

FINANCIAL TRANSFER IN CYBER CURRENCY AND THE PRIVATE INTERNATIONAL LAW

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Abstract

The object of this study is the analysis of the legal nature of the so-called cryptocurrencies or virtual currencies and the positions defended by different authors based on the current regulatory status and the decisions issued by international authorities, with special emphasis on the conception of cryptocurrencies as “means of payment” and “property susceptible of ownership.” In addition, an examination is also carried out on the sufficiency of the existing legal mechanisms in matters of private international law to deal with the consequences derived from said qualifications and on the possibility or need to carry out legislative modifications to achieve a satisfactory regulation of cyber currencies.

Keywords: cryptocurrencies, blockchain, private international law, international contracting.

Background

The so-called “blockchain” technology (“chain of blocks”) has become, on its own merits, one of the main challenges for researchers in the 21st century. Accordingly, specialists from all fields have focused their efforts on studying the various applications of this technology in the public and private sectors, and the science of law has been no exception: the absence of a specific regulation of such technology has led to a wide catalog of Unknowns that range from the probative value of the records generated by the blockchain to the possible validity of the legal transactions concluded through it.¹

As explained in section II, the ubiquitous and delocalized nature of the “blockchain” means that the legal relationships through this technology are, by definition, international. This circumstance makes it necessary to analyze whether the private international law regulations (from now on, “DIPr”) are sufficiently prepared to regulate international private relations that may appear as a

¹ B.J. Turpin, “Bitcoin: The economic case for a global, virtual currency operating in an unexplored legal framework.” *Ind. J. Global Legal Stud.* Vol 21, (2014): p. 335.

consequence of the use of applications based on “blockchain” technology. In particular, it is necessary to examine whether the rules on international jurisdiction and applicable law offer companies that want to use this technology the necessary legal certainty to facilitate its implementation worldwide.²

From the analysis of the legal mechanisms that currently exist, it can be inferred that, at large features, the law is sufficiently prepared to deal with this new technology. Therefore, a complete reform of the current regulatory framework is unnecessary to grant a satisfactory regulation to the blockchain. As we defend in section II, the possibility granted by the DIPr rules to choose the competent courts and the law applicable to the legal business contributes to avoiding the problems that the lack of adaptation of certain internal rights may pose for the users of this technology.³

However, an issue raises particular problems for applying the DIPr rules, such as using cryptocurrencies as a means of payment. According to what is stated in section III, these problems are related to the difficulties that the competent authorities have encountered when regulating this figure, which has resulted in the attribution of a different legal nature to a legal system. other.⁴ These differences can generate problems when determining the rules of international judicial competence and applicable law that should govern those contracts that have as their object the acquisition of cryptocurrencies and, above all, those in which the payment must be carried out through this mechanism. We will dedicate section IV to these questions.⁵

The essentially international character of the “blockchain” technology The “blockchain” technology is, in the words of C. TuR Fáundez, “a database supported by the peer to peer technology and therefore shared by multiple nodes, in which blocks are registered of information”.⁶

This technology was developed to create a platform to carry out operations with the cryptocurrency “Bitcoin.” However, its potential caused its use to spread

² P. P., Matthew, “A comparative analysis of bitcoin and other decentralised virtual currencies: legal regulation in the People’s Republic of China, Canada, and the United States.” *HKJ Legal Stud.* Vol. 9, (2015): p. 29.

³ E. Ruslina. “Legality Transactions Using Virtual Currency or Bitcoin, Payment Tools in Indonesian Law.” *Journal of Seybold Report*, (2014).

⁴ Ö. Ülger, “The Role Of Money Laundering And Tax Fraud Bitcoin As a Virtual Currency”. *Politico-Economic Evaluation Of Current Issues*, Vol. 36, 2018.

⁵ C. Richter, S. Kraus, R.B. Bouncken. “Virtual currencies like Bitcoin as a paradigm shift in the field of transactions”. *International Business & Economics Research Journal (IBER)*, Vol. 14 No. 4, (20015): p. 575-586.

⁶ M. Franklin. “A PROFILE OF BITCOIN CURRENCY: AN EXPLORATORY STUDY.” *International Journal of Business & Economics Perspectives* Vo. 11 No.1, (2016)

to other areas. Currently, in addition to “Bitcoin,” there are many other platforms that use “blockchain” technology, such as “Ethereum,” “Tezos,” or “Neo.” To understand how it works, it is necessary to study two key concepts:

First, the information is written in so-called “blocks.” Then, each block of information is connected to its predecessor using so-called “hashes,” identification codes calculated for each block. Consequently, each block includes its own “hash” and the “hash” of its predecessor, being linked together and guarantee that the information cannot be manipulated once it has been registered.

Second, the entire blockchain is stored in a decentralized way by each of the network members. In this way, each time a transaction related to the blockchain is requested, it is not processed by a single member or “node.” Still, rather all nodes check the transaction and try to reach a consensus in such a way that “so that the information contained in a block is considered valid, all participants must agree ”⁷ or, at least, reach the minimum required by the consensus rules established by the protocol of that particular “blockchain” platform.

