Geopolitics and Monetary Systems

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ABSTRACT: A significant part of the world would like to get rid of dollar-based international settlements and is therefore looking for non-dollar alternatives. It is replacing dollar settlements with clearing systems. This is resulting in a spectacular division in international payment systems.

Another division is the role of digital currencies. Technological advances have enabled the operation of high-capacity computers. This has made it possible to create digital national currencies. This is how cryptocurrencies and digital national currencies came into being. Cryptocurrencies embody legal value and are created using special distributed ledger technology. Their creation is called cryptocurrency mining. Anyone who is technically capable can do it. National currencies are monopolies; only the central bank and the banking system can create them. Accepting cryptocurrencies in the payment system is risky because their value is volatile. Stablecoins are pegged to the dollar, so their value is presumably stable. This is based on trust. US President Trump wants to base the future on these currencies produced by tech giants. In contrast, China was the first to create its digital national currency, the digital yuan. This process also divides the international settlement system.

The EU is considering combining the two methods. There will be a digital euro, but there will also be stablecoins – albeit regulated ones. (China also allows yuan-based stablecoins.)

KEYWORDS: digital national currency, cryptocurrency, authorisation and regulation of stablecoins

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Introduction

Many have already analysed the division in the global currency system. The part of the world that wants to break free from dollar-based international settlements, in which the US is able to control every transaction through the Fed's server, is looking for non-dollar-based solutions.

This has already led to a split. Added to this is another development: digitalisation. Digital currency: but what kind? In other words, attitudes towards digital currencies are another important divisive issue in global finance.

Digital national currency

The rapid development of technology has enabled the operation of high-capacity computers capable of doing what the Fed does in international settlements. They can quickly perform a sea of operations and transmit payment transactions electronically. Not only in international transactions, but also domestically. Not only between companies, but also between individuals. Even in a country with a population as large as China. Digital central bank money is therefore becoming a possibility.

What exactly is digital central bank money (DJBP, or Central Bank Digital Currency, CBDC)? It is digital money issued by the central bank, representing a claim against the central bank, which can only be stored and used in electronic form. Its value is guaranteed by the central bank, making it a legal tender. It is also referred to as digital currency or e-money ( ). It is not the same as electronic account money created by commercial banks, nor is it the same as the electronic money currently used in the EU zone, and in particular, it is not the same as cryptocurrencies (We will discuss the latter in more detail later).

China has developed a digital national currency.1 The digital yuan was first introduced in China. The e-CNY (e-yuan) was first introduced in August 2020 as a pilot programme in several Chinese cities (e.g. Shenzhen, Suzhou, Chengdu, Xiong'an). Testing has since been gradually expanded: in 2021, additional regions such as Shanghai, Hainan, Changsha, Xi'an and Dalian joined, and in 2022, Tianjin, Chongqing, Guangzhou, Fuzhou, Xiamen and cities in Zhejiang province (Hangzhou, Ningbo, Wenzhou, Huzhou, Shaoxing, Jinhua) will join the programme. From 2023, new introductions appeared in several areas: in the city of Changshu, public sector employees were paid in e-CNY, SIM card e-CNY wallets were introduced, and for the first time, oil trading (crude oil) transactions were also conducted in digital yuan.

There have been further significant developments in relation to the digital yuan to date, but full implementation is still pending. By June 2023, there were 120 million active e-CNY wallets in operation, and 1.8 trillion yuan worth of transactions had been completed. Nevertheless, adoption has remained modest, with many users preferring Alipay or WeChat Pay, which continue to dominate the Chinese market. (These are also modern forms of payment, but they are not the same as electronic central bank money.)

