

# El modelo de regulación legal de la circulación de monedas virtuales: La investigación sociológica y legal

## The legal regulatory model of virtual currency circulation: A socio-legal study

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### Resumen

El artículo considera el modelo de circulación legal de monedas virtuales. El problema de la naturaleza legal de las monedas virtuales sigue siendo discutible. Todo esto causa el problema de elegir el enfoque más óptimo y efectivo para regular la circulación de monedas virtuales. El artículo analiza diferentes enfoques para determinar la naturaleza legal de las criptomonedas y la experiencia de la regulación estatal en Suiza, Japón, Estados Unidos y China. En el artículo se utilizan los métodos de análisis legal, síntesis, especiales y científicos y el método de investigación sociológica. Como resultado de la investigación sociológica y legal, se hizo evidente la ausencia de una estrategia unida para la regulación legal de las monedas virtuales, lo que afecta su percepción por los encuestados. La conclusión se basa en un análisis comparativo de la regulación legal de la circulación de criptomonedas en estados como Japón, Estados Unidos y Suiza. A diferencia de estos países, China ha limitado significativamente el uso de criptomonedas, de hecho, eligió prohibir las monedas virtuales. La fragmentación de la regulación legal existe no solo a nivel de varios estados, sino dentro de un estado. Esto se confirma por la experiencia de los Estados Unidos y Suiza. Actualmente, el sistema de regulación nacional de la circulación de criptomonedas es más efectivo en Japón.

**Palabras clave:** Agentes de comercio; instrumentos financieros; moneda virtual; regulación legal

### Abstract

The article examines a model of legal circulation of virtual currency. The issue of the legal nature of virtual currencies remains controversial. This generates a problem of choosing the most suitable and effective approach to regulation of virtual currencies circulation. The article analyzes approaches to determining the legal nature of cryptocurrencies and the experience of state regulation in Switzerland, Japan, the USA and China. Methods of legal analysis, synthesis, specific scientific methods, and social research survey have been employed in this article. As a result of the conducted socio-legal study, it has been found that there is no unified strategy of legal regulation of virtual currencies, which affects their perception by recipients. This conclusion is based on the comparative analysis of legal regulation of cryptocurrencies circulation in such countries as Japan, the USA, and Switzerland. By contrast with these countries, China has significantly restricted usage of cryptocurrencies, actually having chosen the way of banning virtual currencies. The inconsistency of legal regulation can be observed not only between different countries, but also within one state, which is proved by the situation in the USA and Switzerland. At the present time, the system of government regulation of cryptocurrencies circulation is the most effective in Japan.

**Keywords:** Brokers; consumers; financial instruments; legal regulation; virtual currency



## INTRODUCTION

Since the emergence of virtual currencies, they have become a subject of active research (Yli-Huumo, Ko, Choi, Park and Smolander, 2016). This is no coincidence, taking into account, first, the unusual and even unique character of virtual currencies compared with other financial instruments and, second, their theoretical and practical significance for understanding the main trends of development of national financial systems. Countries face the necessity of identification of economic and legal essence of cryptocurrencies, identification of risks associated with their circulation and advantages of their usage. In spite of the fact that in the current context these issues are actively addressed, the general strategy has not yet been worked out at the international level (Herrera-Joancomartí, 2015). Countries regulate or ban cryptocurrencies on the basis of their own experimental models, which do not possess clearly defined boundaries yet. In such conditions, it is necessary to carry out comparative analysis that would allow studying both strengths and weaknesses of different legal regulatory models applying to cryptocurrencies.

## METHODS

The article is written from the perspective of sociology and comparative law and the socio-legal approach suggested by us allows making comprehensive conclusions. The debatable character of the subject under consideration determines the necessity of studying, analysis, and systematization of the opinions shared by the legal community on the issues regarding the legal nature of cryptocurrencies and potential risks associated with them. The above-mentioned factors necessitate the usage of comparative legal and sociological research methods.