Therefore, the chain of blocks is configured as an articulated system “through P2P terminal networks whose mission is to record all the transactions that take place.” The characteristic notes of this technology that have legal implications are immutability, security, decentralization, and offshoring.⁸

Immutability and security: since the information contained in a “blockchain” platform is visible to all users, and it is practically impossible to modify it without any of the other nodes detecting it, making it very difficult to alter or delete said information (it would only be possible through the consensus of all users or, at least, a majority of 51%). In addition, the immutable nature of the information, together with the fact that all the data entered into the platform incorporates time stamping and that the transactions are visible to all users, give this technology a high degree of transparency that allows increasing the trust placed in it.⁹

Decentralization and offshoring: the information is recorded “in a decentralized network, so a regulated body is not required to verify the transactions” that are carried out on the “blockchain” platform, but rather it is the

⁷ *Ibid.*

⁸ J.H. Forrester. “Coins in the Air: A Literature Review on the Evolving Framework of Bitcoin and its Relevance to the Accounting Profession.” (2015)

⁹ Y. Çeribaş. “Beware, Conspiracy Ahead: Approaching Virtual Currencies as Potential Sources of Conspiracy Theories.” *ICPESS (International Congress on Politic, Economic and Social Studies)*, Vol 4, 2018.

members of the said platform who will collate the operations carried out in this, without the need for a central authority that has absolute control over the processing of the information. Likewise, the anonymity granted by the “blockchain” technology and the possibility that anyone can be part of the platform (as a general rule) results in a relocation situation characterized by total ignorance of the location of the nodes and the information contained in said platform.

These last two elements allow us to affirm that we are dealing with essentially international technology. This circumstance results in private relationships that are carried out using its various applications: even in those cases in which the “analog” elements of the relationship are connected with a single State (e.g., a transaction entered into by two Spanish companies through a “smart contract”), the technology used connects the situation with a plurality of foreign States.¹⁰

But, in addition, it isn’t easy to imagine companies thinking of using this technology in a merely domestic environment. It can be presumed that any entity or group of entities can bet on developing applications based on this technology act or intend to act internationally.

This is the case, for example, of Alibaba or other platforms that use this technology to facilitate the identification of counterfeit products that are trying to be marketed through these online markets, which uses “blockchain” to allow manufacturers to assign unique identification numbers to their products and track their movements through the supply chain from anywhere in the world. We can also highlight other initiatives that have implemented this technology to facilitate the conclusion of contracts by their clients, regardless of their State of residence, such as Ulysses Contract, through which users can enter into a “smart contract” “To set a weight loss goal by delivering a certain amount of “Ether” that will only be returned if you reach your goal.”¹¹

1. Applications of blockchain technology and private international law

Several applications of “blockchain” technology can give rise to international private relationships subject to regulation by the DIPr. As we have already advanced beyond the problems generated by cryptocurrencies, we understand that adopting the DIPr regulatory framework is unnecessary to grant a

¹⁰ K.B. Murugeswari, B. Balamurugan, G. Ganesan. “Blockchain and Bitcoin Security.” *Cryptocurrencies and Blockchain Technology Applications*, (2020): p. 149-156

¹¹ R. Saberi, and A. Khalili Paji. “Criminal Functions of Virtual Currencies: Criminological Analysis and Preventive Approaches.” *Journal Encyclopedia of Economic Law*, Vol. 27 No.18), (2021): p. 223-250

satisfactory regulation to this new technology. To better understand this idea, it is necessary to analyze, individually, these applications and their operation.¹²

2.1 Smart contracts

The “smart contracts” or smart contracts can be defined as “programs informatics that executes agreements established between two or more parties when a pre-programmed condition occurs. In other words, they are contracts that are automatically executed and enforced”.¹³

There is the possibility that machines may enter into a “smart contract”: they are the so-called computable contracts or “machine to machine” operations (“M2M”, from now on). These are “contracts that are perfected and executed between machines directly” and under which “the devices are connected and proceed to perfect new and successive contracts under certain circumstances previously agreed by the parties involved in a smart legal contract”.¹⁴

“Smart contracts” are not constituted as a new category of contracts, but rather are “contracts as such from a legal point of view, which make use - totally or partially - of block technology.” In this way, “smart contract” technology is configured, and, as a new way to celebrate and manage contracts, which will keep their legal nature intact, with no reasons why the current rules should not apply just because the contract is carried out through a “smart contract”.¹⁵

Specifically, this new contractual modality will not require any extraordinary change concerning the DIPr rules that regulate the form of celebration or execution of the obligations, taking into account, above all, the possibility that these rules offer to choose the competent courts and the applicable law for the resolution of the legal business, which in most cases will make it possible to avoid the problems that the lack of adaptation of certain internal laws may pose for this new modality of conclusion and execution of contracts.

In this way, as pointed out by Legerén-Molina, “it seems possible to affirm that the terms that currently make up the smart contract do not seem to require a new contract law, the currently existing rules being perfectly applicable -with their adaptations and modulations.” In our view, the conclusion applies to DIPr’s regulations on contracts.¹⁶

¹² K.B. Murugeswari, B. Balamurugan, G. Ganesan, *Loc. Cit.*

¹³ Y. Çeribaş, *Op.Cit.*

¹⁴ R. Saberi, and A. Khalili Paji. *Op. Cit.*

¹⁵ P. Balgobin, A. Seeam, “Developing an effective regulatory framework for virtual currencies in mauritius.” *Proceedings of the 2nd International Conference on Intelligent and Innovative Computing Applications*, (2020).

¹⁶ P. Godsiff. “Bitcoin: bubble or blockchain.” *Agent and multi-agent systems: Technologies and applications*. Springer; Cham, (2015): p. 191-203.

