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Theoretical Issues of Crypto Assets Taxation and the Regulatory Framework of Hungary

Abstract

Crypto assets have gained significant popularity and mainstream acceptance in recent years, and their adoption as an investment and trading vehicle has increased their value. However, the tax implications of these assets often need to be clarified and are subject to differing interpretations by tax authorities worldwide. The article delves into the various approaches to the taxation of crypto-assets and the challenges tax authorities face in identifying and regulating these assets. Additionally, the paper discusses the Hungarian regulatory framework's unique features for crypto-assets taxation. Finally, the article highlights the importance of clear guidance and regulations to provide certainty to investors and traders and ensure that tax authorities can effectively regulate and enforce taxation on these assets. As such, the article serves as a valuable resource for those seeking to navigate the complex and rapidly evolving area of crypto-assets taxation.

Keywords: crypto assets, stablecoin, tax regulation, income tax, value-added tax, special taxes, Hungary.

Introduction

So far, there is no unified position on the taxation of crypto assets, neither in Hungary nor globally. This is because it is not clear what the tax consequences

of specific activities related to crypto-assets (e.g., mining, forging, conversion, use, purchase of goods or services) are and whether there is a uniform treatment of specific categories of crypto assets, or they should be subject to different tax rates.

In a summary report for 2020, the OECD summarised the main issues related to the taxation of crypto assets as follows: a) „How should income generated by crypto assets be treated for direct and indirect taxation? b) If crypto assets are considered assets, should they be considered when calculating net wealth tax (if any) or other capital taxes? If so, how should they be valued? c) How should the creation, acquisition, holding, and transfer be treated for VAT purposes? d) What are the policy implications of the different taxation methods? and e) How can tax transparency be improved, including what information tax authorities should have on transactions to comply with and enforce the law?”¹

The taxation of crypto assets could generate significant revenues for the budgets of all states; as of December 2022, the total market capitalization of the crypto market, which is otherwise in a deep slump, reached U.S. \$850 billion worldwide. No wonder states want to collect taxes on crypto transactions.

1. Crypto assets and income taxes

From an income tax perspective, the two most significant crypto asset events and activities are creating and selling crypto assets. In this context, whether the acquisition of newly created crypto assets is subject to income tax or only their sale should trigger income tax liability.

The issue of when income accrues also arose in *Jarrett v. United States*² concerning the Tezos tokens acquired by plaintiff Joshua Jarrett. Jarrett alleged that he acquired the Tezos tokens by participating in the operation of the Tezos blockchain Proof of Stake. As explained in more detail above, the Proof of Stake method involves a user depositing his existing tokens as a stake (not transferring ownership of them, but not having access to them until the new block is accepted) to participate in a „draw” of the blockchain to determine which user is entitled to create the next block. In turn, the user designated by the blockchain to create the next block will receive newly created tokens (in our case, Tezos tokens) in return. In Jarrett's view, his activity is similar to a baker baking a loaf of bread. Still, the baker does not pay tax on the bread he makes, but only on

¹ OECD (2020): Taxing Virtual Currencies: An Overview Of Tax Treatments And Emerging Tax Policy Issues. www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emergingtax-policy-issues.htm (31.03.2023); European Committee (2018): FinTech Action plan: For a more competitive and innovative European financial sector. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX:52018DC0109> (31.30.2023).

² *Jarrett v. United States*, No. 3:21-cv-00419 (M.D. Tenn.), <https://www.courtlistener.com/docket/59940467/jarrett-v-united-states/> (31.03.2023).

the sale of the bread, so he should not pay tax on the Tezos tokens he creates as a result of his activity, but only when he sells them. However, the situation is even more complicated. The case has revealed that the Tezos blockchain not only awards newly created Tezos tokens to the creator of the block but also to the users selected to authenticate the new block (32 users are designated for each block). In addition, the creators of a new block are not only rewarded with new Tezos tokens and receive previously created Tezos tokens in the form of transaction fees based on the transactions included in the block. Jarrett's tokens are also the result of these three different activities, which may have different tax classifications. At the close of this manuscript, the Jarrett v. United States case is still pending, so we do not know how the court will rule on these issues. Still, the case illustrates the many aspects that a tax authority and legislature must consider in the taxation of crypto assets.

If a State wishes to tax crypto assets acquired through the issuance, it must consider the specificities of the different ways they are issued (mining, forging, ICOs, etc.). In mining and forging, users who create a new block are rewarded with either newly issued or previously created cryptocurrencies as a transaction fee. For these activities, the new tokens obtained in this way can be said to be the equivalent of a service since by creating a new block, the user is providing a service to other users, and since his activity is in the interest of the entire blockchain, he is rewarded with new tokens or a transaction fee. Similarly, we can treat the reward for users who validate a new block as a service (if there is one for a given blockchain). Validating a new block is a service for the user who creates the block and the users of the entire blockchain, as it ensures trust in the system.³ The crypto assets acquired in respect of these activities can therefore be considered as consideration for a service and as income on which the user must pay an income tax.

However, it may be questionable under which category of income cryptocurrencies received as a reward for new issuance or as should include a transaction fee. In the case of forging as an activity, as explained above, the user who creates a block deposit all the crypto assets he already owns as a deposit, after which, if the blockchain draws him to create a new block, he is rewarded with new crypto asset units or crypto-asset units already in circulation in the form of transaction fees. In this respect, this activity is considered a capital gain since the user deposits his existing crypto-assets as a deposit, which can be treated as an investment, similar to how one earns income as a return on a security.⁴ If, on

³ Parsons, Amanda (2022): Cryptocurrency, Legibility, and Taxation. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4095326 (31.03.2023); Landoni, Mattia – Pieters, Gina C. (2018): Taxing Blockchain Forks, in SMU Cox School of Business Research Paper No. 19-18. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3475598 (31.30.2023).

⁴ OECD (2020): Taxing Virtual Currencies: An Overview Of Tax Treatments And Emerging Tax Policy Issues. www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emergingtax-policy-issues.htm (31.03.2023); OECD (2022): Crypto-Asset Reporting

the other hand, in the case of a Proof of Stake system, the tokens deposited as a deposit are treated as a form of payment instead of a security, then we can analogize them to the same as if they had deposited in a bank. A Proof of Stake blockchain credits us with new tokens in return for creating a new block in proportion to the amount of tokens deposited as a stake; in the same way, a bank pays interest on the amount deposited with it. Based on this parallelism, the tokens are subject to tax, particularly interest tax, at the time they are acquired. If, on the other hand, the Proof of Stake blockchain tokens are regarded as goods, the analogy can be drawn with the leasing of movable property since, when the deposit is made, we do not lose ownership of the 'leased' crypto asset. Still, we only possess it for a certain time. This means that even rental income can be taxed as income from forging. The other possible case is the parallel described in *Jarrett v. United States*, where new tokens created by forging are considered new goods and are only taxed when sold (more on this in a moment). However, the analogies explained only apply to blockchains using the Proof of Stake method. However, a different result may be obtained if the blockchain uses the Proof of Work principle, as it is more similar to income from self-employment.⁵

There are few official positions on the taxation of ICO proceeds worldwide, as most countries have focused on mining and forging to establish guidelines. What can be noted, however, is that the ICO is very similar to the Initial Public Offering (IPO) (the term ICO itself refers to this). This means that the company issuing crypto-assets through an ICO must pay income tax on the proceeds thus generated on the crypto-assets „purchased” by its users. So the next question is: how do we treat the crypto assets acquired from the user's side? If we stick to the IPO comparison, no tax is due on the acquisition of the crypto asset itself in an ICO, but only if the user subsequently disposes of the crypto asset. In this case, the user may make a capital gain and pay tax on his income accordingly.