*Sociological survey.* From December 2017 to February 2018, 207 respondents were interviewed, 123 of whom were people with higher legal education and 84 — without a degree in law, but studying for such a degree or working in the sphere connected

with the usage of legal knowledge (interrogators), aged from 17 to 60, including:

- a. 70 Bachelor students studying for a law degree;
- b. Practicing lawyers (including 21 tax officers, 24 prosecuting officers, 19 interrogators, 24 lawyers working for private companies, and 26 officers of other government bodies).

The majority of the respondents (87%) know or have heard about cryptocurrencies (correspondingly, 13% of the respondents do not know what cryptocurrencies are). It should be mentioned that 59% of the respondents are willing to learn more about cryptocurrencies, their characteristics, and specific features of their circulation. At the same time, none of the respondents have ever owned cryptocurrencies or come across this type of currencies in their professional activities.

Only 13% of the respondents view cryptocurrencies as a threat to the stability of the national monetary system. According to 38% of the respondents, cryptocurrencies do not pose a threat to the national monetary system. At the same time, 49% are undecided on this issue. It appears that this can indicate a lack of sufficient knowledge about the specific features of cryptocurrencies circulation, which is caused by the complexity of this matter, as well as by the lack of information about this subject.

The majority of the respondents do not deem it necessary to introduce a total ban on currencies circulation — 73% of the respondents share this point of view. However, this opinion is sometimes justified by completely opposite reasons.

On the one hand, many respondents have pointed out that the state has no opportunity to restrict the circulation of cryptocurrencies as such. On the other hand, some respondents mention the lack of potential of cryptocurrencies — in their opinion, there is no point in introducing the ban, since in the nearest future cryptocurrencies will not be able to replace the national currency. Some respondents predicted an inevitable collapse of cryptocurrencies. Therefore, they believe that there is no necessity to restrict their circulation.

At the same time, a certain number of specialists think that cryptocurrencies are not only harmless, but even beneficial for the Russian state, as they can be used to circumvent sanctions that have been introduced by some Western countries.

Among the reasons for the lack of necessity to introduce a ban on cryptocurrency circulation the respondents have mentioned the following:

- Cryptocurrencies represent a new type of global money;
- A ban on circulation of cryptocurrencies will lead to technological inferiority of the country and, as a result, stagnation of economy;
- Usage of cryptocurrencies is convenient for making online transactions;
- The government should restrict its intervention in the economy;
- Introducing a tax on cryptocurrencies may serve as a source of additional government revenue;
- A ban on circulation of cryptocurrencies contradicts the constitutional principles, including freedom of information.
- In their turn, advocates of introducing a total ban on circulation of cryptocurrencies have pointed out the following:
  - Cryptocurrencies represent a type of a financial pyramid;
  - This instrument encourages fraudulent activities;
  - With their help it is possible to buy prohibited goods and services, which poses a threat to public law and order;
  - Cryptocurrencies contribute to commitment of other crimes.

Therefore, a conclusion can be drawn that the majority of the respondents in the interviewed group consider cryptocurrencies to be a subject of law infringement or a tool that promotes crime. Thus, according to lawyers, cryptocurrencies in the first place pose a threat to public law and order rather than to the stability of the national currency and the monetary system as a whole.

The majority of the respondents do not deem it necessary to introduce a total ban on currencies circulation. Apart from that,

65% of the respondents are supportive of state control in the sphere of cryptocurrencies circulation. Interestingly, 84% of the lawyers justify their opinion by virtually the same reasons as the group that advocated for a ban on cryptocurrencies circulation — the state should control their circulation in order to prevent illegal activities in the financial sphere. A certain number of the respondents highlight the fact that usage of cryptocurrencies as a tool for commitment of crimes is caused by their anonymity. Apart from that, many respondents indicate that the state is responsible for the protection of society from corresponding unlawful acts. In their turn, 16% of the respondents in this group advocate for the very fact of control without providing any sound arguments for that.

The respondents mention the following problems in the sphere of control of cryptocurrencies:

- The government does not have effective mechanisms of control;
- Illegal transactions can be made without usage of cryptocurrencies, while control of their circulation will lead to a reduction of the investment appeal of this instrument;
- The state cannot ensure effective control in this sphere, since cryptocurrencies do not belong to any jurisdiction.

