Accounting and Tax Specifics Regarding Cryptocurrency Trading at National and European Level

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Abstract

The purpose of the work is to analyze the main fiscal and accounting aspects of the cryptocurrency transaction. The main objectives considered were the theoretical presentation of the cryptocurrency concept, their treatment, the presentation of the most used cryptocurrencies. It continues with the presentation from the fiscal point of view of the aspects regarding the taxation of these types of transactions. Accounting for cryptocurrency operations is the next issue addressed.

Key words: cryptocurrency, blockchain, accounting, tax
J.E.L. classification: M41, Q40, Q56

1. Introduction

The topic deals with the issue of cryptocurrencies from the point of view of accounting and taxation. From an accounting point, we highlighted the accounting treatments applicable and the main accounting monographs regarding the registration of these operations in the accounting of economic operators. The tax treatment highlights the issues related to the taxation of cryptocurrencies at the national and European level.

The main purpose of this article is to highlight the accounting and tax aspects regarding cryptocurrency transaction from both accounting and tax point of view.

The objectives of the work are:

- presentation of the cryptocurrency concept
- identification of the most traded cryptocurrencies
- the tax rates at the level of EU member countries
- presentation of the accounting record of operations resulting from cryptocurrency trading.

Both accounting and fiscal aspects presented on the basis of national and European legislation in the field.

2. Theoretical background

According to the Explanatory Dictionary of the Romanian language the word transaction, represents an agreement between two or more parties, through which certain rights are transferred, a commercial exchange is made, etc(dexonline.ro). For example, a transaction takes place between a party providing a service, and a second party providing payment for the service. To make a payment, the buyer must transfer a certain amount to the seller using a certain payment instrument. The transfer of money through payment instruments is usually validated by a holographic or electronic signature, or by various online authorization algorithms.

Economies today are all monetary economies because all economies have accepted some currency (money) as a medium of exchange. Money supply causes both inflation and deflation through its excess supply and contraction of money supply, so the currencies of different countries are regulated by the government to combat inflation or deflation situations. Now, many countries in the world are focusing on digital currencies and transactions (Mubarak et al, 2021, p.435).

Decentralized blockchain technology simplifies complex mediation processes and automates all existing trading processes enabling fast transactions.

Blockchain technology was first implemented in 2009 as a core platform designed to solve the problem for Bitcoin (ie, how to transfer digital value without relying on a trusted third party). However, the attributes that make blockchain technology essential to Bitcoin can be used to solve a variety of other problems.

A blockchain is: A digital register that represents a history of transactions; It is distributed across computers operated by different participants; This allows participants to enter cryptographically protected records that are validated and immutable (unchangeable) (Rohith , 2019, p.17).

Cryptocurrencies are not regulated by any authority and are a decentralized form of currency. They are created using cryptography, which makes them even more secure. In addition, there are no middlemen, so they can be transferred directly to the receiver in their digital wallet (Mubarak et al, 2021, p. 440).

Some critics argue that cryptocurrency could, if widely adopted, reduce the ability of national governments to regulate their economies through monetary policy. Others expressed concerns about the security of cryptocurrency wallets and exchanges or pointed to the high volatility in value that most virtual currencies have experienced (United States Department of Justice, 2020).

Blockchain – a peer-to-peer network that sits on top of the internet-was introduced in October 2008 as part of a proposal for bitcoin, a virtual currency system that eschewed a central authority for issuing currency, transferring ownership, and confirming transactions. Bitcoin is the first application of blockchain technology (Iansiti et al , 2017, p.4).

Blockchain is considered by many to be a disruptive core technology. Although many researchers have realized the importance of blockchain, the research of blockchain is still in its infancy (Min Xu et al, 2019, p.5).

A *blockchain* is a way of creating a robust, secure, transparent distributed *ledger*. This revolutionary new technology is also an unusual technology in that while manifestly an information and computation technology (an ICT)—as a software protocol based on cryptography, a blockchain is a new technology for public databases (of digital information)—it is actually better understood as an institutional or social technology for coordinating people (Sinclair, ssrn.com).

