



Cryptocurrencies, Survey on Legal Frameworks and Regulation Around the World

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Abstract. Cryptocurrencies have been in the spotlight for the past few years. The centralization of the management of fiat currencies by banks led to their emergence with Bitcoin in 2008 as a way to present truly democratic money to the world. With the increase in the flow of capital to this market, new challenges and problems have arisen that governments must deal with. In this paper, a study of the legal frameworks that are being implemented throughout the world with the intention of regulating the cryptocurrency market is carried out. This study aims to understand the different points of view and interests that each country has when implementing each type of framework.

Keywords: Cryptocurrencies · Regulation · Review

1 Introduction

Cryptocurrencies have been in the spotlight for the past few years. The centralization of the management of fiat currencies by banks led to their emergence with Bitcoin in 2008 as a way to present truly democratic money to the world [27]. After the inflationary crisis brought about by COVID, capitalists have begun to look for alternatives to holding their wealth in cryptocurrencies.

With the increase in the flow of capital to this market, new challenges and problems have arisen that governments must deal with [1, 29, 30]. For example, cryptocurrencies have become a means of financing illegal activities, as well as a means to evade taxes. On the other hand, investors feel unprotected against the volatility of this market and manipulations by major capitals.

In this paper, a study of the legal frameworks that are being implemented throughout the world with the intention of regulating the cryptocurrency market is carried out. The study shows how the legal frameworks differ among the world's economic powers. This study aims to understand the different points

of view and interests that each country has when implementing each type of framework.

Following this introduction, Sect. 2 shows the study of the legal frameworks proposed by each of the world's economic powers. The study has been divided into three major world economic areas: the European Union (Sect. 2.1), the United States (Sect. 2.2, and the BRICS economic-trade union (acronym of an economic-trade association that has been carried out by the states of Brazil, Russia, India, China, and South Africa since 2008) (Sect. 2.3). Finally, the work ends with a conclusion in Sect. 3.

2 Legal Frameworks

In this decade of cryptocurrencies' operation, the money invested until 2020 amounted to \$221K million worldwide¹. According to some studies, 44% of these transactions in 2018 were intended to facilitate illicit activities [8]. Some of the characteristics of cryptocurrencies, especially their anonymity, have made them an attractive element to be used in criminal conduct. In the literature studied, it's been pointed out that the main crimes that have been linked to this phenomenon are the financing of terrorism, money laundering, tax evasions, and the purchase of illicit material or services. Therefore, the criminal aspect should be a focus of concern for States or supranational organizations [7, 11, 12, 15, 17, 28, 33, 35].

Thus, for authors such as Fernando Navarro, cryptocurrencies are considered an excellent way for money laundering. The author points out that according to some studies, the rise in the market in December 2017 was due to a speculative movement resulting from a large-scale money laundering [2]. Similarly, Patricia Saldaña points to Bitcoin as a protagonist in money laundering through the purchase of cryptocurrencies with money obtained from illicit gains [31].

On the other hand, the concern about tax evasion has been highlighted by another sector of the doctrine. Studies such as those carried out by Rain Xie, Mountney, and García Sigman highlight that, in addition to money laundering, the use of these crypto-assets for transactions of illicit goods and services is very common. The most usual method is through the Dark Web, the Internet black market, for the purchase of narcotics, weapons, or consumption of child pornography [14, 34]. García Sigman points out that cryptocurrencies are facilitating the purchase of narcotics on this dark internet wholesale [9].

As part of the study of the literature shows, one of the crimes that have generated greater concern to the institutions is tax evasions. Two characteristics facilitate the commission of the crime, the anonymity and the absence of financial intermediaries that control the movements as in the case of the [13] banks. Besides, terrorist groups have found cryptocurrencies a means of financing. This is pointed out by Dion-Schwarz in his study on the use of cryptocurrencies in terrorist activities [6]. The author highlights the use of this new technology for

¹ Data obtained from the total capitalization of the cryptomarket in real-time through www.tradingview.com. Date accessed June 9, 2020

the financing of terrorist groups and also highlights the alternative cryptocurrencies to Bitcoin that are most commonly used for these transactions such as Blackcoin or Monero [6].

Despite this high number of cases, most states do not have extensive regulation on the subject, not even on the nature of cryptocurrency [3, 4, 10, 16, 18–26]. This is not to say that cryptocurrencies have not currently attracted regulatory interest. The capital movements surrounding cryptocurrencies have led governments to become concerned about the fiscal and financial aspects of the phenomenon.