On the whole, the conducted research has shown that representatives of the legal community are quite well aware of the existence of cryptocurrencies, largely due to the mass media. However, their knowledge about cryptocurrencies is limited by the information commonly provided by the mass media. Among other things, it is proved by the fact that none of the respondents have specified economic threats to the national monetary system posed by cryptocurrencies, reducing the corresponding risks only to the possibility of illegal activities. This is the main argument to justify the necessity to introduce a ban on the circulation of cryptocurrencies and control of transactions with their usage. Besides, among the advantages of cryptocurrencies, the respondents do not mention their economic attractiveness based on the

absence of intermediaries (including banks) and, as a result, no transaction fees (Hayes, 2017).

The obtained information shows that at the present time, cryptocurrencies should not be viewed as a large-scale economically attractive and convenient payment instrument. None of the respondents have ever owned or come across cryptocurrencies in the course of their practical activities. It can be assumed that this situation will continue for quite a long time and the threats posed by cryptocurrencies to the stability of the global economy and national currencies are now purely theoretical.

## RESULTS

The diversity of legal models regulating virtual currencies justifies the necessity to choose the optimal one. Meanwhile, it gives rise to discussions of criteria that should serve as a basis for such choice. The most important of them are the security of the national financial system, as well as the stability of money circulation and of the national currency. At the same time, national legislative bodies approach the risks for public and private finance associated with cryptocurrencies in different ways (Guadamuz and Marsden, 2015).

Another controversial issue is the possibility of delegating the authority to regulate cryptocurrencies from the national level to administrative-territorial units (Liu and Li, 2018).

From the perspective of the questions under consideration, the experience of Switzerland is of particular interest. According to Part 1 of Article 99 of the Federal Constitution of the Swiss Confederation of April 18, 1999, the monetary and currency-related issues are in the supervision of the Confederation; it has the exclusive right to strike coins and issue banknotes. According to Article 1 of the Swiss Federal Act on Currency and Payment Instruments (Bundesgesetz über die Währung und die Zahlungsmittel-WZG, 1999), the official currency and legal means of payment within the territory of this country is the Swiss franc. The existing legal uncertainty, in its turn, does not allow to qualify cryptocurren-

cies as currencies. Therefore, legal regulation of cryptocurrencies relying on the Constitution of Switzerland falls into the category of residual competences of cantons. This means that each canton determines the rules of cryptocurrencies circulation within its territory independently.

For example, on July 1, 2016, the Swiss town of Zug, which is the capital of the canton with the same name, launched a pilot project, according to which, bitcoins started to be accepted as a means of payment for the services provided by the canton. The maximum size of payment in bitcoins is limited to an amount equivalent to 200 Swiss francs; payments exceeding this amount must be made in the national currency. Although bitcoin payments were not in great demand, the pilot project has been extended.

From January 1, 2018, in another Swiss town of Chiasso, it has been allowed to make tax payments for the amounts under 250 Swiss francs.

The above-mentioned regulations are of interest; in the case under consideration, the Swiss municipalities pursue the objective to create a positive image of territories with advanced liberal regulations, which can encourage the growth of their investment appeal ([Kirillova, Pavlyuk, Zulfugarzade and Mikhailova, 2018](#)).

As of today, full-fledged legal regulatory models of virtual currency circulation have been developed and implemented only in a few countries, including Japan. The heightened interest in cryptocurrencies in this country can be explained by the specific cultural and historical features of Japanese society, which is highly interested in new technologies.

On April 1, 2017, amendments to the Payment Services Act no. 54 of June 24 ([MAS, 2009](#)) came into effect, which provided the definition of virtual currencies, institutionalized the legal status of persons who provide the services of virtual currencies exchange, and established the mechanisms of government regulation and control of the activities conducted by such persons.

According to the definition provided by Section 5 of Article 2 of the Payment Services Act, the term “virtual currency” means:

- Property value (limited to that, which is recorded on an electronic device or any other object by electronic means, and excluding the Japanese currency, foreign currencies, and Currency-Denominated Assets; the same applies in the following item), which can be used in relation to unspecified persons for the purpose of paying consideration for the purchase or leasing of goods or the receipt of provision of services and can also be purchased from and sold to unspecified persons acting as counterparties, and which can be transferred by means of an electronic data processing system;
- Property value, which can be mutually exchanged with what is set forth in the preceding item with unspecified persons acting as counterparties and which can be transferred by means of an electronic data processing system.