2.2 Autonomous decentralized organizations (DAO)

An autonomous decentralized organization (“Decentralized Autonomous Organization,” from now on “DAO”) is understood to be “a company or organization whose decisions are made electronically utilizing a written computer code or by the vote of its members. In essence, it is a system of hard-coded rules that define what actions an organization will take. It is considered by many to be the most complex form of smart contract. The smart contract code has the statutes of the DAO through complex governance rules “.¹⁷

Although the nomenclature could point to a new commercial company, a DAO is easily retractable to the traditional contractual categories. As mentioned in the previous section, there seem to be no problems in applying the nomenclature regulations. About DIPr in the matter. In this way, if the will of the members of the DAO were to create a commercial company, they should find accommodation in one of the categories already existing in the national laws on commercial companies, which would determine their regime for DIPr.¹⁸

2.3 Records

Another of the possible uses of “blockchain” technology resides in the registry sector. Many countries have begun to develop projects to apply this technology in registries, such as property or commercial registries. In Spain, without going any further, we can highlight Alastria, a non-profit association that is committed to the development of “blockchain” technology and that is designing, together with the College of Registrars of Spain, methods that allow streamlining the management of all documents processed through said college.¹⁹

Another clear example of applying the “blockchain” to a property registry is the case of Sweden. The Swedish administration has achieved complete digitization of the land ownership register (known as Lantmäteriet), facilitating the processing of registration processes and reducing the duration of the procedure from three to six months to hours.

Likewise, as pointed out, both in Dubai and Japan are developed platforms to unify the registration of urban and rustic properties through blockchain technology, “which would allow an open database where the data of the 230 million and 50 million farms could be consulted. Buildings that are estimated to

¹⁷ K.B. Murugeswari, B. Balamurugan, G. Ganesan, *Op.Cit.*

¹⁸ P. Balgobin, A. Seeam. *Op. Cit.*

¹⁹ B.J. Turpin, “Bitcoin: The economic case for a global, virtual currency operating in an unexplored legal framework.” *Ind. J. Global Legal Stud.* Vol. 21, (2014): p: 335.

exist in the Asian country ”.²⁰

The crystallization of these projects will require, in any case, the legal endorsement of these records, which will not affect in any way the DIPr rules on the matter, such as the exclusive competence of article 24.3 of the Brussels Regulation Regarding public registries: although the data is delocalized, the public registry continues to refer to properties located in state territory.

2.4 Tokenization and securities

The “token” can be defined as “a unit of value that an organization [or private entity] creates to govern its business model and give more power to its users to interact with its products while facilitating distribution and profit-sharing.” These units of value differ from cryptocurrencies in the variety of uses they support: while the main function of virtual currencies is to constitute themselves as a generalized means of payment, the “tokens” will serve for what the persons or entities in charge of their design and development they decide (either to pay a fee, as an incentive or as a means of access to extra service, etc.)²¹

Among all these functions, we can highlight the so-called tokenization of assets, understood as the representation of “a right (personal or real, or on a tangible or intangible good) in a distributed registry (blockchain) private for legal purposes (...) materializing said representation in-unit accounting entries called tokens ”. Under this assumption, the function of “tokens” could be assimilated to that of securities, documents “that grant private rights to their holder and whose exercise and transmission depend on the possession of the document itself” and with which they share such characteristics, such as the existence of a representative title and an underlying right.²²

The representation of security through electronic or digital means does not imply, broadly speaking, an impediment to the application of the substantive regulations in the matter given the equality that usually occurs between physical and digital documents (as long as they comply with the relevant formal requirements) by application of the principle of functional equivalence and the possibility that blockchain technology grants to share, validate and verify documents in a secure manner. Proof of this is the promulgation, by the French legislator, of various legal texts recognizing the possibility of using “blockchain” technology for the issuance, registration, and transfer of securities not admitted to

²⁰ C. Richter, S. Kraus, R.B. Bouncken. “Virtual currencies like Bitcoin as a paradigm shift in the field of transactions”. *International Business & Economics Research Journal (IBER)*, Vol 14 No. 4, (2015): p 575-586.

²¹ K.B. Murugeswari, B. Balamurugan, G. Ganesan. *Op. Cit.*

²² P. Balgobin, A. Seem. *Op. Cit.*

trading.²³

In this same sense, in principle, there seem to be no major problems in establishing that following art. 10.3 of our Civil Code, the law applicable to issuing the “tokens” will be that of the State where the company that issues them is established.²⁴

2.5 Cryptocurrencies

Another of the main applications derived from “blockchain” technology are cryptocurrencies or virtual currencies, defined by the European Central Bank as “digital representations of value not issued by any central banking authority, credit institution or recognized electronic money issuer that, on certain occasions, they can be used as an alternative means of payment to money.” The clearest example of this is the cryptocurrency “Bitcoin,” created by S. Nakamoto in 2008 and has gradually gained relevance until it became the most widely used virtual currency.²⁵

The lack of consensus about the legal nature of cryptocurrencies and the derived implications for the DIPr makes a detailed analysis of the possible legal qualifications of this technology and the sufficiency of the existing regulatory mechanisms to deal with them is necessary. In the following sections, we will delve into these issues.²⁶

2.5.1 Cryptocurrencies and their various legal qualifications in internal material law

The appearance of “Bitcoin” in 2008 generated great expectations regarding the potential of “blockchain” technology for holding legal businesses and introduced an attractive possibility, such as making payments through so-called cryptocurrencies, virtual currencies. That share characteristics include security, immutability, ubiquity, and decentralization with blockchain technology²⁷.