However, neither the lack of regulation nor the linking of the phenomenon with criminal acts has led to a decrease in the development of cryptocurrencies or the blockchain technology that hosts them. Therefore, finding the right balance between the regulation that the phenomenon needs to ensure its legal security and the flexibility linked to its constant development is a complex task. Even more so if we take into account that the approach to cryptocurrencies varies according to the state, the organizations, or the areas we are referring to [32].

A comparison between different economic spheres highlights the lack of common criteria mentioned above. To make this comparative approach, the situation of cryptocurrencies will be identified in three major world economic areas: the United States, the European Union, and the BRICS economic-trade union (acronym of an economic-trade association that has been carried out by the states of Brazil, Russia, India, China, and South Africa since 2008). As will be seen in this analysis, the positions range from the tolerance of cryptocurrency in the market to the prohibition of the operation of exchanges, showing a disparity between the different regulations or, directly, an absence of regulation.

2.1 European Union

The European Union presents one of the main examples of a lack of adequate or extensive regulation in this area. Its progress has been oriented to the presence of cryptocurrency as an instrument in the commission of crimes. In January 2019, Directive (EU)2018/843 of the European Parliament and of the Council of 30 May 2018 came into force. It was intended to amend Directive (EU) 2015/849 on the prevention of the use of the financial system for money laundering or terrorist financing.

The directive inclusion considers that the anonymity of virtual currencies allows their misuse for criminal purposes. To this end, the law established that it is needed control by the exchange service providers and the electronic wallet custodian service providers. The tools for this control must be provided by the National Financial Intelligence Units, which must obtain information that allows them to associate the addresses of virtual currencies with the identity of the owner of the same.

The European Union currently has a draft proposal for a European regulation on crypto-asset markets. This future regulation aims to regulate this type of market through a general framework for the entire European Union. This draft regulation is known as MiCA (Markets in Crypto-assets) [5]. The main objective

pursued by the MiCA is the regulation of the market for crypto-assets which are currently not considered under EU financial legislation as financial assets or electronic money.

2.2 United States

The United States does not have developed regulations in criminal areas. On the other hand, it has been concerned to respond in the financial area. Considering its history with this phenomenon, the country has faced related problems in both sectors. Due to price manipulations in the cryptocurrency market, many US investors have lost millions of dollars. Faced with this situation, the New York Department of Financial Services proposed in 2014 to regulate the exchanges and being themselves the ones responsible to grant the licenses for the opening of new exchanges. In this way, investors can feel a state backing for their investments. Likewise, in tax matters, cryptocurrencies are included in the payment of taxes like the holding of any other property, as is the case with shares.

However, the same is not true for money laundering or financing of illicit activities. Currently, there is no regulation in this area despite having seen the relationship between cryptocurrencies and the criminal sphere that benefits from the anonymity they provide. Despite having so far this absence of regulations, in March 2020 Congressman Paul Gosar introduced the bill: “Cryptocurrency Act of 2020” to clarify and legitimize crypto-assets in the United States by differentiating digital assets and not granting a single definition and nature. In this proposal, there would be three categories: crypto-commodity, crypto-currency, and crypto-value, leaving the category of crypto-currency for those digital assets that are the representation of the currency of the United States to respect what is established in the Constitution. In this way, they try to classify cryptocurrencies to elucidate which regulation corresponds according to the function they have in the market.

The proposal of Paul Gosar is innovative and presents an interesting categorization of cryptocurrencies, but it still does not resolve the regulatory absence in the criminal field that has been highlighted on several occasions since the Silk Road investigation in the United States. It is not known whether this gap is due to a regulatory impossibility or a lack of initiative. What is certain is that the regulatory avenues that are being put forward advocate a tolerance through the control and regulation of crypto-assets and the blockchain system, not a ban on them.

2.3 BRICS

BRICS is the acronym of an economic-commercial association that has been carried out since 2008 by the states of Brazil, Russia, India, China, and South Africa (the latter since 2011). In the 2000s it was considered that these 5 countries could have an economic relevance in the future and it was proposed to create this union. The truth is that cryptocurrencies have a strong presence and influence in most of them. This fact was the reason why this union was chosen as

the third pillar for our comparative study since it includes four countries whose form of regulation will be crucial for the development of cryptocurrencies. The states that are part of this union have had a complex development in the positions taken towards crypto-assets. Some of them even have gone through some moment of banning the sale and issuance of cryptocurrencies in their territories.