Such virtual currencies as Bitcoin, Ezerium, Litecoin, and some other cryptocurrencies that can be used as a means of payment fall into the first category. The second part of the definition includes such virtual currencies that cannot be independently used as a means of payment, but can be exchanged for the first type of virtual currencies. Tokens that can be exchanged only for the second type of virtual currencies do not fall under the definition of the second type of virtual currencies ([Abramowicz, 2015](#)).

The term “currency-denominated assets” as used in this Act means assets, which are denominated in the Japanese currency or a foreign currency, or for which performance of obligations, refund, or anything equivalent thereto (hereinafter referred to as “performance of obligations”) is supposed to be made in the Japanese currency or a foreign currency. In this case, assets for which performance of obligations, etc. is supposed to be made by means of currency-denominated assets are deemed to be currency-denominated assets ([Wright and De Filippi, 2015](#)).

According to the Japanese legislation, the term “virtual currency exchange service” means carrying out any of the following acts in the course of trade, and the term “exchange of virtual currency, etc.” used in the Payment Services Act means the acts set forth in items 1 and 2:

1. Purchase and sale of a virtual currency or exchange with another virtual currency;
2. Intermediary, brokerage or agency services for the act set forth in the preceding item;
3. Management of users' money or virtual currency, carried out by persons in connection with their acts set forth in the preceding two items.

Exchange of virtual currencies is conducted by the following entities (Fig. 1):



**Fig 1.** Entities conducting virtual currencies exchange.

Source: Authors.

It is necessary to distinguish the entities that trade in virtual currencies in their own interests: mining companies, software developers, and eWallet service providers whose services are not connected with purchase and sale of virtual currencies.

The Japanese legislation prohibits conducting activities connected with providing virtual currencies exchange services without registration.

This rule applies not only to Japanese providers of virtual currencies exchange services, but also to foreign providers who render corresponding services within the territory of Japan. The term “foreign virtual currency exchange service provider” means a person who carries out a virtual currency exchange service in the course of trade in a foreign state under the same kind of registration as the one referred to in Article 63-2, pursuant to the provisions of laws and regulations of that foreign state equivalent to this Act.

Foreign providers can register on their own (for this purpose, they need a license issued by another state and have a representative office in Japan) or establish a subsidiary in Japan (it must have the legal status of a stock company).

In order to protect clients, the Payment Services Act requires virtual currency exchange service providers to provide the clients with information regarding corresponding virtual currencies and other terms and conditions of contracts related to the service. In addition, there is a requirement, according to which any virtual currency or money received on behalf of the customer must be registered separately from the provider’s own assets. Auditing companies from Japan or another country that have a license for conducting activities in Japan must check the above-mentioned transactions in terms of assets differentiation (Zheng, Xie, Dai, Chen and Wang, 2018). Service providers that exchange digital currencies must keep records, including handing in audit results to relevant authorities. These authorities are entitled to conduct filed audits and issue instructions to rectify violations. The body that performs all of the above-mentioned procedures is the Financial Services Agency. This body was established in July 2000 in light of structural changes of the legislation and the administrative reform in Japan. From January 2001, the Financial Services Agency reports directly to the Cabinet of Japan, monitoring the financial market and regulating the national stock market. Taking into account the importance of self-regulation, it should be noted that cryptocurrencies exchange service providers can also establish self-regulating organizations.

By now, the Agency has registered 15 organizations, which are entitled to make transactions with digital currencies. These organizations include Tokyo Bitcoin Exchange Co. Ltd, Bit Arg Exchange Tokyo Co. Ltd, FTT Corporation, and Xtheta Corporation. Interestingly, the Financial Services Agency has allowed conducting activities only in the sphere of bitcoin exchange to three exchanges out of the four. The list of cryptocurrencies, which stock companies can officially trade in on the basis of Xtheta Corporation, includes several altcoins: Ethereum (ETH), Bitcoin Cash (BCH), Ripple (XRP), Litecoin (LTC), Ethereum Classic (ETC), NEM (XEM), Monacoin (MONA), and Counterparty tokens (XCP).