The growing number of existing cryptocurrencies shows the expansion of “blockchain” technology and its progressive incorporation into daily life, being able to refer to numerous examples beyond “Bitcoin,” such as “Litecoin” or “Dash.”

²³ M. Franklin, *Op. Cit.*

²⁴ P. Balgobin, A. Seeam, *Op. Cit.*

²⁵ M. Franklin, *Loc. Cit.*

²⁶ C. Richter, S. Kraus, R.B. Bouncken, *Op. Cit.*

²⁷ B.J. Turpin, *Op. Cit.*

However, offering an adequate definition of cryptocurrencies is a complicated task since there is no uniform conception about their legal and legal configuration, not even among the various supervisory authorities at the European level. As we will analyze below, the national authorities that have had to face problems related to cryptocurrencies have attributed a divergent legal nature to them.²⁸

This situation is problematic and, indirectly, affects the regulation by the DIPr of those international contracts in which payment is established through this category of virtual currencies.

And this, because the legal nature attributed to them will affect the legal classification of the contract in question and, therefore, the applicable rule to determine international jurisdiction (in particular the Brussels Ia Regulation) and the applicable law (Rome I Regulation).²⁹

The European Commission has promoted the study “EU regulatory framework for crypto-assets,” whose main objective is to study the possibility of creating a uniform legal framework for the treatment of crypto-assets that allows alleviating the current legal insecurity. The results of this initiative will be published in the third quarter of 2020, and it is expected that it will rule on issues such as the current regulation of cryptographic assets within the framework of the European Union or the promulgation of guidelines or “guidelines” to establish general lines. of performance.³⁰

Meanwhile, there is great uncertainty about the legal qualification that cryptocurrencies can receive. Next, we analyze the different qualifications adopted by various authorities and suggested by the doctrine. To begin with, we will explain why it is not possible to equate these virtual currencies to legal tender currencies and how the negative consensus around this possibility has given rise to other academic approaches, some of which advocate rating these currencies. Virtual as securities or financial assets. However, most authors are divided around two possible qualifications: the conception of cryptocurrencies as intangible assets susceptible to ownership or as a means of payment. In our view, for the DIPr system, the latter is the rating that leads to the most satisfactory results.³¹

2.5.2 The impossibility of qualifying cryptocurrencies as legal tender

²⁸ J.H. Forrester, *Op. Cit.*

²⁹ M. Franklin, *Op. Cit.*

³⁰ P. Balgobin, A. Seeam, *Op. Cit.*

³¹ S. Kethineni, Y. Cao. “The rise in popularity of cryptocurrency and associated criminal activity”, *International Criminal Justice Review* Vol. 30 No.3, (2020): p. 325-344.

To determine whether cryptocurrencies deserve to be classified as “money” or “legal tender,” it is necessary to delimit this concept in a specific way. In this sense, we must refer to the 2012 report of the European Central Bank called “Virtual Currency Schemes”³², in which said body defines “fiduciary money,” conceptualizing it as “any legal tender designated and issued by a central authority” and indicating, in turn, that the existence of said authority and the trust placed in it by users of the currency constitute crucial elements of the monetary system. As we have mentioned above, one of the main characteristics of cryptocurrencies or virtual currencies is the decentralization or non-existence of authority in charge of its operation and control. That is why we must rule out the possibility that cryptocurrencies are equated to legal tender or electronic money since, to date, they have not been expressly recognized as such by any official body; they are not supervised or issued by any competent authority. Moreover, they do not have the backing of Spain or the European Union.³³

In this sense, it is necessary to highlight the pan-European warning issued by the European Securities and Markets Authority, the European Banking Authority, and the European Insurance and Retirement Pensions Authority (from now on, “the three AE”) in 2018 warning about the high risk derived from the use of virtual currencies and underlining that currently available cryptocurrencies are digital representations of value not issued or guaranteed by central banks or public authorities. That, therefore, “do not have the legal status of the currency or money.” The Directive supports this position on money laundering, which reiterates in its art. 3 that virtual currencies may in no case be classified as legal tender or electronic money since they are not a legally established currency.³⁴

2.5.3 Cryptocurrencies as securities or financial assets and the unfeasibility of these classifications

Regarding the possibility of classifying virtual currencies as securities, this deserves to be rejected following the provisions of the Court of Justice of the European Union (from now on, “CJEU”) in its judgment of October 22, 2015 (“Hedqvist” case).³⁵

This litigation confronted the Swedish Tax Administration (Skatteverket) and an individual, Mr. Hedqvist, who was engaged through a company to buy

³² E. Nikbakht, M. Shahrokhi, A. Corriette, “Blockchain & distributed financial data.” *Managerial Finance*, (2019).

³³ R.B. Levin, A. A. O’Brien, M. M. Zuberi. “Real regulation of virtual currencies.” *Handbook of digital currency. Academic Press*, (2020): p.327-360.

