Cryptocurrencies and Taxation

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Abstract

Even though the existence of its idea emerged years ago Bitcoin, started to be used after the 2008 world financial crisis, is the most known of the virtual currencies. Bitcoin has come up with Craig Wright's "Bitcoin: A Peer-to-Peer Electronic Cash System" for the first time, nicknamed Satoshi Nakamoto for the first time and started to be used in 2009. In the period of increasing of financial risks, digitalization and getting stronger the expectancy which economic effects of the changes in world political balances could result in foreign trade wars via giving of unlimited powers to the presidents In China and in the USA, Despite the risks of cryptocurrency, mattress saving is considered an important investment tool. For example, in Greece banks vacationed in July 2015 and withdrawal restriction of 60 euros from ATMs, which has supported the idea that governments and banks could not be relied on during periods of economic depression. Owing to arising bitcoin billionaires with the change in the bitcoin / dollar parity in the USA in 2009-2013, the escape from supervision with the digitization of assets in India and in China and the structure that does not allow to follow of drug traffickers, mafia and terrorists' money transfers with using blockchain encryption technology, have increased the demand for cryptocurrencies. Thus, it has helped spread the cryptocurrencies that can easily be bought, sold, and transferred on free stock exchanges without relying on any state power. Therefore, cryptocurrencies, cryptocurrency exchange and its Regulations, regarding for taxation on income derived from the cryptocurrencies, and practices of selected countries is mentioned to various taxation suggestions for Turkey in the study.

Keywords : Cryptocurrencies, Regulations for Cryptocurrencies Exchanges, Taxation of Cryptocurrencies.

JEL Classification Codes : F6, G28, H2.

Introduction

Today, the increase in interest of cryptocurrencies increases the exchange rate of cryptocurrencies to dollars and other currencies. In 2009, a bitcoin was worth six US cents, exceeding US $ 821 in January 2014, and the highest price of US $ 19,498.68 at the end of 2017. Hence regulations on cryptocurrencies and cryptocurrency exchanges have been needed in many countries for purposes such as price fluctuations in cryptocurrencies, protection of investors against sudden financial risks, prevention of possibilities for the confidentiality of criminal activities, and the inclusion of profits derived from cryptocurrency trading within the scope of taxation. However, there is not yet a standard cryptocurrency regulation applied globally in the world. To ensure the protection of consumers at the level of governments, various preparations of arrangements are underway to prevent the area of tax revenue leakage and potential digital crimes and cyber-attacks, terror financing and money laundering that can occur through cryptocurrencies. In this respect, in the EU, via the additions to the fourth directive to address the threat of money laundering, launched in 2015, and the terrorist attacks in 2015 and 2016 in Paris and Brussels and the Panamanian papers, regulations have brought to agenda. On 19.04.2018, it has been argued that regulations required to prevent the financing of money laundering and terrorism, approved in EU member states, will be included in national legislation within the next 18 months.

Cryptocurrencies

Globally known Bitcoin, Ethereum, XRP, Bitcoin Cash, Eos, Stellar, Litecoin, Cardano, Tether and so on there are many cryptocurrencies and their numbers are increasing day by day. As of August 2018, there are 1771 cryptocurrency and 12652 crypto currency stocks in the world, and the market value of cryptocurrency is $ 231.038.202.716 and the last 24 hours transaction volume is $ 15.565.846.656. (<https://coinmarketcap.com/>). Cryptocurrencies can be obtained by purchasing from the cryptocurrency market and by being accepted as mining or payment for goods and services.

Cryptocurrency, with Blockchain encryption system offers prevention of following of money traffic, the possibility of conversion to various currencies or services, not in the security of any state, transactions can be made between the users without intermediaries, can be called digital (online) payment system. (Bushmaker, 2018). Since it is not under the responsibility or control of a single person or organization, hyperinflationary effects cannot be mentioned in the supply of this currency. (Barski & Wilmer, 2015: 2). Bitcoin with abbreviated notation BTC can be divided up to 8 digits. The smallest unit of bitcoin is 1 satosh. 0,00000001 bitcoins, 0,0001 dollars. With the BTC system, bitcoin production was controlled until 2140, with a maximum production of 21.000.000 BTC. (<https://www.bestchange.com/converter/>). As of January 11, 2018, the number of Bitcoins in use is 16.796.180. Bitcoin transactions are carried out via computers called “pole” which are connected to the internet. In Bitcoin transactions, “full poles”, which store all the blocks holding global account holders in the system, and “light poles”, which represent bitcoin wallets, it utilizes the *Simplified Payment Verification System*, which allows customers to dedicate blocks of their own transactions only from the system (Çarkacıoğlu, 2016: 52-53).