The issuance of crypto assets created from scratch (airdrops) can also be subject to income tax by the state based on the value at the time of acquisition. In this case, the user gets the crypto asset for free. Therefore, the user cannot offset costs against revenues. A complicating factor for tax authorities is that, in many cases, the market value of airdrop crypto assets does not exist at their issuance, as they have yet to start trading. Therefore, taxing airdrop crypto assets at the time of sale may be more appropriate.

Framework and Amendments to the Common Reporting Standard. <https://www.oecd.org/tax/exchange-of-tax-information/crypto-asset-reporting-framework-and-amendments-to-the-common-reporting-standard.pdf> (31.03.2023); Glavanits, Judit - Király, Péter B. (2018): A blockchain-technológia alkalmazásának jogi előkérdései: a fogalmi keretek pontosításának szükségessége, in *Jog-Állam-Politika*, 2018/3.

⁵ Parsons, Amanda (2022): Cryptocurrency, Legibility, and Taxation. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4095326 (31.03.2023).

As we have seen, in the case of mining and forging, airdrop, and ICO acquisitions, the alternative was to charge income tax only on the disposal of the crypto asset, not on its acquisition. If a state chooses this route, the market value of the crypto asset at the time of sale should be considered for the revenue calculation, which can be reduced by the cost of acquiring the crypto asset. Acquisition costs could include, for example, the amount paid for electricity in the case of mining or forging. It is also important to note that airdrop tokens are mostly owned for free by the user, so there are no costs against the revenue.

Suppose the user sells a crypto asset acquired through mining, forging, or ICO, or even airdropped during the issuance process but was previously purchased on a market basis for fiat currency. In that case, they also have to pay income tax. In this case, the income is calculated based on the difference between the sale price (including not only the sale for fiat currency but also the price at which the user receives goods or services in exchange) and the purchase price, which, if positive is a gain and if negative is a loss. The appropriate tax consequences apply to the profit or loss.⁶

For income tax purposes, crypto assets are considered by almost all countries as a form of wealth, mainly as some form of intangible asset. However, there is a difference in whether crypto assets are subject to income tax when they are acquired or sold. For example, Finland, Norway, and the United Kingdom tax the acquisition of a crypto asset. In contrast, only crypto asset sales are taxed, for instance, in France, Denmark, and Poland. Furthermore, some countries distinguish for tax purposes between cases where crypto assets are disposed of depending on whether the user received fiat currency, another crypto asset, goods, or services in exchange. (France, for example, does not tax the exchange of a crypto asset for another crypto asset, whereas in the other two cases, income tax is payable.) Most states consider the exchange of a crypto asset for fiat currency or another crypto asset as if it were fiat currency for tax purposes. In addition, some countries - e.g., Australia and Germany - differentiate between individuals and businesses regarding income taxation (e.g., a company is taxed when acquiring new crypto assets, while an individual is only taxed when it sells it). Other countries - e.g., Switzerland and Singapore - distinguish between the activity carried out by the user on a business basis or only on an occasional basis as a hobby (e.g., only miners who carry out mining activities on a business basis are liable to pay tax, while individuals who mine only on an occasional basis are exempt from paying tax).⁷

⁶ Legge, Michelle: What is a Crypto ICO and How is it Taxed? <https://koinly.io/blog/crypto-ico-tax/> (31.03.2023).

⁷ OECD (2020): Taxing Virtual Currencies: An Overview Of Tax Treatments And Emerging Tax Policy Issues. www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emerging-tax-policy-issues.htm (31.03.2023).

2. Crypto-assets and value-added tax

Another tax often arises in connection with crypto assets is the value-added tax (hereinafter „VAT”). VAT liability may relate either to the issue of crypto assets or to their sale or conversion into fiat currency or other crypto assets. A significant number of states treat cryptocurrencies in the same way as fiat currencies for VAT purposes, mainly because if they were treated as a product, the purchase of goods and services with cryptocurrencies would be considered an exchange transaction, which would create a significant administrative burden for both the tax administration and the taxpayer. Under the EU Council Directive 2006/112/EC on the standard system of value-added tax⁸ (hereinafter: VAT Directive), there are three possible scenarios: (a) crypto assets are entirely outside the scope of the VAT Directive; (b) the VAT Directive covers crypto assets but exempt from VAT; (c) transactions carried out with them are taxable under the VAT Directive.⁹

In October 2015, the Court of Justice of the European Union¹⁰ (hereinafter: CJEU) examined how crypto assets should be valued in the context of the VAT Directive in the case *Skatteverket v Hedqvist*¹¹. The background to the court case is that the Swedish Tax Agency¹² concluded, based on the Swedish VAT Act¹³, that the online service Hedqvist intended to provide, whereby he would have exchanged virtual currencies for fiat currencies, constituted an exchange service for consideration that was exempt from tax. Subsequently, the Swedish tax authority appealed to the Swedish courts, which referred the matter to the CJEU, asking whether the exchange of crypto assets for fiat currency constituted a taxable supply and, if so, whether such exchange transactions were exempt under the VAT Directive. In its decision, the CJEU first held that the transactions in question constituted supplies of services for consideration. As regards the cases of exemption under the VAT Directive, the CJEU ruled that they must be interpreted strictly, as the Directive aims at tax neutrality, and the VAT Directive is applied uniformly in the EU Member States. The CJEU then examined the cases

⁸ Council Directive 2006/112/EC of 28 November 2006 on the common system of value added tax. <https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=celex%3A32006L0112> (31.03.2023).

⁹ Legge, Michelle: What is a Crypto ICO and How is it Taxed? <https://koinly.io/blog/crypto-ico-tax/> (31.03.2023).

¹⁰ Court of Justice of the European Union. https://european-union.europa.eu/institutions-law-budget/institutions-and-bodies/institutions-and-bodies-profiles/court-justice-european-union-cjeu_en (31.03.2023).

¹¹ Judgment of the Court of Justice of the European Union in Case C-264/14. <https://curia.europa.eu/juris/liste.jsf?num=C-264/14>.

¹² Swedish Tax Agency (Skatteverket). <https://www.government.se/government-agencies/swedish-tax-agency-skatteverket/> (31.03.2023).