At the end of 2022, there were 10397 cryptocurrencies worldwide, the top 10 most traded are:

Table no.1 Ranking by market capitalization of the top 10 cryptocurrencies

Current Number	***Cryptocurrency name***	***Market capitalization (USD)***	***Unit price (USD)***
1	Bitcoin	372,748,767,884	19544,672
2	Ethereum	127,767,446,949	1053,914
2	Tether	68,103,052,039	0,999
3	USD Coin	55,896,055,569	1,000
5	Binance Coin	33,734,818,255	206,611
6	Binance USD	17,229,287,408	1,003
7	Cardano	15,732,955,528	0,464
8	XRP	15,286,916,199	0,316
9	Solana	11,127,764,680	32,501
10	Dogecoin	7,651,176,135	0,058

Source: https://coin.dance/stats

3. Research methodology

The scientific approach is based on the national literature, as well as from the practical documentation made through the case study presented. In the elaboration of the works we chose to combine quantitative and qualitative research to obtain the most expected. Following the research undertaken, the research tools are: literature review, comparison, descriptive analysis, case study method, data interpretation.

In carrying out the case study, I presented the way of recording in the accounting some operations regarding trading with cryptocurrencies. The treatment of the topic from a fiscal point of view was approached by presenting the way of taxation of cryptocurrencies at the European level.

4. Findings

4.1. General information on cryptocurrency trading in Romania

Cryptocurrencies are decentralized, not being issued by a government or an institution, but given the fact that they represent a source of income, it is necessary to identify the fiscal obligations regarding obtaining income from the trading of these instruments, but also to identify possible aspects and accounting monographs.

In Romania, we identify merchants from different fields of activity, who accept virtual currency as a form of payment (eg: Electronics and electrical appliance retailer PC Garage, Vola travel agency, Caro hotel in Oradea, etc.), and even the "Lucian Blaga" University from Sibiu accepts as a method of paying the university fee, the Elrond virtual currency, the only 100% Romanian currency, which is in circulation on the global cryptocurrency market, being the first state institution in Romania to accept this form of decentralized payment and which does not has a solid legal basis, until the date of writing this article, in Romania (Mates, 2022, p.148-159).

A 100% Romanian virtual currency was developed in Romania, which is called Elrond and which was born in 2017 in Sibiu, and in the spring of 2020 it became known worldwide when it benefited from an increase of over 5000% of values.

At the level of Romania, the first regulation that refers to such instruments dates from 2019, approximately 10 years after the creation of the first official cryptocurrency, made concrete by the appearance of law no. 30/2019 for the approval of GEO no. 25/2018 regarding the amendment and completion of some normative acts, approval of some fiscal-budgetary measures, which introduces for the first time the tax for the income from virtual currency transfers, for natural persons, included in the category of income from other sources, being taxable with 10% applied to the profit obtained.

The obligation to calculate the tax and declare the income rests with the natural person, through the single declaration. This being the only law that regulates the fiscal regime of the trading of cryptocurrencies that only applies to natural persons, there being a clearly specified regime of taxation and declaration of income from such transactions from the perspective of legal entities.

The second regulation regarding these instruments, which appeared due to the numerous changes to the European Union directives regarding trading with virtual currencies, as well as the increasingly frequent use of cryptocurrencies for money laundering, the Romanian Government was forced to adopt the "Emergency Ordinance no. 111 of July 1, 2020 regarding the amendment and completion of Law no. 129/2019.

Were introduced in the field of money laundering prevention for those companies that offer exchange services involving virtual currencies and suppliers of digital wallets that must identify suspicious transactions made through them and report them to the authorities (Ungurianu et al, 2020).

4.2. Accounting treatment of cryptocurrency

Cryptocurrency is an intangible digital token that is recorded using an infrastructure called blockchain.

