

The Role of Government in a Crypto-currency World

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Abstract—The subject of the research is an opportunity and advisability of a financial crypto-currency regulation. Wherein the work has an aim to substantiate an opportunity and necessity of introduction of government regulation for crypto-currency. In the research are used instruments of government financial regulation with specifics of electronic money using. It is suggested the approach for crypto-currency security creation, based on main fraudulent outlines, used in practice of using electronic money. The presented approach can be demanded by government regulation agencies in the area of financial using, also by banks during suspicious deals detecting. The developed approach gives an opportunity of volumes moving evaluation of electronic money in country and areas of its investment. To protect crypto-currency owners from fraudulent deals and to rise the protection of their crypto-currency wallets.

Keywords—*crypto-currency; block-chain; crowdfunding; ICO (crypto-currencies); token; cyber fraud; dark-net*

I. INTRODUCTION

Few years ago analytic companies, which work with financial markets, distinguished an active rising of crypto-currency value. The rising of this paying electronic system relevance allowed users to think about new currency type purchase. For a short time interval this form of money variation showed unquestionable advantages comparing with traditional payment ways. Nowadays enough time is dedicated to the world financial system condition. A current rate of ruble steadily falls relatively main strong currency (dollar, euro, etc.) and the world and our fellow citizens start to look at crypto-currency: bitcoin and its other digital forms.

An active using of decentralized payment system allowed financial relationship subjects to avoid traditional problems, which appear in any bank system. Using crypto-currency, legal and physic persons could [1]:

- Leave from many bureaucratic delays;
- Reduce much consumption for overpriced commission and other pickings payment;
- Reduce substantially a negative influence of out and inner factors in electronic currency position.

In such a way, a conversion to digital currency was accepted expedient by many large foreign companies. Many widespread famous corporations started to use digital currency, marking its numerous advantages for common ways of payment. As it known it can be founded many stories in internet space about how users faced with fraud using investment into digital currency and lost their invested savings.

Consequently, rather serious problems exist with owner's digital currency protection, which are connected with that virtual market of cryptocurrency is opened, decentralized and no regular. So, because of digital currency decentralization there is no state or interstate agency, which should provide a necessary protection for cryptocurrency owners. Authorities ambitions, including Russian, to take cryptocurrency under a strong control are not surprising. However, a practical realization of the state regulation idea evokes doubts from specialists by following reasons [2].

At first, *cryptocurrency emission* happens during the mining process and is realized on computers or special made calculative installations- farms, belonged to normal users or

many commercial firms. Consequently, an ambition to regular mining process somehow, is necessary to have access to these devices, and besides not only in the territory of your own country. Moreover, if under “emission control” is understood a want of authorities to take taxes from mining, it is unclear how a government could detect or count incomes, which miners get.

Secondly, nowadays to detect cryptocurrency turnover between its owners is unrealizable problem. Because cryptocurrency owners’ wallets are sequence of symbols in ramified chain of files, to identify which or compare it to a real owner is possible just if an owner decide to inform about his electronic wallet by himself.

Thirdly, it exists just one relatively simple opportunity to detect cryptocurrency moving- its changing to normal fiat (fiduciary) currency. More often a net user, who purchase cryptocurrency for rubles or dollars, makes money transferring to a digital currency seller’s bank account and waits then till he makes a transaction of cryptocurrency to user’s electronic wallet. Wherein a bank which doesn’t see (doesn’t control) cryptocurrency transferring doesn’t know the financial meaning of fiat money transaction between clients also.

If because of self-protection reason anonymous cryptocurrency seller will use his own bank account in a country, where bank secrecy is being followed strictly and cryptocurrency turnover isn’t forbidden (Switzerland, for example), Russian control agencies practically won’t have any real opportunity to detect the personality of that seller.

II. THE AIM OF THE RESEARCH

To reduce dangers of digital currencies using by their owners. To restore citizens confidence after negative examples, connected to Soviet investments loss, the default of the 1998, endless inflationary processes. At the same time cryptocurrency wallet in the state system won’t be anonymous, and this won’t arrange for everybody.