¹³ VAT Act (1994: 200). <https://www.vatupdate.com/wp-content/uploads/2020/06/2020-09-15-Sweden-VAT-law.pdf> (31.03.2023).

of exemption in Article 135(1)(d) and (f) of the VAT Directive and found that the service Hedqvist intended to provide was not related to a financial account, a debt claim, or a security. However, regarding Article 135(1)(e), the CJEU concluded that the primary purpose of crypto assets is to serve as a means of payment or exchange and that, in this respect, they are similar to fiat currencies and should be treated in the same way. In other words, the CJEU ruled that it is exempt from the VAT Directive under Article 135(1)(e) because the 'exchange of money' between fiat currencies and virtual currencies is a money exchange service in the same way as the activity of exchanging money between fiat currencies.¹⁴

The EU's VAT Committee¹⁵, in a Recommendation¹⁶ incorporating the CJEU's decision, has further elaborated on the interpretation of the VAT Directive, looking specifically at supplies of goods and services remunerated in virtual currencies that fall within the scope of the VAT Directive, virtual wallets, services that authenticate transactions in virtual currencies (e.g., mining) and intermediary services provided for consideration by virtual currency exchange providers.

According to the EU's VAT Committee, the supply of goods or services in return for a cryptocurrency is treated like any other supply of goods or services for the VAT Directive. In light of the CJEU's ruling, the party paying with cryptocurrencies does not have to pay VAT on them, as they are treated like fiat currencies in this respect. According to Article 73 of the VAT Directive, in the case of supplies of goods and services, the taxable amount includes everything which constitutes the consideration that the supplier receives, or is due to receive, for that supply, from the customer or third parties, including any subsidy directly affecting the price of that supply. Thus, where the consideration for a supply of goods or services is paid in cryptocurrency, the supplier is liable to pay VAT on it and must calculate the cryptocurrency's value in the Member State's currency. Under the VAT Directive, this would require using the exchange rate corresponding to the last selling rate recorded on the most representative foreign exchange market in the Member State concerned or the most current rate published by the European Central Bank. However, crypto assets are highly volatile and can rise or fall in value by several percent daily. On the other hand, it can be challenging to identify the most representative foreign exchange market. Thirdly, as it is not a country's legal tender, the European Central Bank does not officially quote the exchange rate for crypto assets.

Virtual wallets allow users to store their crypto funds and transfer and receive them. In the context of virtual wallets, the EU's VAT Committee has exam-

¹⁴ Judgment of the Court of Justice of the European Union in Case C-264/14. <https://curia.europa.eu/juris/liste.jsf?num=C-264/14> (31.03.2023).

¹⁵ VAT Committee. https://taxation-customs.ec.europa.eu/vat-committee_en (31.03.2023).

¹⁶ Value Added Tax Committee (2016): Issues Arising From Recent Judgments of The Court of Justice of The European Union, in Value Added Tax Committee Working Paper No 892. <https://circabc.europa.eu/sd/a/add54a49-9991-45ae-aac5-1e260b136c9e/892%20-%20CJEU%20Case%20C-264-14%20Hedqvist%20-%20Bitcoin.pdf> (31.03.2023).

ined whether there is a consideration and whether a virtual wallet provider is a taxable person for the VAT Directive, acting in that capacity when supplying services. Concerning the first condition, it was found that most virtual wallet providers provide the service free of charge and are, therefore, not covered by the VAT Directive. However, in cases where the virtual wallet provider charges the user a fee (e.g., a transaction fee), the two conditions are met, and the service is covered by the VAT Directive. The question is whether there is an exemption in this respect. In light of the CJEU's decision in *Skatteverket v Hedqvist*, virtual wallet services are exempt from the VAT Directive under Article 135(1)(e) because they are used directly to carry out a transaction involving a currency. The EU VAT Committee has also examined whether a virtual purse service could be exempt under Article 135(1)(d), i.e., whether it is a transaction involving deposits, current accounts, payments, transfers, claims, cheques, and other negotiable instruments. This exemption may arise because the virtual wallet service is similar to transfers and payments linked to a bank account. However, as the CJEU ruled in the *SWIFT* case, for a service to be exempt, it is not sufficient to form the basis of another exempt service, but the service itself must be exempt. In essence, *SWIFT* provided a messaging system for interbank money and securities transactions through which banks and financial institutions could securely transmit details of the transactions to be carried out. However, the transaction is not carried out by *SWIFT* but by the bank; *SWIFT* merely facilitates its activity. The activity carried out by the bank (the transfer) is therefore exempt under the VAT Directive, but the facilitating service (the messaging system provided by *SWIFT*) is not. Virtual wallet providers are only an ancillary service to an exempted service. In conclusion, therefore, virtual wallet providers are not exempted under Article 135(1)(d) of the VAT Directive but are exempted under Article 135(1)(e).

The first question to be answered concerning the services of authentication of transactions with virtual currencies, i.e., mining and forging, is whether these activities can be considered as supplies of services for consideration by the taxable person. Under the practice of the CJEU, the supply of services is deemed to be supplied for consideration. Therefore, it is taxable only if there is a direct link between the service and the consideration received and a reciprocal supply between the supplier and the service recipient. In this respect, the treatment of mining and forging needs to be clarified. Suppose the miner or blacksmith does not receive a transaction fee for his service. In that case, it is an activity outside the scope of the VAT Directive since even if the user who creates the block receives newly created crypto assets from the blockchain, it cannot be considered a direct consideration for the service. There are, it is true, opposing views that the consideration does not necessarily have to be received by the supplier from that person for his activity to fall within the scope of the VAT Directive so that even if he does not receive a transaction fee, he would still have to pay VAT on

the new crypto asset units credited to him by the system. If the miner or the blacksmith receives a transaction fee in exchange for his assistance in the authentication, this can be considered a service provided directly for consideration. Here too, however, there are views that there is no direct link between the authentication activity and the transaction fee. If mining and forging are considered activities covered by the VAT Directive, the question arises as to whether an exemption applies. According to the EU VAT Committee, there may be an exemption under Article 135(1)(e) of the VAT Directive if mining and forging are considered to be the supply of currency-related services. At the same time, the activities of miners and blacksmiths may also be exempted under Article 135(1)(d) since the transactions are carried out utilizing their authentication, i.e., their activities can be considered a transaction for payment or transfer.

Concerning the service provided by virtual currency exchanges, the CJEU held in *Skatteverket v Hedqvist* that they are exempt under Article 135(1)(e). This raises the question, if whether crypto exchanges are exempt from the VAT Directive. According to the EU's VAT Committee, the activities of these intermediary service providers need to be sufficiently linked to a currency transaction to qualify for an exemption.¹⁷

3. Specific tax issues for stable cryptocurrencies (stablecoins)

We have discussed the income tax and VAT implications of crypto assets. However, there is a category of crypto-assets, stable cryptocurrencies, which, due to their specific characteristics, generate additional issues. Stable cryptocurrencies promise to eliminate volatility, making them more reliable for users. In addition, they cannot be considered fiat currency because a central bank does not issue them, and they are not legal tender.

