

IS THIS OUR PLUMBUS? AN EXPLORATION OF CRYPTO AND VIRTUAL CURRENCIES THROUGH A COMPLIANCE LENS

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ABSTRACT

In this comment piece, I will seek to examine the relationship between cryptocurrencies and virtual currencies from a compliance perspective. I will tie this to the underlying theme from multiple studies, that a lack of knowledge of these products means more needs to be done by policymakers and the crypto industry to form cohesive and understandable standards that unearth what these products are, how they are used and how compliance analysts can be best supported to apply best practice procedures when conducting due-diligence checks. I will seek to lay out the advantages and disadvantages of recent developments and explore the challenges they pose on a socio-economic and macro level. This piece dissects the topic through four chapters.

The first ties it into developments that unfolded during the global financial crisis, the use of collateralized debt obligations and other derivatives-based financial instruments, ultimately showing how a lack of knowledge was an underlying theme within the banking system during the 2008 global financial crisis. The second chapter combines the theme of knowledge and awareness of a product with the way in which people view cryptocurrency and digital coins, including regulators, courts and policymakers.

The third explores recent developments from international central banks and governments, from sanctioned countries using of the product to help their citizens to international alliances forming across the globe in support of central-bank digital currencies.

The final chapter unpacks the advantages and disadvantages of using these financial instruments, from countries in the global south suffering from scams to the pressure it takes on energy efficiency, concluding that more needs to be done to educate users, regulators and everyone in between for the success of the digital currency to be fully realized.

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I. A HISTORY LESSON FROM THE DERIVATIVES MARKET

Cryptocurrencies. Virtual currencies. Digital coins. Studies from ING¹ and St Andrews University² reveal that, “while most of us now know something about these terms, many of the details are still a little sketchy.” For me, the term cryptocurrency or virtual currency is ingrained somewhere in my brain that leads me to conjure up images from the popular animated TV show, *Rick & Morty*. I believe it will provide some insight on how people view ‘crypto’ in general. In the show, our titular characters sit down to watch alien television through the use of their ‘interdimensional cable’ device and witness the following:

“Plumbuses – Everyone has a Plumbus in their home. First, they take the dinglebop, and they smooth it out, with a bunch of Schleem. The Schleem is then repurposed for later batches. They take the dinglebop and push it through the Grumbo, where the Fleeb is rubbed against it. It is important that the Fleeb is rubbed, because the fleeb has all of the fleeb juice. Then a Schlommy shows up and he rubs it and spits on it. They cut the fleeb. They are several hizzards in the way. The blamphs rub against the chumbles. And the plubus and grumbo are shaved away. That leaves you with a regular old Plumbus.”³

Rick, the genius scientist and multidimensional traveler, nods sagely, whilst his oblivious grandson Morty, is as perplexed as the audience. Whilst this mock documentary is revealing the inner machinations of a nonsense object being produced through unintelligible steps using unknown ingredients, it leaves us completely in the dark without a frame of reference. “Huh,” Rick says, “always wondered how Plumbuses got made.”

In my experience as a journalist and former legal and compliance analyst, people are often enticed by financial products that sound ground-breaking. Who doesn’t wish to be the first to uncover something special? Being part of a cultural sea-change, being the right side of a technological paradigm shift, and generally appearing to have some insider knowledge on future trends, are all (understandably) valued in the industry. However, this focus on the symbolic value of products rather than their immediate value calls to mind the ‘father of postmodernism’, French sociologist and cultural theorist Jean Baudrillard, who once wrote:

“Far from the primary status of the object being a pragmatic one which would subsequently come to overdetermine a social value of the sign, it is the sign exchange value

¹ Jessica Exton, *Cryptocurrencies: Curiosity and confusion among consumers*, ING (Sep. 18, 2019), <https://think.ing.com/articles/sizing-up-the-money-revolution-crypto-bitcoin-currencies-digital/>

² Georgios A. Panos & Tatja Karkkainen, *Financial Literacy and Attitudes to Cryptocurrencies*, WORKING PAPERS IN RESPONSIBLE BANKING & FINANCE, WP N° 20-002, pg 6 (2020).

³ Rick & Morty, season 2, episode 8, “Interdimensional Cable 2: Tempting Fate”. Directed by Juan Meza-León. Written by Dan Guterman, Ryan Ridley and Justin Roiland, aired September 20 2015, on [adult swim].