Brazil first associated the phenomenon with pyramid schemes and its possible prohibition was debated in Congress on several occasions. In the end, since 2015, a line focused on the regulation of these cryptoassets in terms of taxation was followed. Cryptocurrency is recognised as an economic good and a means of payment. In 2019, bill 2303/2015 was presented by federal deputy Aureo Ribeiro to try to regulate this phenomenon and its market more precisely. However, it was not until 29 September 2021 that the bill was approved, and now it only remains to be submitted to the Chamber of Deputies.

Russia and China share a very similar regulatory landscape. Both economic powers are major sources of cryptocurrency mining. However, given the energy expenditure involved along with the economic movement cryptocurrencies are causing, restrictive measures have been taken towards the activity.

In the case of Russia, cryptocurrency is considered a digital financial asset and not a currency. The Russian Central Bank has on several occasions lobbied the state powers against the acceptance of crypto-assets in the market as a possible risk to the economy. There is a draft law that envisages a very restrictive limitation of exchanges and the issuance and use of cryptocurrencies as stated by the Chairman of the State Duma Committee on Financial Markets, Anatoly Aksakov. This project will establish a definition of cryptocurrency and prohibit its use as a method of payment. However, this regulation does not envisage the same path for mining activity. According to Aksakov, the activity will be allowed as long as it is regulated and taxed for exercising it as it is considered a type of business that produces profit.

On the other hand, On the other hand, China was the birthplace of cryptocurrency mining and exchange platforms and it is an activity carried out by many users in the country. However, in September 2021 the Chinese government has proposed a ban on cryptocurrency-related activities. The reason that led the government to initiate these restrictions is not only for financial and economic reasons. Cryptocurrency mining farms are causing serious damage to the environment and electricity consumption. We will have to observe how this control of a transnational phenomenon evolves and whether they really succeed in banning the activity.

Finally, the case of India also reflects disparate positions on the phenomenon over the years. In April 2018, the Reserve Bank of India (RBI) banned the use of cryptocurrencies and any operations carried out with exchanges that handle these digital assets. Faced with this decision, the Supreme Court of India on 4 March 2020 struck down the measure adopted by the central bank, calling it disproportionate and unconstitutional. There are currently plans to regulate cryptocurrencies as commodities from February 2022.

2.4 Legal Issues Summary

The disparity of regulations shown in the analysis of the studied three territorial sectors highlights the difficulties faced by a transnational phenomenon such as cryptocurrencies. It is not only a concern for users but also for the states themselves in their intention to control the cryptocurrency activity. The analysis developed exposes that most of the states are favorable to the development of blockchain technology, which they do not perceive as a threat, but this is not the case with its best-known representation, the cryptocurrencies.

As assets that can be created voluntarily and are not subject to control to ensure financial security and consumer protection, cryptocurrencies cause rejection. However, some states have an intention to create their own state cryptocurrency. However, the proliferation of state cryptocurrencies generates uncertainty about the value they will have in other territories.

This observation is made from the perception of a wide range of conceptualization and denominations of digital assets that, as the study has shown, can be considered goods, digital securities, financial assets, or currencies. Therefore, the need for a global agreement on general standards for the Blockchain and cryptocurrencies should be considered, as is the case with other international regulations. The objective should be to increase confidence at financial and market levels and to address the criminal risks associated with cryptocurrencies.

At this point, it should be noted that crimes such as money laundering, terrorist financing, or drug trafficking are transnational criminal acts whose commission has benefited from the emergence of cryptocurrencies. In reality, this is not a novelty but a change in the means of commission as criminal groups take advantage of one of the main attractions of this phenomenon, their anonymity. Therefore, it is not so much a question of defining new crimes or modifying the definition of some of them, but rather of developing tools to minimize this characteristic. The international agreements required on this matter must therefore combine two elements: providing cryptocurrency with legal certainty and reducing its criminal potential.

In this digital era, regulation should not be oriented towards delegitimizing the innovation that cryptocurrencies and Blockchain technology represents. The path of international agreements on the matter must ensure a tandem between the financial and technological security of exchanges for the protection of consumers and the economic system and the development of this phenomenon.

3 Conclusion

In this paper it has been done a study in depth of the initiatives, regarding the cryptocurrencies ecosystem, of some of the most important states of the world. Although crimes such as money laundering, terrorist financing, or drug trafficking are transnational criminal acts whose commission has benefited from the emergence of cryptocurrencies. This is not a novelty but a change in the means of commission as criminal groups take advantage of one of the main attractions of this phenomenon, their anonymity. Therefore, it can be concluded that it is

not so much a question of defining new crimes or modifying the definition of some of them, but rather of developing tools to minimize this characteristic. The international agreements required on this matter must therefore combine two elements: providing cryptocurrency with legal certainty and reducing its criminal potential.

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