The authors propose the introduction new accounts the modification of the chart of accounts from Order no. 1802/2014 such as:

204 "Cryptocurrencies "

372 "Stocks in the nature of cryptocurrencies": 3721 "Stocks of the nature of cryptocurrencies held for investment purposes"; 3723 "Stocks of the nature of cryptocurrencies - other than those held for investment purposes".

They could work against the following expense and income accounts that should also be entered in the chart of accounts:

653 "Cryptocurrency Expenses": 6531 "Expenses regarding cryptocurrencies held for investment purposes"; 6532 "Cryptocurrency fair value expenses"; 6533 "Expenses regarding cryptocurrencies - other than those held for investment purposes".

753 "Income from cryptocurrencies":

-7531 "Income from cryptocurrencies held for investment purposes";

-7532 "Earnings from the fair value of cryptocurrencies";

- 7533 "Income from cryptocurrencies - other than those held for investment purposes"(Păunescu Mirela, et al, 2020).

4.3. Accounting monograph for the purchase of cryptocurrencies by a trading company (for investment purposes)

A company purchased 300 Arwave (AR) virtual coins from the Binance.com platform in May at the price of 11 Euros/piece, with a 0.1% purchase commission incurred at acquisition. tHE BNR exchange rate was 4.95 Ron/Euro.

Recording of transactions was done using the accounts proposed in the article above.

- Purchase cost = 300 × 11 × 4.95 = 16335 Ron
- Purchase commission = 16335 × 0.1% = 16.34 Ron

-Arwave purchase registration

3721 „Cryptocurrency stocks held for investment purposes"	=	**462** „Various creditors"	16335 Ron

- Registration of the purchase commission

628 „ Other expenses with services performed by third parties"	=	**462** „Various creditors"	16.34 Ron

At the beginning of June, the unit price of the cryptocurrency increases to 13 Euro/piece, and the BNR exchange rate changes to 5 Roni/Euro, and the conversion fee is 0.1%.

-Current value = 300 x 13 x 5 = 19500 lei

-Conversion commission = 19500 x 0.1% = 19.5 Ron

- Fair value = 19500 – 19.5 = 19480.5 Ron

Profit from the variation in the fair value of cryptocurrencies = 19480.5 – 16335 = 3145.5 Ron

-Recording the increase in the value of the cryptocurrency

3721 „Cryptocurrency stocks held for investment purposes"	=	**7532** „ Earnings from the fair value of cryptocurrencies"	3145.5 Ron

At the end of June, the company sells the 300 cryptocurrencies in Euro at a quote of 15 Euro/piece, commission 0.1%, BNR rate= 4.95 Ron/Euro.

- Selling price of cryptocurrencies = 300 x 15 x 4.95 = 22275 Ron

-Trading commission = 22275 x 0.1% = 22.28 Ron

-Cryptocurrency exchange registration

5124 „Bank accounts in foreign currency"	=	**3721** „Cryptocurrency stocks held for investment purposes"	22275 Ron

- Cryptocurrency Discharge Registration

6531 „Expenses regarding cryptocurrencies held for investment purposes"	=	**3721** „Cryptocurrency stocks held for investment purposes"	19480.5 Ron

-Commission registration

628 „ Other expenses with services performed by third parties"	=	**5124** „Bank accounts in foreign currency"	22.28 Ron

4.4. Fiscal treatment of cryptocurrencies

The Fiscal Code, Law no. 227/2015, in article 114 paragraph (2), letter m), income from the transfer of virtual currency, and in article 115 the following clarifications are made: Income tax is calculated by withholding at the source at the time of granting the income by the income payers, by applying the quota of 10% on gross income. Thus, natural persons who obtain profit from virtual currency must pay 10% of the profit. This is the average of the buy price and the sell price.

Law no. 210/2019 on the activity of issuing electronic money regulates the conditions of access to the activity of issuing electronic money and of carrying out this activity, the conditions of carrying out the activity of providing payment services by institutions issuing electronic money, the prudential supervision of institutions issuing electronic money, as well as the regime regarding the redemption of electronic money.