In connection with concerns over the possibility of using cryptocurrencies for money laundering and financing of terrorism, the amendments to the Act on Prevention of Transfer of Criminal Proceeds will require digital currencies service providers to introduce mechanisms for requesting proof of identity from their clients, creating and retaining personal identification records and a register of all transactions. In addition, these amendments will impose an obligation on service providers to inform state authorities of suspicious transactions ([Ujii, 2002](#)).

It has not been long since the amendments were introduced and came into force; therefore, the list of requirements to cryptocurrencies service providers is still being developed by the government and will be included in the corresponding Japanese laws. From April to October of the current year, the police registered 170 reports of money laundering with the use of cryptocurrencies. According to the statistics based on the first seven months of 2017, residents of Japan have reported 33 cases of fraud involving digital currencies. According to the estimates provided by the National Police Agency (NPA), the damages resulting from fraudulent activities amounted to 76.5 mln yen, which is equivalent to about 710,848 US dollars. The highest damages caused by virtual currencies were registered in June 2017; the losses were inflicted by Ripple (29.9 mln yens) and bitcoins (29.3 mln yens). The damages caused by Ethereum and NEM amounted to 200,000 yens and 100,000 yens correspondingly ([Peck, 2017](#)).

## DISCUSSION

In its turn, China decided to ban virtual currencies. The People's Bank of China, the Ministry of Industry and Information Technology of the People's Republic of China, the China Banking Regulatory Commission, and the China Securities Regulatory Commission have issued a joint letter, which has in fact banned Initial Coin Offering (ICO). As it has been pointed out in this letter, tokens or "virtual currencies" "are not issued by any official monetary authority and not have monetary and other legal attributes, such as legal liability and or enforcement. They do not possess a legal status equivalent to a currency, cannot and must not be used in the market as a currency" (Eyal, 2017).

At the present time in the US, there are no regulations applying to virtual currencies circulation at the federal level. However, on February 6, 2018 the United States Senate Committee on Banking, Housing, and Urban Affairs conducted a hearing entitled "Virtual Currencies: The Oversight Role of the U.S. Securities and Exchange Commission (SEC) and the U.S. Commodity Futures Trading Commission (CFTC)"; the main speakers were heads of the corresponding commissions (Dwyer, 2015).

The recently observed "spread and resulting popularity of cryptocurrency markets poses the question to the market regulators if the historically developed approach to regulating transactions with sovereign currencies is suitable for these new markets. These markets may look like the markets we regulate with exchange rates and other information. In fact, investors who make transactions on these platforms do not receive many market protection measures that they could receive if they conducted operations under the facilitation of dealing brokers, registered exchanges or alternative trading systems (ATS)" (Treleaven, Brown and Yang, 2017). The US Securities and Exchange Commission regulates and controls the circulation of cryptocurrencies in the following ways:

- If a currency or a product, the value of which is pegged to one or several cryptocurrencies is a security, its promoters cannot offer or sell it if it does not comply with the regulations regarding registration and other requirements set by federal laws on securities;
- Monitoring the activities of market participants connected with cryptocurrencies. Such market participants include brokers, dealers, investment consultants, and trading platforms. Brokers, dealers, and other market participants that accept payments in cryptocurrencies, allow their clients to buy cryptocurrencies or use them in different ways to make transactions with securities are recommended to exercise due diligence, including making sure that the examined operations do not violate the anti-money laundering regulations, and to adhere to the “know-your-customer” principle. The indicated market participants “must treat payments and other transactions with cryptocurrencies as if cash was transferred from one party to another”;
- The financial products that are related to basic digital assets, including digital currencies, can be considered as securities falling within the scope of federal laws on securities, even if the underlying cryptocurrencies are not securities as such ([ElBahrawy, Alessandretti, Kandler, Pastor-Satorras and Baronchelli, 2017](#)).