In the case of stable cryptocurrencies, the tax liability may relate to three activities: a) their issuance, b) their conversion into fiat currency or goods or services, or c) the redemption of stable cryptocurrencies. First, let's examine the tax liabilities that may arise from the issuance of stable cryptocurrencies.

¹⁷ It is worth noting here that the VAT Directive includes intermediary activities in the scope of the exemption in Article 135(1)(d) and (e) so that the Hungarian text would qualify for an exemption. However, in the English version of the VAT Directive, the term 'negotiation' is used, whereas the Commission uses the term 'intermediation' to describe the activities of the platforms in question, which would lead it to conclude that the exemption does not apply. This shows that the interpretation of the VAT Directive and the tax classification of activities related to crypto-assets are complicated by purely legal issues and differences in translation. Value Added Tax Committee (2016): Issues Arising From Recent Judgments of The Court of Justice of The European Union, in Value Added Tax Committee Working Paper No 892. <https://circabc.europa.eu/sd/a/add54a49-9991-45ae-aac5-1e260b136c9e/892%20-%20CJEU%20Case%20C-264-14%20Hedqvist%20-%20Bitcoin.pdf> (31.03.2023).

In effect, what is happening with the issuance of fiat currency-based stable cryptocurrencies is that in exchange for receiving fiat currency, the issuer credits the user with stable cryptocurrency equivalent to the fiat currency received (i.e., 1 unit of stable cryptocurrency is issued for the receipt of 1 U.S. dollar). This does not create a new asset but merely tokenizes the fiat currency; therefore, no tax liability arises. It is worth noting here that the US IRS considers stable cryptocurrencies to be property, the issuance of which is taxable. However, since the issuance is in exchange for fiat currency of the same value, it does not result in a profit or loss.

In the case of asset-based stable cryptocurrencies, the situation is similar. The stable cryptocurrency unit is issued in exchange for the receipt of a financial asset or crypto asset that exists in some physical form. In principle, this does not result in a profit or loss.

Algorithm-based stable cryptocurrencies are usually created „from scratch” (airdrop), meaning that the issuer does not take any funds from the user who is credited with the stable cryptocurrency unit. This will, of course, result in a profit for the user acquiring the new algorithm-based stable cryptocurrency, to which the taxation of the creation of other crypto assets out of thin air as described above may apply.¹⁸

Suppose the user converts the stable cryptocurrency into fiat currency or purchases goods or services. The tax liability is linked to this transaction, raising several tax issues due to the specificities of stable cryptocurrencies.

If you convert a stable fiat currency-based cryptocurrency into the fiat currency that you have deposited and which also serves as the reference currency, you have essentially just reversed the tokenization, so again there is no tax liability. It is worth noting that the above case assumes that the value of the stable cryptocurrency has not changed compared to the value of the reference currency. If a change were to occur, income tax would be payable on it, as explained in the taxation of crypto assets. If, on the other hand, the fiat currency-based stable cryptocurrency is exchanged for a fiat currency that is different from the reference. It can be considered a currency exchange between two fiat currencies, with all the tax consequences that this entails, since the stable cryptocurrency is merely a tokenized version of the fiat currency deposited as a deposit. This means one must pay income tax on our exchange gains, whereas a virtual currency converter would be taxed as described in the VAT Directive. And when we buy goods or services with fiat-stable cryptocurrency, the tax consequences of buying with electronic money (e.g., VAT, excise duty, corporate tax, etc.) may apply from the side of the party selling the goods or services since fiat-stable cryptocurrencies are, as already mentioned, essentially electronic money. In this

¹⁸ Trivedi, Noopur - Golani, Jitesh (2021): Tax Policy for Stablecoins and DAOs: A Peek Into the Future. In *Tax Notes International*, Vol. 103, July 19, 2021. pp. 313-316.

case, the recipient of the product or service may be liable to pay income tax if the value of the stable cryptocurrency at the time of purchase is different from the value of the reference currency.

Stable cryptocurrencies with off-chain or on-chain collateral can also be considered tokenized versions of deposited assets (e.g., gold or other crypto assets). Along this logic, the same tax consequences should apply when converting them into fiat currency as when selling the deposited asset in exchange for fiat currency. Similarly, purchasing a product or service with such stable cryptocurrency could be considered if the deposited asset were exchanged for the product or service in an exchange transaction. The problem here may arise if the reference value of the asset-based stable cryptocurrency is not the deposited asset itself but, for example, a fiat currency. In this case, the relative value of the asset deposited and the fiat currency used as the reference may have changed between the acquisition of the stable cryptocurrency and its exchange into fiat currency or the purchase of the product or service. The user may be subject to the appropriate gain or loss tax consequences in such cases. A further question is how the acquisition value of stable cryptocurrency (especially if the user acquired it by depositing crypto assets) should be calculated. For example, suppose that X.Y. invested U.S. \$70 to purchase Ethereum. After a short time, the value of Ethereum increased to U.S. \$100, so X.Y. decides to purchase U.S. \$100 worth of stable cryptocurrency by depositing Ethereum as collateral. Later, he uses these stable cryptocurrencies to buy 100 U.S. dollars worth of whiskey. What should the cost of acquiring the stable cryptocurrency be, assuming that using the stable cryptocurrency to purchase the whiskey is a taxable activity for X.Y. and that the tax authority does not tax Ethereum's unrealized gain on the acquisition of the stable cryptocurrency? One possible version is that the acquisition cost should be U.S. \$70, X.Y.'s original investment in Ethereum. The acquisition cost should be the value of the stable cryptocurrency acquired at the time of acquisition, i.e., U.S. \$100.¹⁹

When converting algorithm-based stable cryptocurrencies into fiat currency, it is also essential to consider whether the user is converting into the fiat currency used as a reference or another fiat currency. The difference with fiat currency-based stable cryptocurrencies is that most algorithm-based stable cryptocurrencies are created from scratch, i.e., they have no acquisition cost. In this case, its conversion into fiat currency results in a profit for the user and, thus, an income tax liability. The question here is what the user can deduct as an acquisition cost (e.g., if he bought it on the secondary market for Ethereum or U.S. dollars, this can be deducted against income) when calculating income. Similarly, when the user purchases a product or service with algorithm-based stable

¹⁹ Trivedi, Noopur - Golani, Jitesh (2021): Tax Policy for Stablecoins and DAOs: A Peek Into the Future. In *Tax Notes International*, Vol. 103, July 19, 2021. pp. 313-316.

cryptocurrency, the user's tax liability is similar. Here again, from the point of view of the party selling the product or service, stable cryptocurrency can be considered as if it had been paid for with fiat currency, i.e., it is subject to VAT.

When fiat-based stable cryptocurrency is redeemed, the tokenization process is effectively reversed, i.e., the user transfers the stable cryptocurrency back to the issuer, which burns it. The issuer then transfers the previously deposited fiat currency back to the user. This activity does not, however, give rise to any tax liability, as the user will, in principle, receive back as much fiat currency as he originally transferred to the issuer (of course, the value of the stable cryptocurrency in the reference currency may have changed despite the promised stability, which, if it results in a profit, would lead to income tax being payable).