Any entity that intends to issue electronic money on the territory of Romania as an institution issuing electronic money must have an authorization, and the BNR can grant said authorization only to a Romanian legal entity established on the basis of Companies Law no. 31/1990, which has its real headquarters on the territory of Romania and which issues at least part of the electronic currency on the territory of Romania. According to art. 19, institutions issuing electronic money must issue electronic money without delay, upon receiving the funds in exchange for which it is issued, they having the right to open and maintain payment accounts for their customers, intended exclusively for the execution of payment operations.

Considering the decentralized nature of cryptocurrencies, not issued by any financial institution, it is important to know how the jurisprudence of different states regards these instruments. The position towards cryptocurrencies in the jurisprudence of the most 12 states of the European Union and the United Kingdom can be seen below (Mateş, 2022, p.9):

Austria: Does not constitute legal tender within the meaning of the legislation; They are classified as intangible assets; Income taxation is carried out by applying the tax rate of 27.5%.

Belgium: They have no legal tender and have warned against the various risks posed by their use; Fiscally income/gains from the sale of cryptocurrency are considered as "miscellaneous income" subject to taxation.

Bulgaria: It does not constitute a legal course in the sense of the legislation. Since 2014, the Bulgarian tax authorities have issued rulings requiring individuals to pay taxes on the gains from the sale of virtual currencies, similar to the tax regime for the sale of financial assets.

Denmark: Parties involved in the cryptocurrency transaction must determine whether their asset is classified as a form of payment (currency), a capital asset (investment) or a financial service to determine whether the transaction is subject to regulation by the Danish authorities; Their taxation is determined according to the classification of cryptocurrencies, and losses from these instruments will not be deducted from taxes as business losses.

France: There is a law on virtual currency providers that entered into force on May 1, 2019. The first French regulation of cryptocurrency came in January 2014, the Authority for Prudential Supervision and Resolution, the French banking and insurance regulator, stated that entities that receive legal tender on behalf of clients in connection with the purchase or sale of cryptocurrencies were required to obtain a license to provide payment services.

Germany: It qualifies virtual currencies as units of account and therefore they are considered financial instruments, but there is no specific legislation.

Greece: Virtual currencies are not recognized as a legal means/instrument of payment on the territory of Greece;

Italy: there is no specific and detailed legislation regulating blockchain technology and/or virtual currencies

Slovenia: they are neither financial instruments nor monetary assets; taxation of cryptocurrency depends on factors such as merchant status, type of transaction and other individual circumstances.

Spain: there is no Spanish legislation specifically addressing cryptocurrency offerings.

Sweden: are subject to capital gains taxes by applying the single tax rate of 30%. losses resulting from cryptocurrency trading are deductible up to 70%.

Hungary: there are no laws specifically regulating the use of cryptocurrency, and no cryptocurrency is recognized as legal tender.

5. Conclusions

Cryptocurrency trading is an attractive activity for investors, but it is very risky due to the lack of regulation of this sector of activity, as well as the high risk of fraud. Not being a regulated activity, there have been a number of frauds in this area, some even from within the companies that manage clients' cryptocurrencies, but even from the creators of certain cryptocurrencies. A very good business is the brokerage of cryptocurrency trading, which brings commissions on every transaction, deposit and cash withdrawal. Some trading platforms have their own cryptocurrencies, such as Binance Coin, symbol BNB, created by the Binance trading platform. If you still decide to trade cryptocurrencies as a long-term investment, I recommend trading some of the top 20 cryptocurrencies in terms of market value, and especially those that have real utility, being accepted as payment for a wide range of goods and services. Bitcoin is a good example, although it has lost more than 50% of its value in the last year, the decline cannot be compared to other cryptocurrencies, which have lost more than 200% of their value, or even more. A good example of cryptocurrencies that could be traded with some safety are those that can be exchanged directly into Bitcoin, as Bitcoin does not allow direct conversion on trading platforms to cryptocurrencies that have a high degree of volatility or whose price can be slightly manipulated for the purpose of purchasing Bitcoin at a better rate.

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