislative reform? (2024) Journal of Business Law 4, 301 – 328.
- Benjamin Geva, "Cryptocurrencies and the Evolution of Banking, Money and Payments" in Chris Brummer (ed.), Crypto-Assets. Legal, Regulatory and Monetary Perspectives (Oxford: Oxford University Press, 2019).
- Goto, Izuru, Kuribayashi, Yasuyuki, Saito, Takashi, 2019. Virtual currencies: regulators make their move. Int'l Fin. L. Rev. 75.
- Marco Gross, Christoph Siebenbrunner, 'Money Creation in Fiat and Digital Currency Systems' (IMF Working Paper, 2019) WP/19/285.
- Andreas Hanl, "Some Insights into the Development of Cryptocurrencies" (2018) MAGKS Joint Discussion Paper Series in Economics No 04-2018.
- S.E.C. v W.J. Howey Co, 328 U.S. 293 (1948).
- https://www.skadden.com/insights/publications/2022/01/2022-insights/regulation-enforcement-and-investigations/central-banks-consider-digital-currency-pros-and-cons Accessed 5th July 2024.

Ibid.

Ibid 7

- Ibid.
- 1D1d. Ibid

Ibid.

Ibid.

- 1D10.
- Ibid.

Ibid, 110.

Ibid.

Ibid. Ibid

- Ibid.
- Ibid.

Ibid.125.

- Ibid; Ryan Clements, "Built to Fail: The Inherent Fragility of Algorithmic Stablecoins" (2021) Wake Forest Law Review 11.
- Ibid, 2; FATF, Updated Guidance for a Risk-Based Approach. Virtual Assets and Virtual Asset Service Providers (October 2021), (https://www.fatf-gafi.org/media/fatf/ documents/recommendations/Updated-Guidance-VA-VASP.pdfOpens> in a new window.
- Ibid, 123; Sam Sutton, "House punts on stablecoin bill after Yellen raises flags over key provision" Politico (25 July 2022).
- In El Salvador the 'Ley Bitcoin' which is translated as the Bitcoin Law was passed by the Legislative Assembly of El Salvador on 8 June 2021, which gave Bitcoin the status of legal tender.
- Internal Revenue Service, "Gross Proceeds and Basis Reporting by Brokers and Determination of Amount Realized and Basis for Digital Asset Transactions" (9 July 2024) 2024-14004. Accessible at Federal Register:: Public Inspection: Gross Proceeds and Basis Reporting by Brokers and Determination of Amount Realized and Basis for Digital Asset Transactions Accessed 9th July 2024a.
- Internal Revenue Service, "Treasury, IRS issue final regulations requiring broker reporting of sales and exchanges of digital assets that are subject to tax under current law, additional guidance to provide penalty relief, address information reporting and other technical issues" (28 June 2024b) IR-2024-178. Accessible at Treasury, IRS issue final regulations requiring broker reporting of sales and exchanges of digital assets that are subject to tax under current law, additional guidance to provide penalty relief, address information reporting and other technical issues | Internal Revenue Service Accessed 9<sup>th</sup> July 2024.
- James Dean, 'Bitcoin experiences historic boom' Financial Times (London, 8 December 2017), 1, 2, 14-15.

Joaquín, Arriola, Juan Barredo, Zuriarrain, 2023. From "Crypto-Alternatives" to a regional unit of account: monetary proposals in Latin America for a Greater Shared Autonomy. Value Money Profit Cap. Today 39.

Julia, G., 2024. Campbell "At the crossroads of the cyberworld and the underworld: classifying crimes involving cryptocurrency". Co. Lawyer 45 (3), 75–85.