The redemption of asset-based stable cryptocurrency can be voluntary or mandatory. In the case of voluntary redemption, the user gets back the funds previously deposited. The difficulty may arise if the reference asset for the stable cryptocurrency was not the underlying asset but, for example, a fiat currency, in which case exchange rate gains may occur. In the case of mandatory redemption, the issuer/custodian sells the assets deposited as collateral and redeems the stable cryptocurrency from the user. Suppose any of the assets deposited by the user remain after the redemption. In that case, the issuer will return them to the user (minus a penalty fee for not providing adequate additional collateral). This process may also result in a loss for the user if the value of the deposited assets has increased relative to the value of the stable cryptocurrency's reference currency. The user returns any assets remaining with the custodian after the redemption. This, of course, results in taxable income on the user's side. Mandatory redemption may also generate income from the issuer/custodian as a penalty charge to the user.

In the case of algorithm-based stable cryptocurrencies, we can see that in most cases, we cannot even talk about redemption, as they are „created from scratch” by the issuers, so we cannot talk about tax law consequences in this context.²⁰

In summary, there needs to be a consensus on the taxation of stable cryptocurrencies and limited guidance available. They show that some countries either do not treat stable cryptocurrencies in a specific way, others treat them the same way as other crypto-assets, and others have created a particular tax regime for them, considering their specific characteristics.²¹

²⁰ Trivedi, Noopur - Golani, Jitesh (2021): Tax Policy for Stablecoins and DAOs: A Peek Into the Future. In *Tax Notes International*, Vol. 103, July 19, 2021. pp. 313-316.

²¹ OECD (2020): Taxing Virtual Currencies: An Overview Of Tax Treatments And Emerging Tax Policy Issues. www.oecd.org/tax/tax-policy/taxing-virtual-currencies-an-overview-of-tax-treatments-and-emerging-tax-policy-issues.htm (31.03.2023).

4. Administrative difficulties in taxing crypto assets

From an administrative point of view, the biggest challenge is calculating the tax base due to value volatility value. For example, the value of BitCoin increased by 457% between 2017 and 2019. In contrast, its value decreased by a third between November 2021 and June 2022²². The value of crypto assets can fluctuate by several percentage points even daily. The question arises as to what basis should be determining the value of crypto assets to calculate the tax base and who should be responsible for calculating and keeping records of it. The determination of the value of a crypto-asset may be based on its value in fiat currency as displayed on virtual currency exchange platforms or the fair market value of goods or services acquired in exchange for the crypto-asset.²³ In the former case, a further difficulty arises because cryptocurrencies have no official exchange rate (such as the central rates published by central banks for fiat currencies). Each virtual currency exchange is entirely up to the individual virtual currency exchange to determine its exchange rates. (Although there are now also traditional exchanges that list certain crypto assets.)²⁴

Suppose a state already includes the issuance of crypto assets in the scope of tax liability. In that case, there may be an additional problem in determining the value of the newly created crypto assets, as there is no consideration (e.g., product) whose value can be used as a basis for the tax authorities. In such cases, the only solution is to use the arm's length price of the crypto asset received as a reward, which may not always be possible as the exchange rate of a crypto asset linked to a new blockchain may not yet be quoted by the virtual currency exchanges, and a comparable product that can be used to determine the arm's length price may not exist in the market. It is simpler for the tax authorities in the case of stable cryptocurrency issuance, as they can consider the value of the reference currency (e.g., the euro) or reference asset (e.g., gold) when determining the taxable amount. Conversely, if the value of the stable cryptocurrency is linked to a crypto-asset, valuation problems remain.

A particular difficulty is that if the taxpayer has purchased the same crypto asset more than once, how to calculate the income from the sale of these assets, as although they are the same asset, their cost values may differ. Based on international practice concerning securities, the following solutions can be out-

²² For more detail see: Nibley, Brian: Bitcoin Price History: 2009 - 2023. <https://www.sofi.com/learn/content/bitcoin-price-history/> (31.03.2023).

²³ Value Added Tax Committee (2016): Issues Arising From Recent Judgments of The Court of Justice of The European Union, in Value Added Tax Committee Working Paper No 892. <https://circabc.europa.eu/sd/a/add54a49-9991-45ae-aac5-1e260b136c9e/892%20-%20CJEU%20Case%20C-264-14%20Hedqvist%20-%20Bitcoin.pdf> (31.03.2023).

²⁴ Chatham, Michael D. - Duncan, Thomas (2020): Taxation as a Barrier to Blockchain Innovation. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3662619 (31.03.2023).

lined. The first is to separate the individual units within each asset category (e.g., tracking the individual crypto-asset units separately). In this case, it is easy to identify when the sold crypto-asset unit came into the seller's possession. The second solution is calculating the income on a first-in-first-out (FIFO) basis. In other words, we assume we sell the crypto-asset units we have owned the longest when we sell a crypto asset. Finally, the third option is where the law allows us to treat crypto assets of the same type as a pool. This means that crypto assets of the same class acquired by the same person and of the same quality are treated as a single asset within which it is impossible to distinguish between the individual units. In other words, when a crypto asset is purchased, it is included in the pool and thus loses its uniqueness. Furthermore, all crypto assets in the pool are treated as acquired at the exact average cost. Therefore, the disposal of individual crypto assets in the pool is a partial disposal of that asset.

Tax returns and record keeping are still the taxpayer's responsibility in most countries. If taxpayers also had to prepare tax returns for crypto assets, this would impose a significant administrative burden on them. Taxpayers could benefit from the simplicity and the provision of accurate and realistic data by a regulation that makes it mandatory for crypto asset providers to keep records, collect the data necessary to prepare the tax return, and transmit it to the tax authorities.²⁵ It has been discussed several times in previous chapters that it may be helpful to examine the operations of individual blockchains on a case-by-case basis to determine precisely what activity the user's crypto assets are derived from (see *Jarrett v. United States*). Although it may seem logical at first sight to determine the tax due on each crypto asset unit based on the underlying activity, this has the disadvantage of creating a significant administrative burden for both the taxpayer and the tax administration, as it requires a thorough understanding of the blockchain's program code and operating principles. Another administrative difficulty is determining the costs (e.g., electricity, purchase prices of equipment used, etc.) that can be offset against income from mining or forging, especially if the user carries out these activities at home. Finally, it may also be a challenge for the tax administration if the legal system of a given jurisdiction distinguishes between tax consequences based on the purpose of using crypto assets. Some users may use them for payment, others as a speculative investment tool. In addition, crypto assets can fulfill these functions simultaneously or very closely in time, which may be particularly relevant for avoiding double taxation. This would also require significant human resources to investigate.²⁶

²⁵ Value Added Tax Committee (2016): Issues Arising From Recent Judgments of The Court of Justice of The European Union, in Value Added Tax Committee Working Paper No 892. <https://circabc.europa.eu/sd/a/add54a49-9991-45ae-aac5-1e260b136c9e/892%20-%20CJEU%20Case%20C-264-14%20Hedqvist%20-%20Bitcoin.pdf> (31.03.2023).