There have been international and cross-border attempts to introduce the e-yuan: e-CNY was temporarily available for use during the 2022 Winter Olympics, mainly for athletes and tourists. Singapore has launched joint pilot projects with the Chinese

1 Progress of Research & Development of E-CNY in China. Working Group on E-CNY Research Research and Development Development of the People's Bank of China July, 2021 https://openresearch-repository.anu.edu.au/server/api/core/bitstreams/8c1d1ea1-a8f7-402c-9f08-edf6863237bc/content

central bank to enable cross-border use of e-CNY for tourists. In Hong Kong, residents can now open a digital yuan wallet and use it to make payments without having to open an account on the Chinese mainland, significantly expanding its area of use.

Meanwhile, China's Cross-Border Interbank Payment System (CIPS) has also been established, which supports e-CNY-based international settlements and is cooperating with an increasing number of foreign banks , such as Africa's Standard Bank and the United Arab Emirates' largest bank, Abu Dhabi First Bank.

When the Chinese president made regional visits, cross-border yuan-based settlements reached record levels. The QR code-based UnionPay payment system is expanding in more than 30 countries.

(The QR code UnionPay payment system is a mobile payment solution developed by China UnionPay, one of the world's largest payment networks, which enables transactions using QR codes. It is similar to how Alipay or WeChat Pay work, which are privately owned companies, except that in this case, UnionPay, which is close to the Chinese state, is the service provider.)

The Chinese central bank is committed to the international application of e-CNY: an international e-CNY operations centre is planned in Shanghai . According to some expert calculations, the digital yuan ecosystem will be relatively fully developed by the end of 2025. (The term „digital ecosystem" refers to the interconnected system of various players, tools, platforms, applications and services in the digital world that complement each other.)

At the same time, China is restricting the spread of cryptocurrencies, another digital trend. In 2021, cryptocurrency mining was banned.

What is cryptocurrency?

A cryptocurrency is an asset that is actually linked to other existing assets, primarily actual national currencies, and can be said to be backed by them... A crypto asset is a digital embodiment of value or rights that can be transferred and stored electronically using a specific technology called distributed ledger technology (DLT) . There is a specific term for its creation: cryptocurrency mining.

What does this mean? Cryptocurrency mining is the process whereby computers compete with each other using enormous computing power to verify transactions, and in return receive new „coins". In the cryptocurrency system, many computers (miners) simultaneously attempt to solve a very complex but completely meaningless mathematical problem. The first to find the correct solution „wins": on the one hand, their computer validates the given transaction block, and on the other hand, they receive a certain amount of cryptocurrency (coins) as a reward. This is to prevent anyone from cheating or entering false transactions into the system. Mining is therefore both a security mechanism and a way of issuing new money. Miners do not receive rewards from individuals or companies, but from the system itself. When a miner solves a block (puzzle), a new coin is automatically „created" according to the rules of the blockchain and added to the miner's „wallet".

It's like a game rulebook that says, „The first person to solve the puzzle gets 1 new token from the supply..."

Cryptocurrency can be produced by private individuals, unlike national currencies commonly used for payments, which can only be produced by the central bank and members of the banking system... Of course, this is only seemingly simple, as it requires extremely powerful computers that consume enormous amounts of energy.

In terms of its creation, cryptocurrency seems more „democratic" than digital central bank currency, as there are no restrictions on who can produce it. The creation of national money, on the other hand, is a monopoly:

But this form of money creation only appears to be more democratic. After all, the value of cryptocurrencies is ultimately linked to the official national currency issued by a central bank with a monopoly on money creation... Moreover, some form of central regulation of this type of financial instrument will also become inevitable.

In May 2024, the MNB issued an official information sheet, which generally deals with the concept of cryptocurrencies. It is worth studying this in its entirety to familiarise ourselves with the new concepts. (As a final note, we are therefore attaching the document.[i] In this paper, we refer to only a few of these concepts.)

Can cryptocurrencies be considered money? The term „currency" seems to suggest so. But we call it „crypto" because the currency is hidden within it... After all, it is not exactly what its name suggests; it cannot be used without restriction and is not a full-fledged currency. This is because it cannot be used to make purchases at any time without further ado, as market participants are not obliged to accept it. It is therefore questionable whether it can be called money. To be precise, it can only be used to make purchases if a seller is willing to accept it. If not, it must be converted into the national currency that serves as its collateral. However, crypto assets are definitely a means of holding and accumulating wealth.