³⁴ K.B. Murugeswari, B. Balamurugan, G. Ganesan, *Op. Cit.*

³⁵ Y. Çeribaş, *Op. Cit.* and P. Balgobin, A. Seeam, *Op. Cit.*

“bitcoins” for later resale to individuals and companies, obtaining the difference between prices as a benefit. Thus, the Supreme Administrative Court of Sweden (Högsta förvaltningsdomstolen) asked the CJEU if said sale and purchase transactions could be considered services and, if so, whether or not such transactions were exempt from Value Added Tax (in from now on, “VAT”), following the provisions of article 135 of the VAT Directive.³⁶

Raising these questions forced the CJEU to rule on the legal nature of cryptocurrencies and the possible legal qualifications that virtual currencies deserve, as we will explain in greater depth in the following sections. However, said Court was strongly positioned against the equating of “bitcoin” to the figure of the security, affirming that “the virtual currency“ bitcoin ”is neither a title that confers a property right on legal persons nor a title that has a comparable nature” to that of the securities specifically mentioned in article 135 of the VAT Directive (as opposed, for example, to book entries or exchange rate instruments).³⁷

The doctrine supports this position, being able to highlight the opinion of authors such as A. legerénmolina, who considers that we must dispense with this possible qualification as cryptocurrencies lack legal recognition and the figures of the “debtor” and the “issuer” against whom it should be able to exercise the corresponding right.³⁸

Once this question has been resolved, the possibility of classifying virtual currencies as financial assets also arises. However, here again, we must rule out this option, since the consideration of cryptocurrencies as such would imply the existence of a “contractual right or obligation to receive cash or another financial asset from another entity,” since cryptocurrencies have value by themselves and do not represent a collection right that requires the counterpart of financial liability in another company.³⁹

3. Classification of cryptocurrencies as property susceptible of ownership

The classification of cryptocurrencies as intangible and susceptible personal property is the option that generates the most consensus among authorities and academics today. Despite this, we already anticipate that, for DIPr instruments, it does not seem that this rating is the most appropriate to guarantee a satisfactory regulation of the relationships in which virtual currencies are used.⁴⁰

The configuration of cryptocurrencies as movable property is 333, 335,

³⁶ E. Nikbakht, M. Shahrokhi, A. Corriette, *Op. Cit.*

³⁷ C. Richter, S. Kraus, R.B. Bouncken, *Op. Cit.*, p. 579.

³⁸ S. Kethineni, Y. Cao. *Op. Cit.*

³⁹ Y. Çeribaş, *Op. Cit.*

⁴⁰ J.H. Forrester., *Op.Cit.*

337, and 345 of the Civil Code. The analysis of these precepts allows us to conclude that, as they are non-fungible elements and susceptible to private property and appropriation, cryptocurrencies meet sufficient requirements to qualify for said qualification. This is how the Spanish Mercantile Registry seemed to understand it in 2014 when it allowed the constitution of a company, Conffeine SL, whose capital was made up solely of “bitcoins,” which were classified as “non-monetary contributions”.⁴¹

In a similar sense, the Supreme Court ruled, in its judgment of June 20, 2019, in which it condemned, for a continuing crime of fraud, the sole administrator of a company that he had signed management contracts with several people who gave him “bitcoins” to reinvest them and return the profits obtained in exchange for a commission. Our High Court considered that the culprit had the intention to seize the “bitcoins” without complying with his obligations and imposed, in addition to a two-year prison sentence, the obligation to pay compensation for the damages caused to the victims, given the impossibility of returning the stolen “bitcoins” as it is not a material object or has the legal consideration of money.⁴²

To study possible restitution of the currencies mentioned above, the Court analyzed their legal nature in this context. As a result, it came to a conclusion that “bitcoin is nothing more than an intangible heritage asset (...) of consideration or exchange in any bilateral transaction in which the contracting parties accept it, but in no way is it money, or it can have such legal consideration ”.⁴³

The General Directorate of Taxes shares this criterion (from now on, “DGT”) in its binding query V1149-18, of May 8, 2018, in which an individual asks whether the exchange of the cryptocurrency “bitcoin” for the Cryptocurrency “iota” originates obtaining income for Personal Income Tax (from now on, “IRPF”). Well, here the DGT states, concerning the legal nature of virtual currencies, that cryptocurrencies “are intangible assets, computable by units or fractions of units, that are not legal tender, that can be exchanged for other assets, including other virtual currencies, rights or services.” However, in some of its latest binding consultations, we must point out that the DGT has departed from this criterion, as we will explain later.⁴⁴

⁴¹ M. Franklin, *Op. Cit.*

⁴² E. Nikbakht, M. Shahrokhi, A. Corriette, *Op.Cit.*

⁴³ S. Kethineni, Y. Cao. *Op. Cit.*

⁴⁴ A.K. Yadava. “Prevalence of Crypto-currencies: A Critical Review of Their Functioning and Impact on Indian Economy.” *International Journal of Research in Economics and Social Sciences (IJRESS)*, Vol. 8 No. 1, (2018).

It should also be noted the opinion of international organizations specialized in the matter that has also spoken in this same sense, such as the UK Jurisdiction Taskforce, which in its statement “Legal statement on crypto assets and smart contracts” issued last November 2019, concluded that, according to existing regulations, cryptocurrencies should be treated as intangible assets susceptible to ownership⁴⁵.