Concepts Related to Cryptocurrencies

The block chain is the underlying technology of BitCoin, a database in which all transfers on the BitCoin network are replicated, is decentralized (Raval, 2016: 2, 6).

Cryptocurrency mining is the process of producing new cryptocurrency. Mining is the act of collecting and blocking published processes and establishing a block chain exactly and correctly, thus destroying the possibility of changing the information. Decryption takes about 8 minutes even for the fastest online computers with specially equipped systems in the system. (Norman, 2017: 2-4). While the miners are performing the verification process, solves a puzzle; the blocks in the chain are sequentially codes according to the processing order (Uzer, 2017: 32).

The hardware wallet is protected by storing cryptocurrency in an offline wall from digital thefts (O’Mahony et al., 2001: 34). Some types of hardware purses in use are treasure, ledger, keepkey (Okan, 2018). However, this method is much more reliable than the method of protecting the investors’ assets in the cold storage wallets in the cryptocurrency market, since it does not allow the wallet owner to access the cryptocurrency even if the password is forgotten or lost.

Literature Review

Studies in the literature on cryptocurrency have begun in 2012 and are seen to accelerate in 2014-2015. Especially, in many studies examining bitcoins from crypto parcels, it has been noticed that there are studies which include technical features of cryptocurrency at engineering level and contributions to improve these properties. Following this, there have been studies of cryptocurrency exchanges, their regulation, and the legal arrangements of the states about crypto paralysis, which are not examining the volatility of cryptocurrency. Although taxation of cryptocurrency is very up to date nowadays, there is a limited number of studies in the literature and it is aimed to contribute to the literature in this regard.

Studies on cryptocurrencies can be classified as having positive or negative opinions. According to this, positive opinions about cryptocurrencies in the literature; the fact that it is cost-effective in the transfer of money, the acceleration of transactions, the prevention of print unbacked money (Lee et al., 2018: 19) , the modification of the basic payment system (Narayanan, et al. 2016: vii) and the compatibility with the trends of mobile payment systems such as credit cards and PayPal which are widely used today (Meiklejohn et al., 2016: 86), the fact that exchange rates are not risky international transactions do not cause erosion of purchasing power with inflation (Renterghem & Meerleer, 2017: 15).

Criticisms about cryptocurrencies as representable being easy using by illegal organizations, sustained changings in market value (Descôteaux, 2014: 3, 4), despite the fact that it is more inelastic and more transparent than gold but being much more speculative (Rose, 2015: 620), the lack of legal regimes in some countries, the inadequacy or complexity of some (Polasik et al., 2014: 37), the uncertainty about taxation, the use of cybercriminals as a means of storing bitcoins, openness to double spending attacks (Srokosz & Kopyscianski, 2015: 619), the cumbersomeness of bitcoin system, using bitcoin as a storage medium having many risks,, openness to double spending attacks, the inadequacy of democracy in the bitcoin system, which consists of large mining, enterprising companies and large investors holding large quantities of bitcoins (Spenkelink, 2014: II).

Cryptocurrency Market and Regulation

In the cryptocurrency market, cryptocurrency is bought or sold by cash or credit card or exchanged with official currencies or cryptocurrencies. The cryptocurrencies outside of the bitcoin is generally referred to as “altcoin” in the market. The prices of these subcodes are determined according to their characteristics and the price of cryptocurrency is between US $ 0.001 and US $ 1.000. Some cryptocurrency is not obtained with mining, some have a certain amount of money.

According to the Bitcoin Market Potential Index of 2015, the five countries with the highest potential for bitcoin adoption are Argentina, Venezuela, Zimbabwe, Malawi, and United States. In Argentina and Venezuela, for example, inflation is the dominant factor in the widespread use of bitcoin, while in Zimbabwe the informal markets are the dominant force. (Hileman & Garrick, 2014: 9). However, the first five countries of crypto trading volume are Malta, Belize, Seychelles, USA and South Korea respectively. Most cryptocurrency exchange is in the UK. (<https://www.businessinsider.com/cryptocurrency-exchanges-trading-locations-volumes-2018-4>).