Maximum correlation of these two mutually exclusive processes will allow to create a reliable financial system, attractive for users and agencies, making state regulation in this space also. To reduce a probability of fraudulent operations during buying and selling cryptocurrency.

III. MATERIALS, METHODS AND SUBJECTS OF THE RESEARCH

Cryptocurrency is one of the digital currency varieties, which is created, protected and controlled by special cryptographic methods [3]. Cryptocurrency- is payment unit, money, which can’t be faked because cryptocurrency itself is a code, encoded record in a digital data bank, copies of which are always synchronize in different computers in different parts of the world.

At the same time there are many fraudulent operations, connected to digital currency weaning off and deception of its owners.

Despite on a strong progress in economic globalization, the world financial system is still strong fragmentary and just its separate players get a real chance to influence on something. Consequently, block-chain has a good potential for consolidation and even for standardization of main financial markets. It is known that different private companies and regulation agencies already started to introduce block-chain technology to their business-models. One of the vital problems of world economy is economic growth deceleration. The lack of economic growth is one of the most important problems, which can amplify problems in other areas of activity, with which our world faces all the time [4].

So, different international organizations acknowledge the problem of reduce and even deceleration of economic growth. In such a way, the UN report starts from the caption - «Global economy stays indrawn into a long period of a deceleration growth”. Besides, in the report it is emphasized that: “Factors, which are being in the background of a long economic recession have a tendency to amplify each other because of close connections between the demand and investments, trade and productivity” [5].

In the research made by the World bank, the following is being claimed – “last few years long-term financing attracts high attention for legislators, investigators and other interested parts of financial sector”. Wherein lack of a long-term financing “has more aggravated the position of existing vulnerabilities and increased the influence of long-term financial problems, in particular for infrastructure” [6].

Moreover, in the research made by the Organization of Economic Cooperation and Development, also is being noticed that “long-term investments play the key role in promotion of the growth and work places creation”. There is being indicated also that “long-term investments are necessary for the growth, and its financing faces serious problems, which need active calling in corporative investors” - private companies should take part more actively in problems solutions, connected with long-term financing deficit [7]. The institute of international finance in the published report “Structural calls to the developing market” shows visually and substantiate all possible consequences of long-term financing deficit: “Failure to support a strong growth of economy threatens to that expectations, in particular, the expectations of the growing middle class will be deceived, which can contribute to the amplification of social tension, as it was not long time ago in Turkey and Brazil” [8].

Wherein social unrest as it known often outgrows to all possible conflicts, which aggravate the problem. G30 - the consultative group for international economical and money problems made the objective research to detect four main principles, which influence on the lack of long-term financing. The group’s conclusions:

Financial system should direct citizens’ and companies’ savings to the real opportunity of financing with a long term of its return, with the aim to satisfy growing investing needs of the world and national economy.

A long-term financing should be made by physical and legal entities with attractive long-term perspectives.

For the support of long-term investments should be available the wide range of financial instruments.

Effective international financial system should provide the economic growth by the way of making stable streams of a long-term financing, supported by a transparent and effective global regulation.

Consequently, the block-chain technology and its active popularization by the uneven cryptocurrency costs growth can make help to the world financial system to solve its main problem- the deficit of a long-term financing and provide next global growth of economy.

IV. PERFORMANCE

It is known that the transition to financial calculating by bitcoin changing has also an essential negative side. The main danger is inside effective active net of a cyber fraud. Criminals mislead and deceive many internet users, who make simple financial operations with cryptocurrency and direct money to personal deposits. As a fraud with bitcoins is prospering, amounts of the damage made to users for the last four years measured for hundred million dollars [9].

Last time employees of law-enforcement agencies started to detect happenings of especially large bitcoin fraud.

One of the state control and participation direction can be crowdfunding because a fraud, connected to digital currency can appear exactly in this area.