²⁶ Parsons, Amanda (2022): Cryptocurrency, Legibility, and Taxation. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4095326 (31.03.2023).

Among the difficulties of taxing crypto assets, I would also like to highlight the consequences of a state allowing taxpayers to pay their taxes on crypto assets. The main problem with this is also the volatility of cryptocurrencies, as the state continues to meet its financial obligations - for which it would use the tax - in some form of fiat currency, so it is presumably not in the state's interest to receive revenue in the form of an unstable 'currency.' In addition, financial system regulators have expressed concern about the two states' plans, arguing that replacing the national currency with a cryptocurrency would make it difficult for central banks to maintain economic stability and monetary policy properly.²⁷

5. Hungarian regulation of the taxation of crypto assets

Under Hungarian legislation, before 2022, individuals were liable to pay personal income tax (hereinafter: income tax) on the income from crypto assets, with the income from mining and forging being considered as income from self-employment, while the income from the sale of crypto assets was considered as other income. This meant that the taxpayer had to pay a social contribution tax of 15.5% in addition to the 15% tax liability.²⁸

However, the amendment to the Act CXVII of 1995 on Income Tax²⁹ in Hungary (hereinafter: Income Tax Act), which entered into force on 1 January 2022, introduced a new regulation on income from transactions with crypto assets, according to which they fall under the category of separately taxable income, including capital gains. As a result, in addition to the liability to pay social security contributions, no further social contribution tax is payable since under Act LII of 2018 on Social Contribution Tax³⁰ (hereinafter: Soco Act), social contribu-

²⁷ Brown, Matthew: Lawmakers in these two Western states want to mainstream cryptocurrency. <https://www.deseret.com/2022/2/8/22918061/wyoming-arizona-bitcoin-cryptocurrency-taxes-state-legislatures-congress-constitutional-hurdles> (31.03.2023). It should also be noted that during 2018, Ohio has already allowed taxpayers to pay their taxes in BitCoin. But all this meant was that they could pay their taxes through a website called OhioCrypto.com, where a virtual currency exchange called BitPay converted the BitCoin they paid into U.S. dollars so that the U.S. dollars were now in the coffers of the State of Ohio. This method of tax collection was eventually declared illegal within a year because the Board of Deposit did not approve the use of the OhioCrypto.com website, and the Ohio Treasurer selected the website without a competitive bidding process. <https://eu.dispatch.com/story/news/columns/the-daily-briefing/2019/11/05/ohio-ag-finds-mandel-s/2356902007/> (31.03.2023).

²⁸ Minden, amit a kriptovaluták utáni adózásról tudni kell. https://www.portfolio.hu/uzlet/20220517/itt-van-minden-amit-a-kriptovalutak-utani-adozasrol-tudni-kell-545275?fbclid=IwAR22Alexhi2S8TT7hpCnJ5oal7NdPaColwCv5QOBAPk_UdBjKZx6jIcCHSk (31.03.2023).

²⁹ 1995. évi CXVII. törvény a személyi jövedelemadóról. <https://net.jogtar.hu/jogszabaly?docid=99500117.tv> (31.03.2023).

³⁰ 2018. évi LII. törvény a szociális hozzájárulási adóról. <https://net.jogtar.hu/jogszabaly?docid=a1800052.tv> (31.03.2023).

tion tax is payable only on income taken into account in the calculation of the tax (advance tax) base included in the consolidated tax base.³¹ According to the Soco Act, „income from a transaction with a crypto-asset is deemed to be the transaction profit made by an individual in the tax year based on the transaction(s) with a crypto-asset.”³² „Crypto-asset transaction means a transaction in which an individual acquires a non-crypto-asset asset in the form of a transfer or assignment of crypto-assets (including the exercise of a right secured by a crypto-asset) in a transaction that is available and accessible to any person.”³³ For example, it is exchanged for fiat currency, given away, used to purchase a product or service, or used (i.e., a user token is redeemed for a product or service, or the token provides the holder with an equity interest or dividend).³⁴ „Crypto asset is a digital representation of value or rights that can be transferred and stored electronically using distributed ledger technology or similar technology.”³⁵ The Income Tax Act states that „transaction gains shall be determined (in respect of the excess) if the amount of income earned through transactions in the current year exceeds the amount of the current year's verified expenses for the acquisition of crypto-assets and the fees, commissions (including verified expenses in the current year not related to a specific transaction but related to the holding of crypto assets) related to the transactions. A transaction loss is recognized (for the excess) when the amount of such current-year expenditure exceeds the current year's income. No transaction income is to be assessed if the income from the transaction does not exceed 10 percent of the minimum wage (currently HUF 20,000), provided that the individual does not earn income from any other transaction of the same subject matter on the day the income is earned. Such income does not exceed the minimum wage (currently HUF 200,000) in the tax year.”³⁶ When calculating the income, the average market value of the crypto asset at the time of transfer, assignment (or commencement of exercise) is considered.

In the case of purchasing a crypto asset, the expenditure incurred to acquire the crypto asset (e.g., the amount of fiat currency used to buy it, plus any transaction costs, account management fees, etc.) may be taken into account as an expense. In addition, the verified expenditure incurred for the activity underlying the acquisition (i.e., the „production” of the crypto asset, e.g., mining, forging) (e.g., the cost of purchasing a computer, the cost of electricity). In addition, if the taxpayer acquired the crypto assets in exchange for an asset other than

³¹ Paragraph 1 (1) para of the Soco Act.

³² Paragraph 67/C (1) of the Income Tax Act.

³³ Paragraph 67/C (2) of the Income Tax Act.

³⁴ Bardócz, Iván: A kriptovaluták adózása 2022-ben. <https://ado.hu/ado/a-kriptovalutak-adozasa-2022-ben/> (31.03.2023).

³⁵ Paragraph 67/C (9) of the Income Tax Act.

³⁶ Paragraph 67/C (2) of the Income Tax Act.

a crypto asset (e.g., a car), the substantiated expenditure incurred to obtain that other asset is considered an expense up to the fair market value of that other asset at the time of the transfer or assignment. Finally, an expense is the open market value of the crypto-asset acquired when the income is earned if the individual acquired the crypto-asset as consideration for an activity or service (e.g. if a beautician receives a crypto-asset in exchange for his services). However, expenses can only be considered when determining the transaction result if they were incurred in the current year. If a taxpayer has incurred a loss in the tax year or the two years preceding the tax year, he is entitled to a tax offset, i.e., he can claim the „tax content” of his loss as tax paid in his tax return.³⁷ The tax offset amount is 15% of the crypto transaction loss declared in the tax year or in the two preceding years, less the amount of the tax offset already claimed for the crypto transaction loss in the tax return for any of the two years preceding the tax year. Costs and losses are, therefore, only taken into account by the tax authorities for a limited period, and it is consequently not worth holding crypto assets for tax purposes in the long term.