(valeur d'échange signe) which is fundamental – use value is often no more than a practical guarantee (or even a rationalisation, pure and simple) [...] An accurate theory of objects will not be established upon a theory of needs and their satisfaction, but upon a theory of social prestation and signification.”⁴

Baudrillard's intervention into the political economy debate between Marxists and classical liberal interpretations of value added a sociological dimension. Objects are bought and displayed as much for their sign-value, i.e. prestige or status, as their use-value, and that the phenomenon of sign-value has become an essential constituent of the commodity and consumption in contemporary consumer society.⁵ This can be witnessed from early collectors of Fabergé eggs in 19th century Imperial Russia through to Gen-Z's obsession with the (intentionally falsely scarce and commercially hyped) Supreme brand – everyone wants to get in on “the next big thing”, and sometimes that next big thing has value based on hype rather than utility.

But how would this translate when working behind a compliance desk at a bank? During my time working at the bank, a client had signed up for the first set of weather derivatives that I had encountered. For me, it was puzzling. Why would you put an ‘option’ or a ‘forward’ on the weather? This seemed perplexing and excessive. I thought that this must be the first ever occasion that someone convinced someone else to purchase such a product. I was sorely mistaken. In fact, weather derivatives had been around since the 1990s as a tool that farmers could opt for as opposed to insurance in order to ‘price-in’ certain weather affecting their crops – from an unexpected dry season to flooding.⁶ However, the client in this instance was a high-risk hedge fund based in the Cayman Islands that was making various bets on what they deemed as high-risk products to receive the highest yields for their clients.

At the time, people in the team were only required to make the appropriate anti-money laundering (AML), know your client (KYC), market research, due-diligence, contractual and legal capacity assessments for us to be comfortable that there were no underlying risks we had not considered for the trade to go through. But nowhere within the process was it a legal requirement for any team member to demonstrate the requisite knowledge or understanding of the product. I simply went out of my way to undertake a form of ‘extra-curricular’ reading to fully get up to speed with what was being asked of me. This in itself is a risk.

⁴ JEAN BAUDRILLARD, FOR A CRITIQUE OF THE POLITICAL ECONOMY OF THE SIGN, pg 2, (St. Louis, Mo: Telos press Ltd., 1981).

⁵ Douglas Kellner, *Jean Baudrillard*, THE STANFORD ENCYCLOPEDIA OF PHILOSOPHY (Apr. 7, 2020) <https://plato.stanford.edu/archives/win2019/entries/ baudrillard/>.

⁶ Sarfraz Thind, *As Temperatures Tumble in North America, Weather Derivatives Warm Up*, INSTITUTIONAL INVESTOR, (Apr. 7, 2020) <https://www.institutionalinvestor.com/article/b14zbksjmn4504/as-temperatures-tumble-in-north-america-weather-derivatives-warm-up>.

The lack of understanding of financial products – be it back or front-office – within banking has led to catastrophic consequences. During the run-up to the subprime mortgage crisis, Fabrice (“Fabulous Fab”) Tourre, a former Goldman Sachs trader, sent an email to his girlfriend at the time who was also an employee at the bank in January 2007. His email stated: “Only potential survivor, the fabulous Fab ... Standing in the middle of all these complex, highly leveraged, exotic trades he created without necessarily understanding all of the implications of those monstrosities!!!” But that wasn’t all. Tourre admitted to his lack of understanding of these financial products in yet another email sent in March 2007, referring to the financial products he worked on as “pure intellectual masturbation, the type of thing which you invent telling yourself: ‘Well, what if we created a “thing”, which has no purpose, which is absolutely conceptual and highly theoretical and which nobody knows how to price?’” His understanding of these financial products shows a lack of awareness of what they actually are and do.

Recall Baudrillard once again: trading something that no longer holds value in of itself, but has value depending on how it communicates the illusion of value; a copy of a copy of a copy. Similarly, cryptocurrency wishes to disavow or even transcend conventional currency, but is utterly reliant on such currencies as a reference in order to describe how they work to prospective investors. Despite their libertarian rhetoric, the jackpot for a cryptocurrency is to demonstrate its popularity amongst a core base of early investors such that it may be considered a viable option for established financial houses: selling the glamour of revolution with the security of the state. However, in the case of these derivatives, these tools were not just theoretical; they had serious real consequences that affected real people and their lives. Tourre’s emails were admitted in court during a civil case brought by the Securities and Exchange Commission (SEC) after the global financial crisis, where he was found guilty for his role in a mortgage deal that cost investors \$1 billion. This was because of a financial product – Abacus – that was created by the hedge fund Paulson & Co. The product is widely known as a collateralized debt obligation (CDO), and thanks to various long reads in broadsheet newspapers in the immediate aftermath of the 2008 financial crisis, and the explanation by pop-star Selina Gomez (with glamorous assistant Professor Richard H. Thaler) in the movie ‘The Big Short’, there has been an uptake in mainstream understanding of such complex financial instruments. Unfortunately for the financial industry, and their compliance analysts, a working knowledge of the risks of certain products prior to their becoming midwives to misery is infinitely more preferable.