Why is it risky to accept certain crypto assets as payment? Because in most cases, the value of cryptocurrencies – i.e. the amount you paid for them – can easily evaporate. The exchange rate of these assets is volatile and uncertain. And although they are based on a complex IT structure, they can still be hacked. (According to some analyses, powerful computers will make this possible with complete certainty in the near future...) In that case, you could lose the entire amount! (Portfolio wrote about this, based on an article by Project Syndicate.2) The technical standard is a key issue in terms of security... Zoltán Pogácsa's book, published in 2024,3 tells countless stories from the lives of cryptocurrency innovators and millionaires, in which astronomical fortunes were made, but often melted away in a matter of minutes, and what's more, many of those involved ended up in prison...

Stablecoins are a form of cryptocurrency. As their name suggests, the creators of these „coins" sought to achieve a certain degree of value stability by stipulating

2 Project Syndicate
https://www.project-syndicate.org › The big Picturet. By PS editors

3 Zoltán Pogácsa: Digital Capitalism Kossuth Publishing House, 2024

collateral requirements. Of course, there is (as yet) no guarantee that the collateral actually exists. It is based on trust and faith. Here, we have to accept the issuer's claim. As we have already mentioned, this would require a supervisory authority to guarantee it (but then where is the democracy so often mentioned in crypto ideology, which cryptocurrencies are supposed to represent in theory?

It is very interesting, however, that the US has nevertheless committed itself to this direction.

Washington's strategy

Unlike China, the US is focusing on the private sector.
In contrast to China, which is striving for digital central bank money, the US has introduced rules that favour the spread of certain cryptocurrencies and dollar-based stablecoins...

And here we have the rift!

There is no place for the digital dollar in this system. Work on the e-dollar has even been banned in the US.[4] Trump pushed through a legislative process that brought cryptocurrencies into the mainstream , with minimal oversight. (These are the CLARTY and GENIUS acts.) (Incidentally, Congress did not pay particular attention to the fact that Trump owns billions of dollars worth of cryptocurrencies, which certainly represents a conflict of interest...)

It is true that the GENIUS Act ties crypto-stablecoins to traditional currencies, primarily the dollar, but the regulatory framework – the CLARITY Act – is extremely weak . The law allows insider trading and companies to trade with themselves. There are no capital requirements or liquidity rules... Kenneth Rogers puts it bluntly: it is „a skeleton..."[5] What's more, it makes tax avoidance easier. He believes that the current regulations take us back to 1800s America, when there was no central bank. At that time, any bank could issue dollar-backed money, which had tragic consequences. Fraud, instability, bank failures... With some exaggeration, some believe that something similar could happen if stablecoins flood the market.

Trump specifically wants to make Washington, or more precisely, the United States, the capital of stablecoins. Who will benefit from all this is a big question. It is likely that it will not be the masses, but the super-rich.

In any case, the two great rivals have moved in opposite directions.

4 Europe could win the battle for the future of digital money Chattam House https://www.chathamhouse.org › Topics › Region expert comment, published 11 June 2025

5 Project Syndicate Big Picture 2025 Aug. 15 https://www.project-syndicate.org/commentary/trump-s-stablecoin-gamble-doc-2025-08

What will happen in Europe?

The Brussels Commission is sympathetic to stablecoins, but the ECB is not at all supportive of their presence. The bank fears that their spread will lead to the dollarisation of European payment transactions and that Europe will lose its financial sovereignty. It sees a risk in dollar-pegged stablecoins, which threaten financial stability in the eurozone.

For the time being, it appears that the EU will operate both solutions in parallel[6]. By 2028, according to plans, the ECB will have its digital euro; this is still awaiting parliamentary approval (at the time of writing). MiCA (Market in Crypto-Assets Regulation), on the other hand, which has already been adopted, provides regulation and a framework for the operation of stablecoins in the EU. It is believed that this regulation will enable stablecoins to operate without jeopardising stability.