- U.K. Jurisdictional Taskforce 'Legal Statement on the Status of Cryptoassets and Smart Contracts' (2019).
- Kamps and Kleinberg, "To the Moon: Defining and Detecting Cryptocurrency Pump-and-Dumps" (2018) Crime Science 7(1), 18.
- Leaders' Declaration G7 Summit (7 8 June 2015), 9. Accessible at 7320LEADERS STATEMENT\_FINAL\_CLEAN.pdf (un.org) Accessed 4<sup>th</sup> July 2024.
- Lee I., 'The Top 5 Wildest Crypto Moments of 2021' (Markets Insider) < https://markets. businessinsider.com/news/currencies/top-5-wildest-crypto-moments-2021-nft-bitcoin-dogecoin-shiba-2021-12 > accessed 21 May 2024.
- Library of Congress: Law. 'Regulation of Cryptocurrency: Japan' (2022) Accessed at Regulation of cryptocurrency around the world | Library of Congress (loc.gov) Accessed 4th July 2024.

William J. Luther, "Is Bitcoin Intrinsically Worthless?" (2018) AIER Sound Money Project Working Paper No. 2018-07.

Mackenzie, "Criminology Towards the Metaverse: Cryptocurrency Scams, Grey Economy and the Technosocial" (2022) The British Journal of Criminology 62(6), 1537–1552, 1546.

- Trischa Mann, Audrey Blunden, (ed), Australian Law Dictionary (Oxford University Press 2015), 69.
- Mark Hallam, "China Test Drives National Digital Currency" Deutsche Welle (17 June 2022), https://www.dw.com/en/china-test-drives-national-digital-currency/a-62168123 Accessed 5th July 2024.
- Mary Elizabeth Burke, (n 35), 126.
- Mary Elizabeth Burke, (n 35), 110.
- Mary Elizabeth Burke, (n 35), 127.
- Mary Elizabeth Burke, (n 35), 124.
- Mary Elizabeth Burke, 2023. From Tether to Terra: the current stablecoin ecosystem and the failure of regulators. Fordham J. Corp. Financ. Law 28 (1), 107.
- Measures for the Administration of Internet Information Services 2000.

Satoshi Nakamoto, 'Bitcoin: A Peer-to-Peer Electronic Cash System'(2008).

- National Provincial Bank v Ainsworth [1965] A.C. 1175.
- Nian, Lam Pak, Chuen, David Lee Kuo, 2015. Introduction to Bitcoin. In: David Lee Kuo Chuen (Ed.), Handbook of Digital Currency: Bitcoin, Innovation, Financial Instruments and Big Data 8. Amsterdam: Academic Press is an imprint of Elsevier, pp. 5.
- Notice on Further Preventing and Handling the Risk of Speculation in Virtual Currency Trading" (People's Bank of China , 2021) Accessible at Notice on Further Preventing and Handling the Risk of Speculation in Virtual Currency Transactions Documents of the State Council\_Chinese Government Network <(www.gov.cn)> Accessed 5th July 2024.
- OECD, "Lessons from the Crypto Winter: DeFi versus CeFi" (OECD Publishing, Paris, 2022) OECD Business and Finance Policy Papers, No. 18.

Payment Service Regulations 2017 (2017/752).

Payment Services Act (2019) Act No. 2.

A.A. v Persons Unknown [2019] ewhc 3556.

Rao, Sandeep, 2021. Mt. Gox – The Gall of a giant" in Shaen Corbet. Understanding cryptocurrency fraud: the challenges and headwinds to regulate digital currencies 71–82.

Regulation (EU) 2023a/1114 of the European Parliament and of the Council of 31 May 2023 on markets in crypto-assets, and amending Regulations (EU) No 1093/2010 and (EU) No 1095/2010 and Directives 2013/36/EU and (EU) 2019/1937 (Text with EEA relevance).

Regulation (EU) 2023b/1114 (n 118).

Russia Plans to Use Digital Rouble in Settlements with China ", Reuters (26 September 2022), <a href="https://www.reuters.com/markets/currencies/russia-plans-use-digital-rouble-settlements-with-china-says-lawmaker-2022-09-26/Opens">https://www.reuters.com/markets/currencies/russia-plans-use-digital-rouble-settlements-with-china-says-lawmaker-2022-09-26/Opens</a> in a new window.

Ariel Santos-Alborna, Understanding Cryptocurrencies: Bitcoin, Ethereum, and Altcoins as an Asset Class (Business Expert Press, 2022), Chapter 7.