It seems, therefore, logical that taking into account the current regulatory status and the position of authorities such as the Supreme Court, the doctrine temporarily chooses to classify cryptocurrencies as intangible assets susceptible to ownership, in the absence of a regulation that determines of concretely or specifically the legal nature of virtual currencies. Thus, we can point to the position of authors as A. Legerén-Molina, who states that “cryptocurrency can be considered as a movable digital and divisible, unrepeatable and non-copyable asset, capable of being valued economically”; academic like M. García-Torres, who supports this option by considering “that the legal nature of Bitcoins is intangible personal property”; or experts like E. Hijascid, who among all possible ratings is also inclined to consider cryptocurrencies as a digital movable asset.⁴⁶

4. Cryptocurrencies as a means of payment

The origin of this conception can be found in the judgment mentioned above of the CJEU of October 22, 2015 (“Hedqvist” case), which revolves around foreign exchange transactions and their possible subject to Tax on Added Value.⁴⁷

In it, after ruling out the equivalence of cryptocurrencies to fiduciary money, the CJEU concludes that “the virtual currency of bidirectional flow« bitcoin »(...) cannot be classified as« tangible good »within the meaning of article 14 of the VAT Directive, since (...) it has no purpose other than that of being a means of payment”. Thus, “since bitcoins are not currencies in a technical sense, as any State does not back them,” said body makes a distinction between traditional currencies (currencies that are legal means of payment) and non-traditional currencies, that is, currencies “other than currencies that are legal means of payment” but that may be used in legal business as long as the parties have accepted their use as an alternative to legal means and do not have any purpose other than that of being a means of payment. This would be the case with cryptocurrencies or virtual currencies.

30. This qualification as a means of payment is supported by Directive

⁴⁵ C. Richter, S. Kraus, R.B. Bouncken, *Op. Cit.*

⁴⁶ N. Shetewy, J. Aitlaadam, L. J. Jiang. “Challenges of the Bitcoin in the Arabic Countries”, (2019).

⁴⁷ C. Richter, S. Kraus, R.B. Bouncken, *Loc. Cit.*

2019/770 on contracts for the supply of content and digital services, which in its art. 2 defines the concept of “price” as “money or a digital representation of value, payable in exchange for the provision of digital content or services.” In our view, cryptocurrencies can be considered “digital representations of value” accepted as a “payment method” by the parties to an economic transaction, so that in principle, they would be included within the definition given by said Directive.⁴⁸

In this same sense, we must also highlight the Directive mentioned above on money laundering, which after the ruling in the Hedqvist case modified the definition given to cryptocurrencies to refer to them as “a digital representation of value not issued or guaranteed by a central bank nor by a public authority, not necessarily associated with a legally established currency, which does not have the legal status of currency or money, but which is accepted by natural or legal persons as a means of exchange and which can be transferred, stored and negotiated by electronic means.”

In Spain, this interpretation is shared by the DGT, which after issuing several contradictory pronouncements (see query V2846-15, of October 1, or V1149-18, of May 8, referred to in the section above), has finally consolidated its criteria regarding the legal nature of cryptocurrencies through its latest binding consultations.⁴⁹

In this sense, we can refer to query V2034-18, dated July 9, 2018. The consultant is a merchant who wants to build a farm for mining cryptocurrencies and the development of activities such as the sale of virtual currencies and wants to know the taxation of such activities for Value Added Tax. In it, the DGT analyzes the nature and functions of “bitcoin” in the light of the judgment of the CJEU of October 22, 2015, and concludes that it is a virtual currency that constitutes a means of payment, so that financial operations linked to it will be exempt from VAT (according to art. 20.1 of Law 37/1992 and art. 135 of the VAT Directive).

The DGT maintains this same position in other more recent consultations, such as consultation V351319, of December 20, 2019, in which a company dedicated to legal advice on new technologies wishes to know the incidence of VAT if said services advisory services are billed to their clients using virtual currencies such as “bitcoin.” Thus, this body states that “the criteria of this Management Center, regarding the transmission of bitcoins, has been exposed, among others, in its query V2034-18, dated July 9, 2018, where it is concluded

⁴⁸ Y. Çeribaş, *Op. Cit.*

⁴⁹ J.H. Forrester, *Op. Cit.*

that bitcoins, cryptocurrencies, and other digital currencies are currencies, so the financial services linked to them are exempt from Value Added Tax in the terms established in article 20.One.18º of Law 37/1992”.⁵⁰

Despite all that has been stated, this classification faces a great obstacle, and that is, as explained in the first section, there is no State or Central Bank that endorses cryptocurrency as a virtual currency or means of payment. Recital 23 of the Directive on contracts for the supply of digital content and services indicates that “digital representations of value should also be understood to include virtual currencies, insofar as they are recognized by national law”.⁵¹

In our view, the recital calls for confusion. Certainly, if the price is indicated in legal currency, the user will not pay in cryptocurrency. However, as long as both parties to the contract have accepted cryptocurrencies as a means of payment, there should be no problem with their admission. It would be an assumption similar to the electronic vouchers or discounts mentioned in the same recital or to the programs for redeeming points for products used by many Internet service providers.⁵²

It remains to be seen whether, in the future, payment through cryptocurrencies will be assimilated “legally in Spain and Europe to payment through metallic cash, although it is not attributed the status of money for that reason.” However, we agree with those authors who understand that “bitcoin” may function as an extinguishing mechanism of the payment obligation as long as the parties show their express and voluntary agreement since this qualification is the one that best suits the ultimate purpose of cryptocurrencies.⁵³

Once this question has been clarified, it is necessary to analyze the consequences of the law and, more specifically, for the DIPr, of said qualification.⁵⁴

4.1 Qualification of cryptocurrencies as a means of payment for private international law

as we have advanced, in our view, for the DIPR, cryptocurrencies must be qualified as a means of payment. This idea is based on three key arguments:

In the first place, the rating of cryptocurrencies held by national authorities or by the doctrine concerning merely domestic situations does not condition the

⁵⁰ K.B. Murugeswari, B. Balamurugan, G. Ganesan, *Op. Cit.*

⁵¹ Y. Çeribaş, *Loc. Cit.*

⁵² M. Franklin, *Op. Cit.*

⁵³ J.H. Forrester, *Op. Cit.*

⁵⁴ Ö. Ülger, *Op.Cit.*

rating that must be granted in DIPr. Furthermore, although the principles that inform an institution in the internal regulations affect the regulation of that same institution at the international level, the problems to be solved by the DIPr regulations are different from those existing in merely domestic situations. Consequently, the legal qualification granted to cryptocurrencies in DIPr may not coincide with that granted in other branches of the internal order.⁵⁵

Second, the vast majority of existing DIPr instruments in property law are instruments of European production. Therefore, it is necessary to sustain an autonomous rating of this figure to guarantee a uniform application of these instruments in all Member States to transactions in which cryptocurrencies are used. To do this, the content and purpose of the specific European instrument must be taken into account.⁵⁶

Third, the qualification of this figure for the DIPr should be guided by the need to grant the most satisfactory regulation possible to international private relations in which cryptocurrencies are used. In our view, this requires offering an interpretation that facilitates the use of cryptocurrencies as a means of payment in international trade.⁵⁷

Following these three postulates, we understand that the qualification of cryptocurrencies as a means of payment offers more satisfactory results than other alternative qualifications when determining the competent courts and the law applicable to the commercial transactions in which they are used. And this is because if cryptocurrencies were considered “intangible assets,” the legal classification of these transactions would unnecessarily hinder the application of art. 7.1 of RBI bis (art. 5.1 of the Lugano Convention) and art 22 of the LOPJ81 to determine international judicial competence; and art. 4 of the Rome I Regulation to establish the law applicable to the contract in which the payment obligation is reflected in cryptocurrencies.⁵⁸

4.2 International judicial jurisdiction: payment through cryptocurrencies and determination of the forum executions

As has been advanced, the use of “blockchain” technology in international contracting (the so-called “smart contracts”) does not present problems for the determination of the competent courts to hear international contracts concluded by consumers. This is so because the application of the competition forums on the matter (articles 17 to 19 of the Brussels Regulation) is not affected by the new

⁵⁵ C. Richter, S. Kraus, R.B. Bouncken, *Op. Ct.*, and M. Franklin, *Op. Cit.*

⁵⁶ J.H. Forrester, *Op. Cit.*,

⁵⁷ M. Franklin, *Op. Cit.*

⁵⁸ Y. Çeribaş, *Op. Cit.*, and P. Balgobin, A. Seeam, *Op. Cit.*

developments in the celebration and, where appropriate, execution of the obligations incorporated by the technology “blockchain ”.⁵⁹

In general, there should be no major problems in granting validity to submission clauses included in a “smart contract” thanks to the generic reference of art. 25.2 of the RBIbis to the forum election agreements concluded by electronic means. However, the reference to the law of the Member State whose courts have been designated in the agreement to determine its material validity may be problematic because, as of today, it cannot be affirmed that “smart contracts” are valid, as a form to express consent, in all Member States.

This being the case, in those cases in which the submission clause is not valid or has not been included in the contract, the determination of the competent courts must be carried out following art. 7.1 of the Brussels I bis/art. 5.1 CL (if the defendant is domiciled in the EU or a State party to the Lugano Convention); or art. 22 of the LOPJ by art reference 6 RBI bis/art. 4 CL, if the defendant is in a third State). And it is at this point, and the problems appear if the contract establishes the payment by cryptocurrency.⁶⁰

When applying art. 7.1 of the Brussels Ia Regulation, if the jurisprudence of our Supreme Court were followed and cryptocurrencies were classified as “intangible movable property,” it would be difficult to sustain the application of the special rules of letter b):

- a. If it were the delivery of goods in exchange for “bitcoins,” we would be facing a kind of swap.
- b. If it were the provision of your service in exchange for “bitcoins” in the face of a contract of difficult qualification, but, without a doubt, it would not be before the traditional contractual scheme of provision of services in exchange for a price.

Consequently, not being applicable any of the special rules, it would be necessary to resort to the general rule of the letter a), with the difficulties that this entails: it would be necessary to identify the specific obligation whose fulfillment is claimed; and, later, fix the place where it should be fulfilled. If this is not established in the contract, it should be determined from the *lex contractus*, which, as we will see, also presents problems for its identification.⁶¹

For its part, if the defendant was domiciled in a third State, determine whether the contractual obligation should be fulfilled in Spanish territory

⁵⁹ N. Shetewy, J. Aitlaadam, L. J. Jiang, *Op. Cit.*

⁶⁰ A.K. Yadava, *Op. Cit.*

⁶¹ M. Dumchikov, et al. “Issues of regulating cryptocurrency and control over its turnover: international experience.” *Amazonia Investiga* Vol 9, No. 3, (2020): p.10-20.

following art. 22 of the LOPJ would not be without problems either. If the unfulfilled obligation were the payment through cryptocurrencies, understood as “intangible personal property,” where should it be understood that the delivery should be made? Being a technology that enjoys the attribute of “relocation,” it could hardly be argued that this place was Spain.⁶²

The qualification of cryptocurrencies as a means of payment allows more adequate results to be reached since the contract they bring cause does not modify its qualification. Thus, when the defendant is domiciled in a Member State, if “bitcoin” is used to pay for a provision of services (e.g., a digital service such as hosting data, SaaS, or even a traditional service), It would be a contract regulated by the special rule of art. 7.1 of the RBI bis.⁶³

There seems to be no problem extending this interpretation to contracts in which goods are purchased in exchange for a payment in cryptocurrencies. In this way, we would not be dealing with a swap contract but with an international contract for the sale of goods in which payment is made by cryptocurrency, so the special rule of art. 7.1 b) of RBI bis would be applicable.