On the income from crypto-assets calculated in this way, individuals will be subject to a flat 15% VAT whenever they convert their crypto-assets into fiat currency or use them to buy goods or services. The individual cannot claim further deduction on income from crypto assets. „An individual shall declare the income from a transaction carried out with a crypto-asset and the tax thereon in a tax return prepared without the assistance of the tax authority or by supplementing the information in the draft tax return and pay the tax by the deadline for filing the return.”³⁸ Taxpayers must keep accurate records of all purchases, exchanges, and expenses.³⁹ It is worth pointing out that, to calculate the taxable amount, only the amount of non-crypto-asset assets acquired as income in the tax year through the transfer or assignment of crypto assets, from which the certified costs incurred in the year (e.g., however, it is not necessary to record in the return how many units of crypto-assets were acquired during the year, or how much of them were disposed of in one form or another, or the market value of the crypto-assets held at the end of the tax year. This means that only the income realized in the tax year will be the basis for our tax. This means that we may end the tax year with a loss year after year, but in reality, our profits in the form of crypto assets will grow. Suppose we buy 10 BitCoin units worth 1.000.000 HUF at the beginning of the year and then sell 5 BitCoin units at the end of the year, the total value of which is 1.000.000 HUF, while incurring a total

³⁷ Paragraph 67/C (3)-(5) of the Income Tax Act.

³⁸ Paragraph 67/C (8) of the Income Tax Act.

³⁹ Minden, amit a kriptovaluták utáni adózásról tudni kell. https://www.portfolio.hu/uzlet/20220517/itt-van-minden-amit-a-kriptovalutak-utani-adozasrol-tudni-kell-545275?fbclid=IwAR22Alexhi2S8TT7hpCnJ5oal7NdPaColwCv5QOBAPk_UdBjKZx6jJCcHSK (31.03.2023).

of 5.000 HUF in account management and transaction fees as additional costs. On this basis, we have incurred HUF 1,005,000 during the year against income of HUF 1,000,000, i.e., our transaction result for the tax year is a loss of HUF 5,000. We still have 5 BitCoin left in our virtual wallet as unrealized gains, which in the example above represents a profit of HUF 1,000,000. This 5 BitCoin (HUF 1,000,000 in fiat currency) gain can be declared as long as we obtain non-crypto assets through its transfer or assignment.

However, the above-reduced income tax rate is only available to individuals on the proceeds of crypto transactions that anyone can enter into. This means that if, for example, the possibility of mining is not available to everyone (e.g., private blockchain) or if someone participates in an auction where crypto assets can be used to pay for the auction, but the bidders can only participate in an invitation basis, they will be taxed according to the general VAT rules. In such a case, the crypto assets acquired through mining or forging are considered income from an independent activity, taxable at the time of acquisition at the arm's length price. The costs can be accounted for by itemized cost accounting or applying a 10% cost rate. As income is subject to the consolidated tax base, crypto assets acquired through mining or forging are subject, in this case, to a 15.5% social contribution tax in addition to the 15% VAT. If crypto assets are not traded in a commercial activity that is not accessible to everyone, the income thus obtained is considered as other income, on which 15.5% Sochi is also payable in addition to 15% VAT, with the taxable amount being calculated based on 87% of the taxable amount on the income less certified expenses.⁴⁰

It is important to note that domestic tax legislation currently only contains specific rules for crypto assets in relation to VAT. Only one National Tax and Customs Administration⁴¹ (hereinafter: NTCA) statement⁴² concerning corporate tax issues is available, which was issued in response to a taxpayer request in consultation with the Ministry of National Economy. According to this, BitCoin is not backed by a precious metal or a government but by the market and the network and, therefore, cannot be considered a means of payment in the traditional sense. The value of BitCoin is that it is accepted as a means of payment by market participants. The NTCA has also ruled that BitCoin is not a security because it needs to meet the formal and substantive security requirements. Furthermore, BitCoin exists only in virtual form and can be considered a tangible asset. „By its very nature, BitCoin is essentially a promise of payment that can be converted into money or used to pay for goods or services - to certain suppliers - based on the current price or exchange rate. This promise to pay has

⁴⁰ Kriptoaluta adózás magánszemélyek számára 2021-2022 – Kriptoaluta II. rész. <https://iriszofice.hu/kriptoaluta-adozas-maganszemelyek-2021-2022/> (31.03.2023).

⁴¹ National Tax and Customs Administration. <https://nav.gov.hu/en> (31.03.2023).

⁴² National Tax and Customs Administration, Official Information. <https://digitalcash.hu/wp-content/uploads/2017/07/Ad%C3%B3.pdf> (31.03.2023).

no expiry date or maturity. It can be exchanged for money at any time if a person or entity is willing to do so.” The NTCA explains that BitCoin is “a promise to pay that can be recognized” as a receivable and, although it does not bear interest, if it is converted or used, it generates a return, which can be positive or even harmful.

Regarding corporate tax, the NTCA stated that „the acquisition of BitCoin for consideration does not in itself generate a profit, and therefore no corporate tax liability.” According to Act C of 2000 on Accounting,⁴³ if, as a business entity, we accept cryptocurrency in exchange for goods or services offered by us or we have paid for fiat currency with cryptocurrency, we must include the cryptocurrency in the accounts as a purchased receivable within current assets under other receivables. The NTCA further explained that, because of the changes in the exchange rate of BitCoin, it is necessary to value the receivable against Bitcoin as a promise to pay at the balance sheet date. Suppose the crypto asset's value has decreased permanently and significantly over time. In that case, an impairment loss must be recognized, which is an item that increases the pre-tax result under Act LXXXI of 1996 on Corporate Tax and Dividend Tax⁴⁴. However, if the crypto asset has grown, it is only recognized in profit or loss once it is sold or used by the enterprise. If the crypto asset is sold, the rules for the sale of purchased receivables apply, which means that the difference between the price/price of the asset received in exchange for the receivable and the carrying amount of the receivable is examined. The exchange difference gives rise to a profit or loss for the company. In the case of a gain, it is recorded as other income from financial operations. In contrast, in the case of a loss, it is recorded as other expenses from financial operations. If, on the other hand, the receivable in the crypto asset is written off as an irrecoverable debt, it does not increase profit before tax as an item recorded as other expenses. Furthermore, the uncollectible portion of the receivable may be deducted from profit before tax up to the amount of the impairment loss recognized.⁴⁵

However, the NTCA's position is not binding, so the uncertainty surrounding BitCoin and other crypto assets remains. In addition, the NTCA should have examined mining and forging activities separately in its resolution. If mining or forging activities are carried out as a business entity, the crypto assets thus acquired are considered assets received free of charge and must be entered into the accounts under other income at the market exchange rate on the day of mining. This additional income should be deferred until the date of sale or use

⁴³ 2000. évi C. törvény a számvitelről. <https://net.jogtar.hu/jogszabaly?docid=a0000100.tv> (31.03.2023).