As of today, legal regulation of virtual currencies circulation in the US is in the first place implemented at the level of states. The legal regulatory models used are totally different. For example, the Texas Department of Banking has come to the conclusion that commercial activities connected with money transfers must comply with license requirements set forth in Chapter 151 of the Texas Finance Code and Chapter 7 of the Texas Administrative Code. Among other things, since money transfer activities relating to virtual currencies are conducted online, the minimum net worth of entities undertaking such activities should amount to 500,000 US dollars (Finance Code §151.307). In some cases, it can be increased up to 1 mln US dollars (§151.307(b)).

In the state of New York an act has been introduced that requires licensing of activities connected with virtual currencies exchange (the so-called BitLicense). In the state of California, buying lottery tickets “for bitcoins and other cryptocurrencies” is banned (Cal. Stat. §320.6 (4) (f)). At the time of writing, in some states, there were no regulations applying to virtual currencies circulation at all (for example, in the state of Mississippi).

The lack of a uniform approach to regulating virtual currencies leads to competition between states in this sphere and has a generally negative effect on business connected with virtual currencies. For the purposes of unification of state legislation, the Uniform Law Commission has developed the Uniform Regulation of Virtual-Currency Businesses Act. The Commission assumes that in the future this Act will serve as the basis for the legal regulation of virtual currencies in different states. As of April 1, 2018, this Act has not been passed in any of the states, although it has been submitted to consideration by the legislative bodies in the states of Connecticut, Hawaii, and Nebraska.

## CONCLUSIONS

As a result of the conducted socio-legal study, it has been found that there is no unified strategy of legal regulation of virtual currencies, which affects their perception by recipients.

The first conclusion is based on the comparative analysis of legal regulation of cryptocurrencies circulation in such countries as Japan, the US and Switzerland. By contrast with these countries, China has significantly restricted usage of cryptocurrencies, actually having chosen the way of banning virtual currencies. The inconsistency of legal regulation can be observed not only between different countries, but also within one state, which is proved by the situation in the US and Switzerland. At the present time, the system of government regulation of cryptocurrencies circulation is the most effective in Japan.

The following conclusions are based on a sociological survey with the participation of 207 respondents including people with a degree

in law, studying for such a degree, or working in spheres connected with the application of legal knowledge.

The majority of the respondents (87%) knew about the new financial instrument represented by cryptocurrencies, while 13% of the respondents did not possess such information. This allows us to draw a conclusion that over the period from December 2017 to February 2018, in spite of active discussions and the growing trend towards using cryptocurrencies, even among students and practicing lawyers, there were still some people who were not familiar with new financial technologies and instruments. Interestingly, the same number of the respondents (13%) viewed cryptocurrencies as a threat to the stability of the national monetary system. The survey results suggest that financial literacy correlates with the perception of virtual currencies in the public consciousness.

73% of the respondents had a negative attitude toward the circulation of virtual currencies. However, this result is explained not only by the approval of cryptocurrencies usage, since among the reasons for the lack of necessity to ban cryptocurrencies the respondents mentioned the lack of potential of this financial instrument. The reasons for disapproval of the ban can be divided into two groups:

1. The novelty and convenience of the new financial technology and instrument;
2. The necessity for the reduction of the role of the state in the economy.

The main reason the necessity to introduce a ban on virtual currencies circulation mentioned by the respondents was the possibility of their usage in the course of illegal activities, i.e. a threat to public law and order rather than the national financial system. In this connection, government regulation and control are matters of utmost importance.

The obtained sociological data suggest that when such factors as the lack of awareness of virtual currencies, government regulation and control are eliminated, survey results can be different. The economic and legal conditions of state functioning will affect the end

results of such surveys. In this context, it should be noted that survey results show the interrelation between financial literacy of the population, legal groundwork, and actual economic relations, on the one hand, and perception of new financial instruments by society in general and the legal community in particular, on the other hand. Projection of the obtained results not only on the legal community, but also on other population groups is possible due to the fact that, as the sociological survey has shown, many factors are important for the perception of cryptocurrencies and legal knowledge is not the key aspect here.

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