This has been a trend for the derivatives product since its inception. “There is evidence of the use of derivatives in the 17th century in Holland and in Japan. Derivatives were already considered suspicious.”⁷ And that isn’t the only example: gambling, betting or speculating on movements in securities or commodities prices without actually owning the referenced security or commodity was seen as early as 1829, known as ‘stockjobbing’, an early version of short-selling which was outlawed in New York. “The Stock Jobbing Act was ultimately repealed in 1858 because it was overly broad and captured legitimate forms of

⁷ Gunther Capelle-Blancard. *Are Derivatives Dangerous? A Literature Survey*, ÉCONOMIE INTERNATIONALE, 123(3), 67-89 (2010).

speculation. However, the question of whether to allow bets on security and commodity prices outside of organized exchanges continued to be an issue.”⁸

Although derivatives might not be inherently dangerous, the suspicion of the tool emerges from a lack of complete and utter understanding of what it is and its uses. The emergence of powerful new technological breakthroughs and the enhancements of these financial products only lead to greater complexity. History has shown us that the more complicated financial instruments become, the greater the risk it can pose. A lack of understanding of what these products are from investors, traders, consumers and regulators can lead to damaging consequences. Furthermore, if a product appears unintelligible from its marketing materials, a compliance analyst should not be afraid to operate under the assumption that this unintelligibility may be deliberate.

II. LEGAL AND REGULATORY TREATMENT OF CRYPTOCURRENCIES

A cryptocurrency is defined as virtual or digital money which takes the form of tokens or coins. Financial instrument-wisdom-provider, *Investopedia*, defines the ‘crypto’ in cryptocurrencies as a complicated cryptography which allows for the creation and processing of digital currencies and their transactions across decentralized systems. “Alongside this important crypto feature of these currencies is a common commitment to decentralization; cryptocurrencies are typically developed as code by teams who build in mechanisms for issuance (often, although not always, through a process called “mining”) and other controls.”⁹

Cryptocurrencies and digital coins have a floating reliance on future prestige because the idea is that you are investing in something that *might* derive value in the future and distils an air of status once it does appreciate in value in the markets. An extract below from St Andrew’s study highlights that the poorer candidates were actually more likely to invest in cryptocurrencies, viewing it as aspirational and ahead-of-the-curve. In other words, the association with complex financial manoeuvring, of being somebody who knows about Bitcoin and willing to put their money where their mouth is, may be a primary motivation behind retail client investment, under conditions where they are unable to explain how they work. This is not to say that cryptocurrencies do not or will not do what they say they will in the future; rather a comprehensive understanding of cryptocurrencies cannot be assumed by compliance professionals on the part of the retail investor. More specifically:

“The average purchasing power parity (PPP)-divided monthly household income per capita in the sample is €1,116.4, with owners and prospective owners of cryptocurrencies

⁸ United States. Congress. Senate. Committee on Agriculture, N. (2009). The role of financial derivatives in the current financial crisis: hearing before the Committee on Agriculture, Nutrition, and Forestry, United States Senate, One Hundred Tenth Congress, second session, pg 75-78 October 14, 2008. Washington: U.S. G.P.O.

⁹ Jake Frankenfield, *Cryptocurrency*, INVESTOPEDIA (Apr. 7, 2020). <https://www.investopedia.com/terms/c/cryptocurrency.asp>.

being poorer by some €140 per month on average. Individuals intending to own cryptocurrencies in the future have some €237 per month lower income, compared to individuals who have heard but do not intend to own cryptocurrencies.”¹⁰

Furthermore, recent studies reveal that “consumer knowledge about digital currencies is limited, and cash is still king.”¹¹ The paradox is that “the more financially literate candidates were less likely to own cryptocurrencies and they are more likely not to intend to own them in the future.”¹² As you can imagine, this is a huge problem for the expansion of the industry. Has there ever been a product so heavily lent on by banks and investors where the more you learn about the product, the less likely you are to want to invest in or use it? The conventional compliance problem is when individuals with specialist expertise, mastery of regulatory loopholes or aspects of a product’s application, try to circumvent thorough examination by the compliance analyst or officer. This requires compliance teams to work out what somebody is trying to avoid disclosing and why. In the case of cryptocurrency, it may be the case that many investors know as little as any untrained analyst. The product could be either an inert purchase made on the assumption that it must be a safe bet because of its growing popularity, or a powder keg that requires intensive scrutiny.