- SEC.Gov | SEC Charges Ripple and Two Executives with Conducting \$1.3 Billion Unregistered Securities Offering' < https://www.sec.gov/news/press-release/2020-338 > accessed 21 May 2024.
- Securities and Exchange Commission v Shavers Case (Dist. Court ED Texas, 18 September 2014) No.4:13-CV-416.
- Securities and Exchanges Act (n 64), Section 3.
- Securities and Exchanges Act 1934 15 U.S.C. § 78a et seq.
- Gauri Sinha, "Cryptocurrencies and anti-money laundering regulation: the cat and mouse game" (2022) Comp. Law 43(12), 377 – 384.
- Sohail, Ali, Mayor, Suhail, 2022. The 'crypto crash': a catalyst for further crypto litigation? Butterworths J. Int. Bank. Financ. Law 37 (8).

Robert Stevens, Liam J. Kelly, "What Is Terra? The Chaotic Algorithmic Stablecoin Protocol Explained" DecryptU (11 May 2022).

*Supra* (n 93).

Telecommunications Regulations of the People's Republic of China 2000.

- The Author acknowledgesthat there are addition reasons towards this particular increase in value of both Bitcoin and Ethereum but has specifically picked these two examples as they were two of the most notable.
- The FATF Recommendations' < https://www.fatf-gafi.org/en/publications/ Fatfrecommendations/Fatf-recommendations.html > 17, accessed 5 July 2024; For guidance on Recommendation 15, 78 – 79.
- The FATF Recommendations' < https://www.fatf-gafi.org/en/publications/ Fatfrecommendations/Fatf-recommendations.html > 17 – 18, accessed 15 March 2024; For guidance on Recommendation 16, 80 – 85.

The Financial Services and Markets Act 2000 (Regulated Activities) Order 2001a No. 544.

The Financial Services and Markets Act 2000 (Regulated Activities) Order 2001b, Part III.

This Is How the Top Cryptocurrencies Performed in 2021' (World Economic Forum, 26 January 2022) < https://www.weforum.org/agenda/2022/01/top-crypto-currencies-performance-2021/ > accessed 21 May 2024.

Tomoko Amaya (n 77).

- Tomoko Amaya, (n 77), 6. Tomoko Amaya, (n 77), 6.
- Tomoko Amaya, (n 77), 0. Tomoko Amaya,(n 77), 10.
- Tomoko Amaya, "A Speech on 'Regulating the crypto assets landscape in Japan' at the
- crypto asset roundtable hosted by OMFIF" (10 November 2022), 5. Presentation material accessible at: A speech on "Regulating the crypto assets landscape in Japan" at the crypto asset roundtable hosted by OMFIF : FSA Accessed 5th July 2024.
- H.M. Treasury, Cryptoassets Taskforce: final report (October 2018) Accessible at Cryptoassets Taskforce: final report - GOV.UK (www.gov.uk) Accessed 4th July 2024.

# T. Burgess

Trust Business Act (Act No. 154 of December 3, 2004).

Tsuchiya, Yoichi, Hiramoto, Noaki, 2021. How cryptocurrency is laundered: case study of Coincheck hacking incident. Forensic Sci. Int. Rep. 4, 100241.

- Xihan Xiong, Junliang Luo, (n 49). Xihan Xiong, Junliang Luo, (n 49).
- Xihan Xiong, Junliang Luo, (n 49), 12. Xihan Xiong, Junliang Luo, (n 49), 11.

- Xihan Xiong, Junliang Luo, "Global Trends in Cryptocurrency Regulation: An Interview" (Cornell University, 2024), 13, Accessible at: [2404.15895] Global Trends in Cryptocurrency Regulation: An Overview (arxiv.org) Accessed 4th July 2024.
- Vibin Mu, Angela Mu, "CBDC: Concepts, Benefits, Risks, Design, and Implications" (2022) Available at SSRN: http://dx.doi.org/10.2139/ssrn.4234876.
- Ruixiang You, 'A New Dimension in the World Economy Fiat Digital Currencies: A Review' (2022) BCP Business & Management 30, 705 - 711.