⁴⁴ 1996. évi LXXXI. törvény a társasági adóról és az osztalékadóról. <https://net.jogtar.hu/jogszabaly?docid=99600081.tv> (31.03.2023).

⁴⁵ National Tax and Customs Administration, Official Information. <https://digitalcash.hu/wp-content/uploads/2017/07/Ad%C3%B3.pdf> (31.03.2023).

of the crypto asset (i.e., the deferral should be reversed when the crypto asset is sold or used).⁴⁶ Whether mining, forging, or investing in crypto assets, if these activities are carried out in the context of a business entity, corporate income tax at the rate of 9 percent will be payable on the result. In addition, 15 percent VAT is payable on the dividend, to which a 15.5 percent social contribution tax may be added. For corporation tax purposes, the loss carry-forward can be deducted for five years, up to 50 percent of the profit.⁴⁷

Considerations

Taxing cryptocurrencies and other crypto assets presents several challenges for tax authorities worldwide. At the same time, the lack of clarity of classification, difficulties in tracking transactions, a lack of global regulatory framework, and the volatility of these assets can be considered as most pressing issues.

Crypto assets can be classified as many things as possible. One of the biggest challenges in the taxation of crypto assets is the need for more clarity on how to classify them for tax purposes. The classification of an asset can have significant implications for how it is taxed, so determining the appropriate classification is essential. Crypto assets can be classified as currencies, securities, commodities, or sui generis assets, and the classification can vary depending on the jurisdiction. For example, the Internal Revenue Service (IRS) has classified⁴⁸ cryptocurrencies as property in the United States for tax purposes. In contrast, in some other countries, they are classified as a currency or commodity. The need for more clarity on classifying crypto assets stems from their unique characteristics. Cryptocurrencies, for example, are decentralized digital currencies that operate on a blockchain network and can be used to purchase goods and services like traditional currencies. However, they can also be held for investment purposes, like stocks or other securities. This hybrid nature of crypto assets makes classifying them appropriately for tax purposes challenging. The classification can affect how they are taxed, for example, as capital gains or income, and can impact issues such as reporting obligations and the availability of tax benefits. Additionally, clarity on classifying crypto assets can lead to consistent tax treatment between different jurisdictions. This can confuse investors and traders subject to other tax laws in different countries. As such, there is a need for more precise guidance and regulations on classifying crypto assets for tax

⁴⁶ Kriptoaluta adózás magánszemélyek számára 2021-2022 – Kriptoaluta II. rész. <https://iriszofice.hu/kriptoaluta-adozas-maganszemelyek-2021-2022/> (31.03.2023).

⁴⁷ Bardócz, Iván: A kriptoaluták adózása 2022-ben. <https://ado.hu/ado/a-kriptoalutak-adozasa-2022-ben/> (31.03.2023).

⁴⁸ Digital Assets. <https://www.irs.gov/businesses/small-businesses-self-employed/digital-assets> (31.03.2023).

purposes. This would provide greater certainty and consistency in treating these assets, benefiting investors, traders, and tax authorities.

The second challenge associated with the taxation of crypto assets is the difficulty of tracking transactions. Transactions involving crypto assets are recorded on a public digital ledger known as the blockchain. Still, this ledger's decentralized and anonymous nature can make it difficult to track transactions and identify the parties involved. This lack of transparency can make it challenging for tax authorities to identify and tax transactions involving crypto assets, particularly those across multiple jurisdictions or involving anonymous parties. In addition, the need for centralized record-keeping and reporting systems can make it challenging to monitor and enforce compliance with tax laws. Another issue is the potential for tax evasion or fraud, as the anonymous nature of crypto transactions can make it easier for individuals to conceal their income or assets. This is particularly concerning for tax authorities, as the growth of the crypto market has made it an attractive target for those seeking to engage in illegal activities such as money laundering, tax evasion, and terrorism financing. Tax authorities worldwide are developing new tools and technologies to track and monitor crypto transactions to address these challenges. For example, some countries are implementing new reporting requirements for crypto exchanges and traders, while others are exploring using blockchain analysis tools to identify illicit activity. However, developing effective tools and technologies for tracking crypto transactions remains a work in progress, and tax authorities must continue adapting their approaches as the crypto market evolves. This will require cooperation between tax authorities, law enforcement agencies, and the crypto industry to ensure that regulatory and enforcement efforts keep pace with the rapid growth of this emerging asset class.

A global regulatory framework is another major challenge in taxation. While some countries have developed regulatory frameworks for crypto assets, there currently needs to be an international standard governing the taxation of these assets. Consistency in regulation can create clarity for investors and traders who may be subject to different tax laws and reporting requirements depending on the jurisdiction. However, it can also create opportunities for regulatory arbitrage, whereby individuals and businesses seek out jurisdictions with favorable tax laws or regulatory frameworks. Another issue is the potential for tax competition between jurisdictions, whereby countries compete for crypto-related business by offering more favorable tax regimes. This can lead to a race to the bottom in terms of tax rates and could ultimately undermine the ability of tax authorities to generate revenue from crypto assets. As a result, there have been calls for greater international cooperation and standardization in regulating crypto assets to address these challenges. For example, the Financial Action Task Force (FATF)⁴⁹, an intergovernmental organization focused on combating money

⁴⁹ Financial Action Task Force. <https://www.fatf-gafi.org/en/home.html> (31.03.2023).

laundering and terrorism financing, has developed guidelines for regulating crypto assets that many countries worldwide have adopted. In addition, some international organizations, such as the OECD, are working to establish a coordinated global approach to the taxation of digital assets. This could ensure greater consistency and clarity in regulating crypto-assets and reduce the risk of regulatory arbitrage and tax competition.

The volatility of crypto assets is another challenge that complicates the taxation of these assets. Unlike traditional assets such as stocks and bonds, crypto assets can experience significant price swings over short periods, often with little warning. This volatility can make it difficult for investors and traders to calculate their gains and losses for tax purposes accurately. For example, if an individual purchases Bitcoin at \$10,000 and then sells it at \$20,000 a few months later, they may be subject to a significant tax liability on their capital gains. However, if the price of Bitcoin drops to \$5,000 shortly after that, the individual may be left with a large tax bill for a transaction that ultimately resulted in a net loss. This volatility can also make it difficult for tax authorities to value crypto assets accurately for tax purposes. In addition, unlike traditional assets, typically traded on centralized exchanges and subject to strict reporting requirements, crypto assets are often traded on decentralized exchanges and can be difficult to value accurately. To address these challenges, some countries have introduced measures to help investors and traders manage the tax implications of crypto assets. For example, the IRS allows taxpayers to use specific identification (or „first-in, first-out”) accounting methods to determine the cost basis of their crypto assets for tax purposes. Other countries have introduced measures to help mitigate the impact of volatility on tax liabilities, such as allowing for the carry forward of losses or using averaging methods to smooth out gains and losses over time.

Overall, the challenges associated with the taxation of crypto assets reflect this area of law's rapidly evolving and complex nature. As such, states and tax authorities must continue to develop clear and consistent regulations to address these challenges and provide clarity for investors and traders.

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