Cryptocurrencies Market

As of September 5, 2018, there are 1910 cryptocurrency, 13.729 cryptocurrency market, $ 223.467.858.476 cryptocurrency market capacity, 24-hour trading volume is $ 15.461.701.744 and the dominance level of BTC in the market is about 54,1%. (<https://coinmarketcap.com/all/views/all/>) There are more than 200 crypto stock exchanges indexed in the world, among which crypto stock exchanges in the first 5 rows are Bitfinex, HuiBo, HitBTC, and Kraken respectively. (<https://cryptocoincharts.info/markets/info>).

There are 9.625 cryptocurrency nodes (wallets) in the system in 05.09.2018, between the countries of the world in terms of the possession of bitcoin wallets in the first five countries of the United States; Germany, France, China, Netherlands, while Turkey ranks 33 (<http://bitnodes.earn.com>).

According to a study analysing global cryptographic money; 1.876 people work full time on the cryptocurrency industry. There are 720 in the Asia Pacific region and 676 in the North American region.

The volume of shopping with cryptocurrency is mostly in Europe, followed by the Asia Pacific region. Bitfinex dominates 16% of all cryptocurrency exchanges in March 2017 and has the highest market share. The sum of small stock exchanges is 25%of the market share. The currency exchanged most in the cryptocurrency market is the US dollar with 65% and the euro with 49% thereafter. Bitcoin is mostly converted to Litecoin and Ethereum. Ripple, Ethereum Classic, Monero, Dogecoin and Dash followed those (Hileman & Rauchs, 2017: 10).

Regulation of Cryptocurrencies Market

When regulating of cryptocurrency market can use various methods. These are the specific security for the stock market, the introduction of standards about the reserve money, introducing standards for currency exchanges (for example, South Korea's financial services commission, cryptocurrency trade may only be from real bank accounts,(the Blockchain Association of Japan has created self-regulatory standards that include the use of cold wallets and aim to strengthen standards following this new event), system risk management (the amount of debt, the number of users, the number of daily transactions can be traced by scaling up the requirements), and finally tax laws (Larsen, 2018).

Whenever the developments in regulation of cryptocurrencies exchanges at international level are examined, it is seen that the studies are still continuing. The European Banking Authority recommended short-term explanations of EU currency makers' virtual currency swaps. Until the development of a comprehensive regulatory regime, only cryptocurrency scheme has indicated that risks arising from the interaction between regulated financial transactions can be mitigated. For this reason, it has been suggested that national supervisory authorities should encourage regulated financial services with cryptocurrencies, in order to protect the institutions, e-money institutions and customers involved in the purchase, possession or sale of cryptocurrencies. For example, the establishment of an immediate response system between financial institutions and the cryptocurrencies stock market will contribute to the current account relationship between financial institutions (EBA, 2014: 44).

In November 2015, the European Court of Justice ruled that Bitcoin should be treated as currency for tax purposes. So, Bitcoin is sold or purchased for fiat money, no value-added tax is due (EU, 2015). The European parliament members and the European Council adopted a December 2017 agreement about aimed at preventing the use of cryptocurrencies in laundering and terrorism financing (Keainge et al., 2018: 46, 50).

On the EU Commission in February 2018, discussed whether the regulatory action on cryptocurrency is required at the EU level (EC, 2018). In the panel called "The Crypto-Asset Bubble" in the world economic forum held in Davos on 23-26 June 2018, debated whether the crypto assets are in the currency of a currency or not (<https://www.weforum.org/events/world-economic-forum-annual-meeting-2018/sessions/the-crypto-asset-bubble>).