In short, the qualification of cryptocurrency as a means of payment implies that contracts for the sale of goods and the provision of services will not have their legal qualification altered, so the special rules of art. 7.1 b), which are easier to apply in practice than the general rule of art. 7.1 a). Thus, in contracts for the sale of goods, jurisdiction would correspond to the State’s courts where the goods were delivered⁸⁹ and in services, to those where the service was provided.

Finally, concerning art. 22 of the LOPJ, the consideration of cryptocurrency as a means of payment would allow us to interpret that the place of fulfillment of the obligation refers to the characteristic obligation that, in this case, would be non-monetary. In other words, the jurisdiction of the Spanish courts would be justified if the delivery of the thing, or the provision of the service, should be carried out in Spanish territory.⁶⁴

4.3 Applicable law: payment through cryptocurrencies and art. 4 of the Rome Regulation

As in the Brussels Ia Regulation case, the use of “blockchain” technology in contracts concluded by consumers does not require any interpretative effort

⁶² G. Giudici, A. Milne, D. Vinogradov. “Cryptocurrencies: market analysis and perspectives”. *J. Ind. Bus. Econ.* Vol. 47, (2020): 1–18

⁶³ *Ibid.*

⁶⁴ M. Tsukerman. “The block is hot: A survey of the state of Bitcoin regulation and suggestions for the future”, *Berkeley Technology Law Journal*, Vol. 30 No. 4), (2015): p: 1127-1170.

when determining the applicable law. And this is because neither the connection criteria (habitual residence of the consumer and conditional conflictual autonomy) nor the conditions of art. 6 of the Rome I Regulation are affected by such technology.

Again, problems can appear in contracts in general, especially when the parties have not chosen the applicable law, or this choice is not valid according to art. 3 of the Rome I Regulation. As indicated previously, it is unknown whether the different legal systems consider that “smart contracts” are a valid form of expressing consent.⁶⁵

The determination of the applicable law based on the subsidiary criteria of art. 4 can be complex if cryptocurrencies are classified as “intangible personal property.” And this is because, in such a case, it will be difficult to understand that the contract is included in one of the categories established in section 1. Again, the traditional contractual scheme of delivering the thing, or providing the service in exchange for payment, is broken off a price that seems to respond to letters a) and b) of art. 4.1 of the Rome I Regulation. Therefore, it would be necessary to refer to section 2 and, where appropriate, to section 4, the application of which is more complex for the applicator of the law and does not guarantee the same degree of legal certainty as to the solutions in section 1.⁶⁶

Thus, for example, if the sale of goods through “bitcoins” were classified as a swap contract, it would not be possible to identify the party carrying out the characteristic obligation, so the most closely related law should be designated directly, in attention to all the elements surrounding the contract. In this sense, authors like m. ng consider that “the decentralized and autonomous nature of the Bitcoin network makes it difficult to apply this criterion”.⁶⁷

Therefore, although the application of sections 2 and 4 should lead in the same way to the regulation of the contract by the law of the State of habitual residence of the seller and the service provider, in our view, it is easier to achieve that result if cryptocurrencies are qualified as means of payment.

Indeed, this approach to cryptocurrencies would mean that contracts for the sale of goods and those for the provision of services (whether digital or traditional) would maintain their legal status and, therefore, the applicable law would be determined from art. 4.1 of the Rome I Regulation. In the first case, it could also be argued that payment through cryptocurrencies does not affect the application of the Vienna Convention on the international sale of goods, although,

⁶⁵ R. Saberi, and A. Khalili Paji, *Op. Cit.*

⁶⁶ Ö. Ülger, *Op. Cit.*

⁶⁷ C. Richter, S. Kraus, R.B. Bouncken, *Op. Cit.*

because of the international nature of the Convention, this interpretation may not be final.⁶⁸

Conclusions

By way of conclusion and after the analysis carried out on the legal nature of cryptocurrencies and the sufficiency of the existing legal mechanisms to deal with said technology, it can be stated that the current private international law rules are sufficiently prepared to grant a satisfactory regulation to the legal businesses that integrate the so-called virtual currencies, even in those cases in which there is a requalification of the contract derived from the predominant conception of cryptocurrencies as intangible assets susceptible of ownership. However, given the difficulty of determining issues such as jurisdiction of the applicable law in the cases of requalification of the contract (and especially when it becomes a modality of the swap contract), we consider that it is more appropriate, for Private international law, the classification of cryptocurrencies or virtual currencies as an alternative means of payment. All this without prejudice to the fact that in the future, as the European mentioned above Commission initiative seems to indicate, international authorities reach a consensus on the legal nature of cryptocurrencies and proceed to a modification of the regulatory framework that unifies the legal treatment of them.

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⁶⁸ J.H. Forrester, *Op. Cit.*

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