In the case of the Abacus scandal, it was only the few at Paulson & Co and Goldman Sachs that knew the full intricacies of the product, and this led to a negative perspective on their success; they took this knowledge and used it to make “short” positions on the product’s overall downfall. The study also shows the inverse as it was “the groups with a lower level of knowledge that [were] more open to future adoption.”¹³ This echoes sentiment felt in the aftermath of the global financial crisis (GFC). Industry reviews, case-law and market research after the crash reveals that only a few people in the market knew what a derivative was, yet they still traded them profitably for some time. But it is not just the problem of traders and their prospective investors. This is a regulatory and policy issue as well, that directly correlates to the treatment and understanding of digital currencies.

“With the growth of various kinds of derivatives in the late 20th Century, there was legal uncertainty as to whether certain derivatives including credit default swaps violated state ‘bucket shop’ and gambling laws.”¹⁴ In fact, the Commodity Futures Modernization Act of 2000 (CFMA) created a safe harbor by pre-empting state and local gaming and ‘bucket shop’ laws except for general antifraud provisions and exempting certain derivative transaction on commodities and swap agreements including credit default swaps from the Commodity Futures Trading Commission (CFTC) regulation. “As the global economy slows and the risk of corporate default increases [...] recent proposals to regulate CDS

¹⁰ See also, Panos. G & Karkkainen. T, p.26.

¹¹ See also, Exton. J.

¹² See also, Panos. G & Karkkainen. T, p.30.

¹³ See also, Exton. J.

¹⁴ See also, United States. Congress. Senate. Committee on Agriculture, N. pg 76-78.

markets show limited awareness of the issues,” writes Satyajit Das, former banker and treasurer turned consultant and author¹⁵. If a regulator does not understand the product that they are regulating, then the odds are stacked against the compliance analyst or chief compliance officer, as the likelihood of their knowledge on the subject matter is predetermined by people who lacked awareness of the issues surrounding the CDO and sub-prime mortgage crisis.

Regulators showed a similar lack of awareness and understanding when trying to regulate cryptocurrencies. The SEC deemed virtual currencies to be securities by reason that they are investment contracts and the CFTC has classified them as commodities. Other regulators around the globe followed suit with Canada, Finland and other European countries viewing them as commodities with additional tax measures. Picture a young compliance analyst who has been tasked with covering the commodities trading desks for AML, due-diligence and other regulatory checks. This analyst has come to grips with the standard products that the trading desk usually works with, i.e., gold, oil, energy derivatives or physicals. This analyst has since been told to also conduct checks on cryptocurrencies. That would not require the same level of skills that this person might have been using for this role. They would require training and a complete understanding as to why this has been classified as a commodity. They might even miss a few ‘red flag’ elements. This is why, despite these products being regulated, lawmakers have not gone far enough. Policymakers have merely opted to box them into existing categories and groups within pre-existing regulation. But they should have examined all of the digital currencies closely and properly understood these products in order to create bespoke legislation that’s tailor-made for the industry without ambiguity. Perhaps it should also receive oversight from regulators who actually do understand the product – forming a new body featuring legal financial technology (fintech) and digital currency specialists. Victor N.A. Metallo, assistant professor of Business Law at Montclair State University agrees with this hypothesis, writing:

“A need for such an entity is clear when looking at, for example, Ripple Labs’s (“Ripple”) XRP, a currency designed to work with the existing banking system. Ripple was sued over whether XRP is a security requiring registration with the SEC. Ripple maintains that XRP is a currency, not a security, because a retail purchaser of the currency “does not own rights to the profits or any dividends of the company.” Ripple contends all XRP virtual currency have been pre-mined and designed for use by banks as bridge assets and can exist without the company. In light of such lawsuits, Congress should create a separate entity that would classify each virtual currency as a security or commodity and determine which commission, the SEC or CFTC, has oversight.”¹⁶

¹⁵ Satyajit Das, *Insight: Credit default swaps and amplified losses*, FINANCIAL TIMES (Apr. 7 2020), <https://www.ft.com/content/3ee5e766-08d7-11de-b8bo-0000779fd2ac>.