Taxation of Cryptocurrencies

Nowadays, cryptocurrencies are the new preference of investors because tax havens have lost their popularity in tax evasion due to multilateral tax information exchange agreements. However, problems that may arise in regulations related to cryptocurrency, such as the ineffectiveness of the Tobin Tax proposal from problems experienced in the precise determination of the values of electronic payments, are not wanted to be involved in the depths of financial markets and can be evaluated in common with the problems experienced in the delivery of e-services. Especially when the online presentation of some electronic services is paid out, the problems experienced in the taxation also apply to the cryptocurrencies. For example, some evidence indicates that Bitcoin is used for tax evasion purposes. According to a study on the topic; the majority of Bitcoin wallet owners use them as investment accounts. Such accounts do not send Bitcoin; it is only used to receive. The gains in such wallets are not accessible to the tax authorities unless they are expressly granted. In addition, researchers have discovered that many Bitcoin users use the cut, split and combine method. Generally, Bitcoins are divided into multiple small accounts of the same person, or large amounts are transferred in bulk using multiple wallets. Tax evaders and money launders often use these methods to hide funding sources and the destination (Melendez, 2013) As a result, the legal regulations on cryptocurrencies vary from country to country. In some countries the use and trading of cryptocurrency is illegal, and in some cases legal. Legal regulations on cryptocurrencies are taxed or excluded, depending on whether the cryptocurrency is being assessed as "currency", "capital gains" or "commodities". The EU explained that cryptocurrency trading should not be subject to VAT on the basis that foreign exchange transactions are a substitute for a supply of goods. This was also adopted by the UK (Norry, 2018).

Selected Country Applications in the Taxation of Cryptocurrency Transactions

Cryptocurrency transactions defined and taxed differently in many countries like Canada, USA, Germany, UK, and Australia. In June 2014, Canada is the first country in the world to establish a tax on virtual currencies. The Bank of Canada has expressed a willingness to acknowledge the developing virtual currency market, but currently recognizes cryptocurrencies as investments (Duhaime, 2014). In the United States, a cryptocurrency has been accepted as "asset", according to the Swedish Financial Supervisory Authority cryptocurrency is "a payment method". In the UK is treated as a special currency and VAT is applied to the purchases made with them. The Finnish Central Tax Board has exempted the Bitcoin transactions from VAT (Carkacioglu, 2016: 57), which identified cryptocurrency as a financial service. In April 26, 2018 in France Conseil d'Etat identified the gains from cryptocurrencies as capital gains. The tax rate applied to crypto-dollar decreased from 45% to 19% (Terenzi, 2018). Iceland (Hofman, 2014), Russia, Denmark and China are preparing lunch to the market their own cryptocurrencies (Tarhan, 2018). China, Thailand, Bangladesh and Bolivia limit the use of cryptocurrency. While prohibiting the use of it by enterprises in China, it is possible for individuals to own cryptocurrency, with the risk and use being on their behalf. In December 2015, the People's Bank of China prevented the cryptocurrencies transactions of financial institutions (Tumber, 2015: 7)

As shown in Table 1 in UK, US, Japan, France and Germany, cryptocurrency is subject to capital gains tax. In Austria, tax authorities treat cryptocurrency as an intangible asset, and mining is defined as an operating activity. Therefore, income gained from the sale of cryptocurrency is subject to income tax. Taxpayers in Switzerland must pay income tax, profit tax and wealth tax to cryptocurrency assets. The European Court of Justice (ECJ) has ruled that BitCoin represents a currency and that transactions must be exempt from VAT (CJEU, 2015: 1). So in EU countries, Switzerland and Liechtenstein, cryptocurrency sales are exempt from VAT (Langer, 2018).

Table 1. Cryptocurrencies Taxation in Some Selected Countries

Country	Definition	Regulation Year	Taxation
Australia	Property	2014	Capital gains tax, goods services tax is not applicable
Germany	Private money	2013	No capital gains tax, if owned less than one year, a progressive income tax of up to 45% applies for all gains
Switzerland	Foreign currency	2015	No capital gains tax, sales tax is not applicable
US	Property	2014	Capital gains tax, sales tax is not applicable
UK	Asser or private Money determined by court on case by case basis	2014	Capital gains tax, exempt from consumption tax
Japan	Legal method of payment	2017	Capital gain tax, exempt from consumption tax
China	Virtual commodity	2017	No taxes
Italy	Financial instrument,	2018	No taxes, but preparing
France	Moveable property,	2014	Capital gain tax
Canada	A commodity	2014	Capital gain tax
Estonia	An investment and a payment method,	2014	Capital gain tax and VAT

Source: Adapted from: <https://cryptoresearch.report/crypto-research/taxation-cryptocurrencies-europe/>; <https://www.log.gov>, 2014; <https://www.canada.ca>, 2014.