One of the main crowdfunding condition is opening, nevertheless internet fraud entered this area of business also. At first a recipient need to collect the certain money amount, which next he plans to cover by other people help and to designate this amount. Consequently, the quantity of a money fund, collected for the exact period of time always should be opened for all donors. Wherein the main and comprehensive condition is that collected funds should be used for the realization of the aim, indicated in the project.

Exactly the control of the last aim from the state side can become some prototype of cyber fraud protection. In the USA it is being set a task in front of the state controlling structures (SEC and CFTC) for inside cryptocurrency market regulation [10].

In the Russian Federation this aspect doesn't regulated at all, so it has wide scope for rulemaking.

As international practice shows, problems of moving crypto-currency control will become more severe because every day there are being providing new and new limitations. This process will continue till ICO become stable and reliable financial mechanism with minimal possible fraudulent schemes for investor's deception. It is supposed that in perspective tokens at smart contracts will be able to make a serious competition to stocks and bonds in our customary understanding.

It is known that nowadays during stocks and bonds buying there are many intermediaries, clearing center, broker, depository, etc., but during token's buying this intermediary series minimalizes, this rises its amounts and is attractive to potential investors [11].

Crypto-currency is some kind of investing way now and is more suitable to venture investing. That's why many large investors enter into a long-term with ICO or crypto-currency as well. For them practically the current rate or crypto-currency moving isn't important because they invest their savings to the perspective.

The next most attractive crypto-currency using is laundering of money or payment of doubtful deals in dark-net. Many large financiers use crypto-currency as offshore or hedge-funds. So they save their money funds not in banks accounts in other countries because they save them on crypto-currency self-wallets.

V. CONCLUSION

The lack of reliable normative legal base for international financial streams through digital currencies is a serious threat for regional and global financial structures also. In nearest future banks and administrations of financial funds can lose potential clients, making all the global financial system even more fragmentary.

Consequently, the decentralization is the only global aim, which stands between opened block-chains. However, the lack of adequate and understandable normative base for users and also lack of stable and strong leadership can lead to unexpected failures in financial market. So, the decentralization of international system is inevitable, but this process should be made with an accordance of both interests of all strictly and indirectly interested sides for providing smooth and painless transition.

A quick growth of different crypto-currencies payed attention of state structures because of few reasons. Illegal and sometimes criminal financial streams, serious credit risks and default risk also, connected to ISO, variety schemes of how to not to pay taxes - are just few problems with which governments potentially face because of the quick growth of crypto-currency assets. Government leaders all over the world start to understand that it is more expedient to join crypto-currency trend, then try to fight with it anyway. Besides, a stimulating of international financial streams with the aim of global economic growth is one of the main problems for government leaders in most countries in the world. G30 notices that «Politicians should start a gradual liberalization of fund accounts in developing markets, saving financial stability as well and using instruments of macro-prudential policy».

According to the World Economic Forum (WEF) certain success is already reached in the block-chain using and the distributed registry technology (DLT). The WEF researches showed that nearly 80% of banks can initiate a financing of projects based on DLT in the 2018, besides more than 90% of central banks take part in discussions about DLT using all over the world. Besides, the International Currency Fund

introduced the new concept of digital currency of the Central Bank (CBDC), which can «solve the problem of coordination in connection to new digital currencies and to stimulate technological innovations».

OECD accepted the Multilateral convention for the introduction of tax's agreements, connected to steps of taxable base decrease prevention and moving money funds starring 70 ministers and other representatives of the higher level, who signed these agreements. Practically OECD made one more important step against "strategies of taxes payment evasion, which irrationally use tax agreements for an artificial transferring of money funds to the places with low taxes or lack of taxes".

Besides, new technologies can help companies, especially not large, to invite facilities for a creation and financing for their operations, which can allow these companies be more competitive inside the country and outside it too. These technological innovations can introduce new financial opportunities for investors, but its full realization is possible only when they are being made according to the current legislature.

In such a way, the state control and an effective building of relationships in the space of digital currency regulation will help to eliminate many fraud schemes, to improve an investing climate and to expand the taxable base.

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