However, not all stablecoin issuers are enthusiastic about EU regulation. Tether, the world's largest issuer, believes that European rules are too strict for them and is therefore withdrawing from the region. The ECB is not shedding any tears over this. Banking experts estimate that by 2028, when the digital euro is planned to be introduced, there will already be 2,000 stablecoins in Europe, which, without strict regulation, could indeed jeopardise the system. *Tokenisation*, which is seen as a positive feature of cryptocurrencies, is something they would rather implement within the banking sector. („Tokenisation" means that sensitive data (e.g. bank account numbers) are replaced by a „token" that can be handled securely but does not directly carry the original information. This is considered an important advantage of cryptocurrencies.)

The ECB also argues that cryptocurrencies, in which assets can be held, siphon deposits away from the banking sector. (It is somewhat ironic that these critics argue that the spread of cryptocurrencies could reduce credit supply in this way. After all, commercial banks do not lend from deposits... But the money held in banks and the transactions associated with it are an important source of income for banks! So losing it would indeed have a significant impact on the banking sector.)

Another question arises, as a legitimate concern. And that is technical security. It is certainly very important that security can be guaranteed in the digital age. We support the above with a few quotes from the analysis published in Portfolion (on which our information above is based).

„Control over payment infrastructure will increasingly determine economic sovereignty /.../ The future international system will be dominated by currencies whose digital ecosystems inspire the greatest confidence in both their institutions and their codes. /.../ Global coordination of tokenisation, cryptographic interoperability, data protection and resilience standards necessary for the quantum era will be essential."[7]:

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6 Project Syndicate, 2025. www.project-syndicate.org and:
The digital euro: maintaining the autonomy of the monetary ...
20 March 2025 European Central Bank https://www.ecb.europa.eu › html

7 This could spell the end of the dollar's dominance portfolio.hu/gazdasag/20250817/ez-vet-het-veget-a-dollar-egyeduralmanak-780211 Portfolio.hu 17 August 2025

As we can see, technological progress will definitely bring about a new world. Money and monetary systems play an important role in our personal sovereignty, but they also play a major role in the independence of countries and regions. The fact that the major powers and countries are moving in different directions in this area does not bode well for the dawn of a peaceful world. It certainly means that the world is moving not towards unity but towards fragmentation.

What does the future hold?

From this point of view, the Chinese position, as expressed by the governor of the Chinese central bank at an international forum in 2025, is instructive.[8] The Chinese central bank governor emphasised what our article also took as its starting point: the international financial system is indeed undergoing transformation.

According to the central bank governor, the most important changes in the international system were the creation of the euro in 1999 and the strengthening of the role of the Chinese yuan after 2008. By 2025, the yuan will be the third most widely used currency for payments and will also rank third in the SDR basket. (Behind the dollar and the euro, ahead of the Japanese yen and the pound sterling.)

According to the governor of the People's Bank of China, the functioning of the current international financial institutions will continue to be necessary, but it needs to be improved. The IMF's structure and decision-making system do not adequately reflect the economic restructuring that has taken place in the world. The yuan, i.e. China, is not in its rightful place, nor are developing countries in general. He regrets that the role of the SDR in the international financial system falls far short of what is necessary. In his view, this should be improved. The rules governing allocations are outdated, reflecting the former quota ratios, and the private use of SDRs in international trade and in determining the currency denomination of bonds is limited.

International payment transactions are costly and inefficient. Digital currency would help to remedy this. However, in the current international financial system, regulatory systems are not sufficiently harmonised, and currency can easily become an economic weapon in political life. (We have seen this recently, of course.)

He recalled that regional multilateral payment systems had also been established, alongside bilateral clearing agreements. China, for example, established its yuan-based multilateral settlement system a decade ago.

The advent of new technologies has accelerated cross-border payment systems, and cryptocurrencies are flourishing. (However, we have seen that these also pose challenges in terms of the regulation and supervision of payment systems.