Countries have no tax on cryptocurrency transactions are Belarus, Denmark, Portugal, Singapore, Slovenia, the Netherlands, Italy, Turkey and several states in the US. (Wyoming, Arizona, Georgia) (Oldale, 2018). The Spanish government has proposed a law on incentives for small businesses in the cryptocurrency sector (Mitic, 2018).

U.S.A.

In January 2015 in the US, the cryptocurrency was legalized (Farell, 2015: 12). In the United States, they have been regarded as assets for federal tax purposes. The principles applicable to the asset operations are also applied to the cryptocurrency transactions. Income derived from cryptocurrency transactions within the United States is subject to income tax, capital gains tax and employment tax. If the value of the cryptocurrency obtained by the people who make mining is the value to be calculated on the market value and the workers who pay the salary with cryptocurrency, it is subject to the income tax, the employment tax and other related taxes (IRS, 2014-21: 2-6) .Regardless of how small is, all types of bitcoin operations must be reported to IRS. However, in the US, long-term gains from cryptocurrency transactions are taxed at a lower rate than short-term earnings, considering individual income levels (Weller, 2018). In the US, the question of sales tax on Bitcoin-transactions is currently subject to discussion (Boehm & Pesch, 2014).

U.K.

Bitcoin buyers are subject to capital gains tax on their gains. The capital gains on cryptocurrency is exempt from £ 11,300 income tax. The next £ 8,500 is taxed at a tax rate of 10%, with income on it being taxed at 20%. Revenue from Bitcoin mining operations is not covered by VAT. When you change for a sterling or currency like Bitcoin, Sterling, or Dollar, there will be no VAT on the value of Bitcoins. However, in any case, the value of the goods or services to be paid by VAT, Bitcoin or any other goods or service supplier sold for similar cryptocurrency will be the value of the cryptocurrency at the point where the transaction takes place. For the Bitcoin transactions, earnings of less than £ 11,600 per year are tax-exempt. If a person uses bitcoin to buy games or send overseas money, these are consumer transactions and there is no need to keep records. If you buy a bitcoin to keep it for investment purposes or set up a business to get paid at Bitcoin, appropriate records should be kept, and the administration should notify the earnings. Failure to meet this obligation may result in a penalty of 100% or a penalty of £ 3,000 per year (UK, 2014).

Japan

Capital gains on crypto-currency transactions in Japan are considered "various income". Bitcoin sales are exempt from VAT. However, the income derived from the sale of Bitcoin is subject to income tax and capital gains tax. Cryptocurrency investors are taxed at 15-55% on their earnings. According to the Japanese tax code, "various incomes" include cryptocurrency operations in the stock market, purchases from sales, purchases from mining, and related network charges (Bourgi, 2018). However, it is planned to reduce the capital gain tax rate in Japan to 20% by 2018.

Germany

German Income Tax Act defines Bitcoins as a privately held movable asset which as a classification are subject to capital gains tax only if the asset is sold within a year of purchase. When bitcoins as an investment sold for profit before the one-year mark would be subject to a 25% capital gains flat tax. If bitcoins are sold more than a year after they are bought, the gains are exempt from tax. But not individuals, who have to pay a tax on profits greater than €600 or if they hold it for less than one year (Summers, 2013).

Turkey

In the definition of electronic money in Law No. 6493, cryptocurrency is not included in electronic money. As a monetary value for which "electronic money" funds are issued can also be produced by cryptocurrency miners, according to Banking Regulation And Supervision Agency (BDDK) Bitcoin cannot be evaluated as electronic money and it is not possible to supervise. A working group was set up by the Treasury and the Ministry of Finance to develop regulations on cryptocurrency parallelism, and the public was informed about cryptocurrency risks. Cryptocurrencies has not legalized in Turkey as currency, commodity, or as a financial instrument yet. However, they should be defined legally in order to prevent the loss of revenue. According to the Securities and Exchange Commission, financial instrument does not comply with Bitcoin's definition, there should be a real product on which it is based. According to experts of the central bank, the cryptocurrency cannot be accepted as currency because the money is required to be printed by the central bank for a value. According to revenue administration in Turkey, cryptocurrency is acceptable as commodity (<https://www.cnnturk.com/ekonomi/kripto-para/turkiyede-bitcoinden-para-kazanan-gelir-vergisi-ve-kdv-odeyebilir>).