¹⁶ Victor N.A. Metallo, *Are They Commodities or Securities? Virtual Currency Markets – Congress Must Create A New Regulatory Entity*, THE WAKE FOREST L. REV. ONLINE, 44 (Apr. 7, 2020) <http://wakeforestlawreview.com/2018/09/are-they-commodities-or-securities-virtual-currency-markets-congress-must-create-a-new-regulatory-entity/>.

But Metallo's findings do not go far enough. Virtual currencies should not be classified as any existing financial instrument as they are new entities in the market, requiring their own definition enshrined in legislation. In fact, a recent decision in March 2020 by the Supreme Court in India found that virtual currencies are not commodities.

"The Supreme Court after going through various explanations and definitions from different sources, observed that "there is unanimity of opinion among all the regulators and the governments of various countries that though virtual currencies have not acquired the status of legal tender, they nevertheless constitute digital representations of value and that they are capable of functioning as (i) a medium of exchange and/or (ii) a unit of account and/or (iii) a store of value".¹⁷

The court investigated the definition of 'currency' as given under various Indian Acts and took into consideration judgments from lower courts to get clarity on the question of whether virtual currencies are just commodities. The judgment stated that the argument of the petitioner, the Internet and Mobile Association of India, that virtual currencies are commodities cannot be accepted. Since it is accepted by some institutions as valid payment for goods and services, "it squarely comes under the purview of the Reserve Bank of India (RBI)." The ruling adds that: "if an intangible property can act under certain circumstances as money (even without faking a currency) then RBI can definitely take note of it and deal with it."¹⁸ The courts essentially denied that these financial instruments were 'commodities', but it did not classify them as 'money' either – rather, they were considered an intangible property that can sometimes get you your groceries. A novel interpretation, but still a bit too ambiguous.

Additionally, to reiterate Metallo's point on XRP, there is not just one type of digital currency. There are several different types of virtual coins and they each come with their own prospective risks. Although this article does not seek to name them all in addition to their inner operations, it will highlight a few below¹⁹:

- Ethereum offers the Ethereum Virtual Machine (EVM) via its platform, a decentralized virtual machine that executes peer-to-peer contracts using a cryptocurrency known as ether.
- Facebook's Libra, a permissioned blockchain digital currency, which will reportedly support both existing government-backed currencies, like the US dollar and the euro, and the Libra token when it is eventually completed and ready to launch.

¹⁷ Supreme Court of India, Internet and Mobile Association of India (IMAI) v Reserve Bank of India (RBI). Justices: Aniruddha Bose, R F Nariman, J. Ramasubramanian, (Mar. 4 2020) https://main.sci.gov.in/supremecourt/2018/19230/19230_2018_4_1501_21151_Judgement_04-Mar-2020.pdf.

¹⁸ See also, SC judgement, IMAI v RBI, 2020.

¹⁹ Angela Scott-Briggs, *10 Types of Digital Currencies and how they work*, TECH BULLION (Apr. 7, 2020) <https://techbullion.com/10-types-digital-currencies-work/>.

- Litecoin is a peer-to-peer cryptocurrency released under the MIT/X11 licence.
- Gemini dollar (GUSD) is an ERC20 stablecoin that allows holders to send and receive US dollars across the Ethereum network and can be exchanged for other cryptocurrencies on other exchanges offering different trading pairs.
- Bitcoin, the infamous digital currency created by the Satoshi Nakamoto, which can be used to buy items locally and electronically.

One crypto-news website's definition on Bitcoin states: "as a new user, you can use Bitcoin without understanding all its technical details. Once you install a Bitcoin wallet on your mobile phone or computer, it will generate the first Bitcoin address and you can generate more whenever you need them."²⁰ Propagating user consent without distilling the requisite knowledge on them to fully understand the financial instrument in order to make the right decision is a red flag, especially within the compliance industry. But this can only be preserved through the lack of awareness from the top of the chain such as policy makers and regulators, which trickles down to traders and compliance analysts. It is understandable to be a technology consumer and enjoy a company's products without fully understanding how everything goes together (if you broke up my laptop, I would struggle to put it back together), but cryptocurrency is unique in the sense that every user is also a prefigurative retail client. Even if you do not directly invest in the company, to invest in the currency is a similar act, done for similar reasons. To invest in cryptocurrency is to invest with the belief of future utility, of future returns.

Legislators and courts world-wide should reconsider what 'currency' is within this digital age. Although it is well and good that these tools are being regulated, they are not being classified correctly. This only increases the likelihood of a compliance malfunction, fraud or inappropriate trading behavior as the lack of properly defining a financial instrument leaves room for ambiguity. Ambiguity, as shown above, can create risks that should otherwise not exist if someone merely took the time out to understand the product. That knowledge can be distilled all the way to a bank's compliance analyst, who can "tick a box" with confidence when authorizing or prohibiting a certain transaction from taking place.