8 http://www.pbc.gov.cn/en/3688006/index.html
A Few Observations on Global Financial Governance--Keynote Speech by PBOC Governor Pan Gongsheng at the 2025 Lujiazui Forum

Smart contracts and decentralised finance (DeFi) will further contribute to the development of cross-border payment systems. (For the concepts of smart contracts and DeFi, see the endnotes.[ii])

To summarise our message, it is clear that the international financial system of the future is moving towards multiple settlement systems and heralds the advance of new digital technologies. It is extremely exciting to consider how this will shape the future of the banking system, central banks and central bank currencies.

Will it become mainstream in the future, at least in the US, for tech companies to take over money creation from the banking system, or will central banks and the banking system retain their role in money creation? (Whether based on physical, tangible money or digital currencies?) Furthermore, will (politically independent) central banks or (politically dependent) governments supervise the channels of money flow? And with what results?

As things stand, it seems that state supervision of modern technology-created financial instruments will definitely be desirable. Perhaps the future will be a mixed European system.

This seems to be indicated by the latest information that China is now allowing stablecoins after all, but with one restriction: only if they are pegged to the yuan rather than the dollar... ■

Sources

1. ECB:
   The digital euro: maintaining the autonomy of the monetary ...
   20 March 2025.
   European Central Bank
   https://www.ecb.europa.eu › html
2. PBOC: Progress of Research & Development of E-CNY in China. Working Group on E-CNY Research of the People's Bank of China July, 2021
   https://openresearch-repository.anu.edu.au/server/api/core/bitstreams/8c1d1ea1-a8f7-402c-9f08-edf6863237bc/content
3. Zoltán Pogácsa: Digital Capitalism. Kossuth Publishing House, 2024
4. Project Syndicate
   https://www.project-syndicate.org › The Big Picturet. By PS editors .21 August 2025

Endnotes

i Cryptocurrencies and service providers – questions and answers (7 May 2024) MNB Information. 1. What is a crypto asset? A crypto asset is a digital representation of value or rights that can be electronically transferred and stored using distributed ledger technology (DLT) or similar technology. 2. What rules apply to crypto assets in Hungary and the EU? The backbone of EU regulation on crypto assets can be found in Regulation (EU) 2023/1114 of the European Parliament and of the Council (MiCA), which is directly effective and directly applicable in Hungary. In Hungary, Act VII of 2024 on the market in crypto-assets (the so-called Kriptotv.), adopted on 10 April 2024, contains important supplementary detailed rules. The parts of MiCA relating to stablecoins will apply from 30 June 2024, and its other provisions will apply from 30 December 2024. In addition to MiCA, the amended EU Regulation on data accompanying transfers of funds and certain crypto-asset transfers (FTR) also entered into force in June 2023. This allows the transfer of crypto assets to be tracked (under the previous regulation, this was only possible for money transfers) in order to prevent and detect their possible use for money laundering or terrorist financing. Detailed rules on professional knowledge and experience will be regulated by a government decree in Hungary, while rules on contractual relationships with customers will be regulated by an MNB decree. 3. What is the purpose of MiCA? The purpose of MiCA is to harmonise the rules applicable to crypto-assets, their issuers, offerors and service providers at European level, mitigate risks to financial stability and provide protection for investors. At the same time, the regulation should not stifle innovation in the financial sector. 4. Who supervises the crypto market? In Hungary, the crypto market is supervised by the Magyar Nemzeti Bank (MNB), which acts in its capacity as the supervisor of the financial intermediary system. 5. What types of crypto assets are there? There are several classifications on the market. MiCA breaks with these and classifies crypto assets into four new types: asset-referenced tokens, electronic money tokens, other crypto assets (the latter including Bitcoin, for example) and utility tokens. 6. What is an asset-referenced token (ART)? A type of crypto asset that is not an electronic money token and that seeks to maintain a stable value by being linked to another value or right, or a combination thereof, including official currency (so-called fiat money) issued by the central bank of one or more countries. In short, it is a crypto whose exchange rate is pegged to an asset or assets other than fiat money. 7. What is an electronic money (e-money) token? A type of crypto asset designed to maintain a stable value by being pegged to the value of an official currency (known as fiat money) issued by a country's central bank. In short, it is a crypto whose exchange rate is pegged to fiat money. 8. What is a stablecoin? A crypto asset whose main purpose is to be used as a medium of exchange, while its exchange rate is typically pegged to some asset. Asset-backed and e-money tokens are collectively referred to as stablecoins. 9. What is a utility token? It is another type of crypto asset that provides access to the issuer's product/service. It can be, for example, a "tokenised" voucher or pass. Under the MiCA Regulation, issuers are not generally required to produce a white paper for these tokens. 10. What is a general crypto asset? Any crypto asset that is not classified as an asset-backed or e-money token (stablecoin), such as Bitcoin. 11. What is fiat money? Money issued by governments and central banks, which regulate the amount of money in circulation. However, it is not backed by physical assets (e.g. gold), but by the performance of the economy. Currently, almost all modern money is of this type. 12. What is DLT? Distributed ledger technology, which allows all participants in the network to store transactions that have been accepted and validated according to specific rules and procedures, and to exchange data related to them, without the involvement of a third