If bitcoin is regarded as a commodity, if the person once bought and sold Bitcoin and earned income therefrom, this gain may be taxed as either capital gains or as incidental earnings. In the legislation, if cryptocurrency will be accepted as a capital market instrument. In the phrase given in paragraph 1 of Article 80 of the Income Tax Law the gains and revenues derived from the exclusion of other capital market instruments are included in the article be within the scope of capital gain. If you are constantly buying and selling Bitcoin and you have earned commercial income from it, then you must pay the income tax return and pay your tax. Since income from cryptocurrency mining requires technical knowledge and professional expertise, it can be taxed as self-employment incomes.

However, according to Article 82 (4) of the Tax Procedure Law, since the proceeds collected due to accidental self-employment activities are regarded as incidental earnings, the cryptocurrency mining may be subject to taxation under incidental income when it is made extrinsically.

If we classify the cryptocurrency as cash or a similar asset, the gain from Bitcoin is not subject to any taxation for real persons without tax liability. Traders' gains from cryptocurrency transactions are subject to income tax. In terms of institutions, the gains obtained from the valuation of cryptocurrencies are subject to the corporation tax. If the cryptocurrency is classified as a financial asset, the provisions of Article 75 of the Income Tax Law and Article 279 of the Tax Procedure Law should be considered in terms of income tax. Accordingly, the profits to be earned from the sale of the financial instruments will be taxed within the scope of the provisions of the capital stock, and the proceeds will be valued with the purchase price arising from the profit and loss of the issuer, which is not possible to be calculated on the day of valuation. However, if Bitcoin is regarded as a non-cash financial instrument in terms of these institutions, the gains arising from the purchase and sale will be subject to the corporation tax. Cryptocurrency purchase and sale transactions are exempted from VAT since they are not included in the transactions mentioned in Article 1 of VAT Law No. 3065 and entered into the subject of VAT Law. In case of providing intermediary service for cryptocurrency purchase and taking commission, it is necessary for the institution providing the intermediary service to calculate the VAT for the related service fee. However, if the cryptocurrency is treated as a cash-asset, the cryptocurrency transfer transactions must be subject to the banking and insurance transaction tax (Cebecioğlu, 2018).

Conclusion

Although it is an alternative currency option in terms of users is positive, it is not recommended to widely use the cryptocurrency because of the unknown risks and uncertainty of the gains and losses of bitcoins hiding for investment purposes. However, it is thought that cryptocurrency can even pass the credit card, if designed by a central institution in a highly secure manner, primarily for a sectoral pilot application and support the official currency of the country. The most basic reasons for this are the inability to process online transactions from ATMs and the possibility of trading with cryptocurrency outside official holiday or weekend break times, which will increase the preference of it. In recent days, will be held in comparison with the gold payment system in Turkey, physical money exchange gold stored in Istanbul seem to be more reliable than an investment with cryptocurrency through guarantor institutions located behind is that can be transferred in the EFT speed. However, because of the more innovative payment system, the availability at the global level, providing the opportunities to its criminal incomes, and the opportunity to obtain high profit if it is risky to its users, cryptocurrency can substitute for other payment systems in the long run.

But, cryptocurrency has been criticized for the availability of mobile wallets, the ongoing risk of user education such as inadequacy, reliability, accessibility and price change in the storage and transfer of cryptocurrency, and the low perception of users' ease of use of cryptocurrency. The necessity of using the online shopping service in most of the places and the fact that the density of use is not allowed is deepened. It is estimated that cryptocurrency ATMs have become widespread and will be an important player in the online payment market of cryptocurrency (Baur et al., 2015: 14-15). In this context, in practice bank investment instruments, credit card payments, cash, cryptocurrency can be compared. While the Bank pays interest payments to the investment vehicles, the deposit is subject to such interruptions as the insured amount, there is no interest payment in the cryptocurrency. Although the high amount of cash transfer is quite costly and difficult, the risk of taxation in the long run of crypt money, which is easy to use in high amount of money transfer, is fast and cheap. Cryptocurrency is considered unavailable for the purpose of hiding value due to price fluctuations. While it is advisable not to control money supply, it can be criticized for being banned by governments (Franco, 2014: 31-32). Besides, the development of crypto coin and blockchain encryption technology will enable many new technologies to be achieved in the future. However, the various technological business opportunities created by the cryptocurrency industry are also remarkable. These include web development expertise, web security system design, market research analyst, marketing manager, financial analyst, and data scientist, business development representative and mining. For example, the most known “mining” in the mentioned works is getting harder day by day due to the difficulties that are expected to be solved and as a result the money earned in the sector is falling. The cost of crypto coin production is high if the cost is not available in countries offering low electricity. Since the cryptocurrency mining has caused the investment, maintenance and high level of energy consumption required by expertise, the residence of miners is more concentrated in China and Russia. But, Russia plans to rent cheaper apartments and transfer investors to the industrial zones by making cryptocurrency mining. It is also on the agenda to sell cryptocurrency miners electricity at different prices.