III. RECENT DEVELOPEMENTS

Aside from the recent Supreme Court ruling in India determining what is and is not a virtual currency, the story of the digital coin has flourished over the past two years. Various governments and policymakers across the globe have shifted their stance towards authorization of these financial instruments.

The recent UK Budget announcement by Chancellor Rishi Sunak, mentions it "looks forward to the Bank of England's (BoE's) discussion paper on a potential UK central bank

²⁰ See also, Scott-Briggs, A.

digital currency (CBDC).”²¹ In fact, the Bank of Canada, the Bank of England, the Bank of Japan, the Swiss National Bank and the Sweden’s central bank, have formed an alliance with the European Central Bank (ECB) and the Bank for International Settlements (BIS), to begin the process of reviewing how a digital currency owned by each country’s central bank could come into existence.

In March this year, the US dabbled in the creation of a ‘digital dollar’ as Congress was putting together the terms of its stimulus package to save the economy from impacts of the coronavirus pandemic. The offer by House Democrats included a forward-looking kind of stimulus: the creation of a ‘digital dollar’ and the establishment of ‘digital dollar wallets.’ However, the final version of the economic stimulus package offered by Speaker Nancy Pelosi in the House Democrats, no longer included the US ‘digital dollar’ proposal.²²

Russia has also softened its approach towards digital currencies as prime minister Mikhail Mishustin introduced a new bill to the country on 17 March 2020 which creates regulatory sandboxes to test “digital innovation technologies” such as blockchain and cryptocurrency. These products will be exempt from requirements such as mandatory authorised capital, fund reserves and reporting to the central bank, and the standards for the maximum risk per borrower can be cancelled.²³

Last year was also a big year for governments testing their own digital currencies. China has piloted its digital yuan back in November²⁴ and the Bahamas begun testing its new digital Sand Dollar in the same year²⁵. Although Kenya, Ghana, Nigeria and Mauritius have not formed any plans for a government-backed digital coin, they are also examining the regulation of cryptocurrency as it is still viewed with suspicion and widely viewed as a Ponzi scheme²⁶. It was also a year for sanctioned nation states to examine the possibilities of a government backed digital currency as North Korea, Cuba, Venezuela and Iran all

²¹ *HM Treasury and the Rt Hon Rishi Sunak MP*, Budget Speech 2020 (Mar. 11, 2020). <https://www.gov.uk/government/speeches/budget-speech-2020>.

²² Jason Brett, *Coronavirus Stimulus Offered By House Financial Services Committee Creates New Digital Dollar*, FORBES (Mar. 23, 2020). <https://www.forbes.com/sites/jasonbrett/2020/03/23/new-coronavirus-stimulus-bill-introduces-digital-dollar-and-digital-dollar-wallets/#59381f5b4bea>.

²³ Government House, Moscow, Meeting with deputy prime-ministers (Mar. 16, 2020) <http://government.ru/en/news/39161/>.

²⁴ Brandon Stewart, *Timeline: China’s Digital-Currency (Yuan), Bitcoin And Cryptocurrency*, READBTC (Apr. 7, 2020). <https://www.readbtc.com/posts/china-digital-currency-yuan-bitcoin-cryptocurrency-timeline-recent-events>.

²⁵ Michael LaVere, *Central Bank of the Bahamas to Launch Its Own Digital Currency ‘Sand Dollar’*, CRYPTO-GLOBE (Apr. 7, 2020) <https://www.cryptoglobe.com/latest/2019/12/central-bank-of-bahamas-launching-sand-dollar-in-exuma/>.

²⁶ Jen Stolp, Ashlin Perumall, Emma Selfe, *Blockchain and Cryptocurrency in Africa*, BAKER MCKENZIE (Apr. 7, 2020), https://www.bakermckenzie.com/-/media/files/insight/publications/2019/02/report_blockchainandcryptocurrencyreg_feb2019.pdf.

considered this option in the second half of 2019²⁷. In fact, in December 2017, Venezuela's president, Nicolas Maduro, announced the launch of an oil-backed cryptocurrency – the Petro. Maduro made the Petro the “official alternate currency” in the country and reportedly issued 100 million tokens. The Petro was launched in pre-sale in February 2018 and in December, Maduro told state-run media that Venezuela had a schedule for selling oil in Petros during 2019 as part of an effort to bypass channels that involve US dollars.²⁸