central party. 13. What is blockchain? Blockchain is a type of DLT in which transactions are linked together in blocks using cryptographic solutions, creating a chain that guarantees the authenticity and integrity of the transactions. There are also DLT solutions where data is not organised into blocks, but rather the balances of network participants are updated accordingly after transactions are authenticated. 3/5 14. What is DeFi (decentralised finance)? Decentralised finance (DeFi) is the field of applications, typically without intermediaries, for providing traditional and new financial services on public networks using distributed ledger technology. Further information is available here 15. What is a white paper? Under the MiCA Regulation, the issuer of a crypto asset must present its activities (products, services), the crypto asset it intends to offer to the public, the purpose and process of the offer, and highlight the risks in a basic document written in plain language. It is essentially an issuer's manual for the project in question. 16. Who can issue and distribute crypto assets? In accordance with the MiCA Regulation, only legal entities established in the EU may offer crypto assets to the public or list them on a crypto exchange. Issuers of stablecoins and crypto asset service providers must comply with strict prudential and consumer protection rules, particularly in terms of capital, liquidity management, investor rights, interoperability and supervision. Within the EU, an issuer or provider with an EU headquarters may also offer cross-border services. 17. Where can I obtain crypto assets? There are many ways to obtain crypto assets, but typically they are purchased or exchanged. The safest and most regulated way is to buy them from crypto asset service providers that deal in exchanges (including crypto ATMs) or on centralised cryptocurrency exchanges (CEXs). Here, after registration and customer identification, users can deposit fiat money into their accounts using a bank card or bank transfer, which they can then exchange for crypto assets and trade with. In addition, there are decentralised exchanges (DEX) where crypto assets can be exchanged directly for other crypto assets. The least regulated method is peer-to-peer (P2P) transactions, where two parties agree on the exchange. 18. How risky are crypto assets? Crypto assets can be extremely risky. This is due to several factors: • High volatility: The crypto market is typically very volatile, meaning that prices can rise or fall rapidly. • Fraud and scams: Fraud, scams and price manipulation are still present in the current crypto markets and pose a risk. • Security risks: The infrastructure associated with crypto assets, such as the digital wallets that store them, is subject to cyber security threats, and if a wallet is hacked or someone loses access to it, it is not possible to recover the assets. 4/5 • Project risks: Many crypto projects or new services are launched, but not all of them are successful. Some fail, which affects the value of investors' assets. It is important to always consider the risks and only invest amounts that the investor can afford to lose. At the same time, it is very important to thoroughly familiarise yourself with the white paper. If something is unclear, don't be afraid to ask detailed questions through the available communication channels (e.g. email, instant messaging apps or other social media). If there are no such communication channels, they refuse to answer, or there are still unanswered questions, it is worth considering avoiding the project. 19. What is a rug pull? It is a type of fraud related to crypto assets, where perpetrators create a new, seemingly reliable protocol and typically issue a new crypto asset, which they then advertise intensively, before disappearing with the value of the collected customer assets. 20. How can I recognise a rug pull? In most cases, fraud can be avoided with sufficient information. In this case, too, the primary source of information is the white paper (the project's basic document). It is also important to find out who is behind the project (advertisers, promoters). It is worth monitoring social media platforms related to the project (e.g. Facebook, X (formerly Twitter)), related forums (e.g. Telegram, Signal, Discord groups) and major crypto websites. It is also worth