The main problem is that tax laws have difficulty in catching up the technological development in cryptocurrencies. In the taxation of cryptocurrency, there is no inter-country cohesion. Different applications can be found even in the states of the same country. Cryptocurrency is defined as payment system in some countries, commodities, and as financial instrument or foreign currency in some cases. Depending on these definitions, the methods of taxing countries’ cryptocurrencies transactions vary. As a result, it is very difficult for taxpayers and tax administrators to determine whether the sale of cryptocurrency, the exchange of sales, the exchange of one cryptocurrency, or the delivery of goods and services through cryptocurrencies. When examining the various countries’ practices regarding the taxation of cryptocurrencies, it is seen that the taxation applied to cryptocurrencies transactions is complex and the taxpayers are not sufficiently understood. At the same time, the variability of the prices of cryptocurrency makes it difficult to register as a taxpayer for cryptocurrency transactions. It is thought that the application of online income management for the application easiness and the loss of the tax base is considered to contribute to the calculation of the taxes arising from the cryptocurrency transactions in order to prevent these (as in our system, online tax calculation and real estate taxation for real estate capital gains are offered). The revenue administration must allocate the fund for the training of the staff and the implementation framework. It is also possible to use software that will track cryptocurrency transactions to prevent possible tax evasion from cryptocurrency transactions by the revenue administration and effectively control them. However, if there are countries that do not yet comply with the proposal for taxation of the cryptocurrency at the global level, it is likely that the cryptocurrency wallets will escape to countries that are not taxable. For example, if stocks and foreign currency gains in Japan are taxed at about 20% in the country, then gains from cryptocurrency transactions are subject to a higher rate of taxation between 15% and 55%. So, may be expected to transfer cryptocurrency account holders to Slovenia or to Italy, whose transactions are not yet taxed. To set an average rate for the country (like 15% -40%, etc.), may be considering the tax rates applied to securities in the country (e.g. around 10-15%) and the tax rates applied to cryptocurrency transactions in other countries (13% and 50%). In addition, applications should be encouraged in order to keep the taxpayers’ records of cryptocurrency transactions in detail and to use them. In this way, it will be possible to follow the activities such as the date of the transaction to be based on the transaction, what the transaction is, and conversion of the amount of the cryptocurrency to the value of the transaction date in the official currency of the country (TL or Dollar).

Cryptocurrencies legally as commodity, currency or financial instrument in Turkey, must be defined urgently. In this regard, since the cryptocurrency can be regarded as a commodity exchange transaction or money exchange transaction, it will be subject to VAT. In order to regulate the cryptocurrency markets, it is obligatory to keep the registers of the hardware purse owners in the stock market, cryptocurrency transactions must be allowed to be exchanged only with the official currency deposited in the stock market, it must be registered by the users of the transactions and reported to the revenue administration of these records, if the records are not kept and not reported, the fines related thereto shall be determined and applied. Therefore, tax losses, fraudulent and other fraudulent activities that can be done with cryptocurrency transactions can be prevented and monitored to a certain extent. However, as the ease of use and widespread use of digital money increases with the needs of technology in the long run, the digital divide that may arise among the countries that bail out these countries, some speculative movements are likely to be affected by the destructive economic activities of the nationalities or individuals with the majority of these cryptocurrencies on the stock Exchange. Turkey’s government should be printed their cryptocurrency and should done related regulations.

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