IV. ADVANTAGES AND DISADVANTAGES

The above notion of sanctioned countries being able to use cryptocurrencies to assist its citizens comes at an advantage for people who can send and receive money abroad using this tool to pay for their bills and groceries. The advent of cryptocurrency has been a welcome product for these nations as it creates a solution to financial exclusion. Cuba's economy minister, Alejandro Gil Fernandez, said the government was consulting with academics to study the potential use of cryptocurrency for its national and international commercial transactions, while the country's president, Miguel Diaz-Canel, announced the plan would raise capital for around one quarter of the population, helping to pay for reforms during a public address on local television²⁹. This is a similar approach taken to that of Iran, despite its top legislators being highly dismissive of the product until a conference with business leaders last year. Although this benefits the citizens of these countries under sanctions, it would pose difficult questions for those in the compliance industry working within an institution that adheres to US sanctions.

There are also potential risks for these nations caused by a lack of transparency surrounding digital currencies. As mentioned above, Kenya, Ghana, Nigeria and Mauritius have all been weighing up the potential pros and cons of a virtual currency which is still met with great distrust in the continent. Due to the lack of transparency within these products, it has been easy for scammers and fraudsters to manipulate the system for their advantage, and Africa has been a prime target for these perpetrators.

On a popular BBC podcast, ‘The Missing Cryptoqueen’³⁰, the broadcasting crew discover that Dr. Ruja Ignatova, aka “the Cryptoqueen”, had managed to defraud her users for millions of pounds all under the guise of being the next Bitcoin. “Investors often told us that what drew them in initially was the fear that they would miss out on the next big thing. They'd read, with envy, the stories of people striking gold with Bitcoin and thought

²⁷ Katherine Kirkpatrick, Christine E. Savage, Russell Johnston, Matthew B. Hanson, *Virtual Currency in Sanctioned Jurisdictions*, KING & SPALDING (Apr 7, 2020), https://www.kslaw.com/news-and-insights/virtual-currency-in-sanctioned-jurisdictions#_edn2.

²⁸ See also, Kilpatrick K, Savage C, Johnston R & Hanson M.

²⁹ Marie Huillet, *Cubans Are Turning to Bitcoin to Access Global Economy: Report*, COINTELEGRAPH, (Sep. 13, 2019).<https://cointelegraph.com/news/cubans-are-turning-to-bitcoin-to-access-global-economy-report>.

³⁰ Jamie Bartlett, *Cryptoqueen: How this woman scammed the world, then vanished*, BBC (Nov. 24, 2019). <https://www.bbc.co.uk/news/stories-50435014>.

OneCoin was a second chance,”³¹ according to Jamie Bartlett, reporter and podcaster at the BBC. This highlights Baudrillard’s point about the sign-value as people wanted to get on the “next big thing” based off hype alone. Even being told to their faces by reporters that they were victims of a proven fraud and that there was an international arrest warrant out for the very person that had convinced them to part with their cash was not enough to dissuade locals. A combination of the anchoring effect, the sunk cost fallacy and the growing political distrust of interloping proscriptive elites lays the ideological groundwork for this type of scheme to operate effectively, acquiring an arguably cult-like following of supporters as emotionally invested in the OneCoin revolution as much as any financial investment made.

Dr. Ignatova managed to launch her OneCoin product in a remote village in Uganda, despite there being publicized revelations in the Western international press flagging it as a potential scam. This illustrates the study by St Andrews that poorer candidates – as those in the Ntangamo region of Uganda were – wanted to invest in something new which can get them out of their current situation. Bartlett wrote: “In Europe, less money was invested in the first six months of 2017 compared to the same period in 2016. But in Africa, the Middle East and the Indian subcontinent, it was the other way around. As the money started drying up in Europe, promoters turned more and more to countries like Uganda.”³² The Financial Conduct Authority (FCA) in the UK issued a warning to investors about the risks OneCoin poses on its website. But how was someone in the Ntangamo region of Uganda supposed to find that out? Western sellers of OneCoin sold the dream to those living in remote towns in the Global South; taking their own lack of transparency and the user’s lack of awareness to their advantage. And that was not the only scam that scared off potential CBDC’s in the continent.