checking who owns the majority of the new crypto assets. If more than 20% of the tokens are owned by one person or group, it is possible that the price of the asset will be severely devalued when they exit. 21. How can I pay with crypto assets? Can I buy a car with them, for example? It is up to the merchant to decide whether to accept crypto assets as payment, but it should be emphasised that they are not legally obliged to do so. The easiest way to convert them into cash is to sell them on a CEX, which will transfer the value of the crypto assets in fiat currency to the account we specify. There are also solutions that allow you to pay for the contents of your shopping basket with crypto assets at the end of your online purchase, at the checkout. Stripe, for example, offers such a service. It is also possible to agree on a P2P transaction between the parties, for example when buying a car, but this depends on the partner. 22. What does the price of a crypto asset depend on? The price fluctuations of such assets are often significant and unpredictable. The price is mainly determined by supply and demand. In many scams, most of the supply is concentrated with the issuer, and when demand appears, the issuer suddenly sells a large number of tokens at market price, resulting in a sudden drop in the price of the token. Many white papers provide information on the number of tokens, their distribution and development plans, and knowing this information can reduce the risk. 5/5 23. How can crypto assets be stored? Crypto assets can be stored in custodial wallets (or hosted wallets), which are provided by crypto exchanges, for example. Here, the service provider stores our crypto assets. If the service provider does not function properly, we may lose all of our crypto assets stored on it. Examples of this are the collapse of the Mtgox and FTX exchanges. The other large group is non-custodial wallets (or self-hosted wallets), for which only the owner is responsible. These wallets can be thought of as a safe in which we can store our crypto assets. Such wallets can be online applications or various hardware solutions (e.g. USB sticks). 24. Who can I contact if I have a complaint about a crypto asset service provider? Under MiCA, crypto asset service providers are required to provide their customers with the option of submitting complaints in person, by telephone or in writing. In consumer protection matters, they are required to appoint a consumer protection contact person, whose identity must also be reported to the MNB. Unless otherwise agreed, complaints are generally handled in Hungarian. Complaints must first be addressed to the service provider. 25. Are crypto asset incomes taxable? Pursuant to Section 67/C of Act CXVII of 1995 on Personal Income Tax, income from transactions executed with crypto assets is defined as the transaction profit achieved in the tax year on the basis of transaction(s) executed with crypto assets by a private individual, and is therefore subject to 15% tax. This section also contains additional rules.

ii To better understand the concepts, let's look at some definitions from Chat GPT and Investopedia:

Investopedia:

Smart contracts allow for secure transactions and agreements between anonymous parties without needing a central authority or legal system.

Chat GPT:

A smart contract is a self-executing programme stored and run on a blockchain (e.g. Ethereum).

DeFi could be the application category that brings crypto into the mainstream

DeFi is a kind of alternative banking system where anyone in the world with an internet connection and a crypto wallet can use financial services without intermediaries. Decentralised finance (DeFi) is a financial system that operates on a blockchain and provides services not through centralised actors (banks, brokers) but through smart contracts. The essence of these is as follows:

- The terms of the contract are written in code, not on paper.
- When the specified conditions are met, the contract is automatically executed (e.g. money transfer, token issuance, access granted).
- Execution and data are stored on the blockchain, making it transparent, immutable and decentralised.