- Mavrodi Mundial Moneybox (MMM), founded by Sergei Mavrodi, a convicted Russian fraudster, approached the African market and took advantage of Bitcoin’s promise to free people from banks and social inequality. “In both Nigeria and Kenya, MMM claimed to be a mutual fund platform where users would contribute their bitcoin to a common funding pool and, in turn, realise 50% returns on their investments.” This turned out to be a Ponzi scheme.³³
- In South Africa, thousands of people lost more than \$80 million total in a bitcoin swindle orchestrated by BTC Global, a bitcoin trading company. “The company targeted members of the public and urged them to invest with a promise of 2% interest daily, 14% weekly and 50% monthly. However, after two weeks of operation, the company closed shop and fled with millions in investments.”³⁴

³¹ See also, Bartlett. J.

³² See also, Bartlett. J.

³³ Steven Weru, *Bitcoin Scams In Africa: Their History And How To Avoid Becoming A Victim*, BITCOIN MAGAZINE, (Jul. 19, 2019) <https://bitcoinmagazine.com/articles/bitcoin-scams-in-africa-their-history-and-how-to-avoid-becoming-a-victim>.

³⁴ See also, Weru S.

- Velox 10 was able to draw in thousands of Kenyans, with some claiming to have lost as much as \$30,000 (3,000,000 KES). To join the investment outfit, members were required to pay a registration fee of \$100, after which they were promised daily returns of \$4,000.³⁵

These scams show that it is not a surprise that countries like Nigeria and Kenya are not running into the arms of issuing their own digital currencies so fast, and instead consider enforcing AML protocols first. As lawyers based in King & Spalding suggest, “exchanges, as well as other crypto participants, such as wallet providers, asset managers, and financial institutions, should strengthen AML and CFT frameworks, along with associated KYC procedures, to ensure that cryptocurrency business lines comply.”³⁶

Scams and a lack of transparency are also not the only issues at hand when considering the use of cryptocurrency. As the world is moving towards more sustainable and environmentally friendly applications and systems, it should be noted that bitcoin “consumes more energy than the entire nation of Switzerland,”³⁷ according to new estimates published by researchers at the University of Cambridge. The Cambridge Bitcoin Electricity Consumption Index³⁸ highlights how the global Bitcoin network is consuming more than seven gigawatts of electricity. “Over the course of a year that’s equal to around 64 TWh or terawatt hours of energy consumption. That’s more than the country of Switzerland uses over the same time period (58 TWh per year), but less than Colombia (68 TWh per year).”³⁹ With this in mind, if countries started rolling out large cryptocurrency projects, the energy consumption would only increase, making the world less energy efficient. The European Commission released its Disclosure Regulation, which was published in the EU Official Journal in December 2019. It forms part of a package of measures announced by the European Commission to improve firms’ consideration of environmental, social and governance (ESG) issues as part of their decision-making processes. The purpose of the Disclosure Regulation is to achieve more transparency on how financial market participants and advisers consider sustainability risks in their investment decisions and insurance or investment advice. As a compliance manager or broker-dealer, it would be hard to justify these high energy figures on the sustainability disclosure regulations issued by the EU. Sustainability should not just be a buzzword used in conferences or seen as what the youth of today form strikes about. It is something that the financial industry should take seriously as it plays a huge role in adding to pollution, so it should make up for its past mistakes by ensuring ESG matters are properly explored.

³⁵ See also, Weru S.

³⁶ See also, Kirkpatrick K, Savage C, Johnston R, Hanson M.

³⁷ James Vincent, *Bitcoin consumes more energy than Switzerland, according to new estimate*, THE VERGE (Jul. 4, 2019). <https://www.theverge.com/2019/7/4/20682109/bitcoin-energy-consumption-annual-calculation-cambridge-index-cbeci-country-comparison>.

³⁸ Cambridge Bitcoin Electricity Consumption Index (CBECEI), Cambridge Centre for Alternative Finance, University of Cambridge Judge Business School.

³⁹ See also, Vincent J.

V. CONCLUDING REMARKS

If digital coins were going to develop a way of being drastically more energy efficient, hone in on scammers, become more transparent and provide potential users – from employees within trading institutions to your average retail investor – with the requisite knowledge and expertise on the product, then it might have a promising future. But first the industry as a whole must come together to address these issues. The unintelligibility and unfamiliarity of its technological innovations with the layperson, their popularity with first-time retail clients without adequate financial literacy, the prevalence of multiple cryptocurrency scams that exploits the aforementioned intelligibility, and the inherent volatility of products that are bought on the basis of projected brand legitimacy, are all factors that must be addressed within the industry, and known to all compliance analysts engaging with these financial products today. If the current trends in cryptocurrency as a popular financial product continue with a similar makeup of client investors, then we all need to finally know how Plumbuses are made.