

Opinion of the European Economic and Social Committee on Crypto-assets — Challenges and opportunities**(own-initiative opinion)**

(2022/C 486/05)

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Plenary Assembly decision	24.3.2022
Legal basis	Rule 52(2) of the Rules of Procedure Own-initiative opinion
Section responsible	Economic and Monetary Union and Economic and Social Cohesion
Adopted in section	9.9.2022
Adopted at plenary	22.9.2022
Plenary session No	572
Outcome of vote (for/against/abstentions)	148/0/3

1. Conclusions and recommendations

1.1. Whilst acknowledging the increasing market capitalisation of crypto-assets, the EESC strongly supports the European Commission's proposal for a Regulation on Markets in Crypto-assets (MiCA) which is aimed at regulating crypto-assets within the EU and which resulted in a provisional political agreement of the co-legislators on 30 June 2022 ⁽¹⁾.

1.2. The EESC also calls for a robust regulatory and operational framework to improve the financial tracking of transactions and tax compliance of crypto-assets.

1.3. The EESC strongly recommends that authorities should abide by the 'same activity, same risks, same rules' principle. This requires building on existing regulatory frameworks in the case of businesses transacting in crypto-assets where similar risks as those arising in traditional ones need to be covered. The EESC believes this is necessary to avoid asymmetries between analogous services and assets that could fall under different frameworks due to technicalities.

1.4. A regulatory framework for crypto-assets needs to be consistent across jurisdictions and not just within the EU. Standards based on a level playing field should be set within and outside the EU to protect customers. The EESC supports the Transfer of Funds Regulation ⁽²⁾ (TFR) although in some aspects this goes further than for traditional finance transactions. However, at the same time, the EESC supports innovation within the EU and it is important that ordinary products based on blockchain technology that are not financial in nature are treated as their physical counterparts and not as financial instruments, following the 'same activity, same risk, same rules' principle.

1.5. The EESC notes with concern the environmental consequences of crypto-assets and related mining activities given the EU's climate commitments as part of the Green Deal and is of the view that despite emerging DLTs such as blockchain that seem to be able to deliver sustainable infrastructure for a low carbon future, there is no conclusive proof that this is the case.

⁽¹⁾ The text is expected to be finalised once approved by COREPER around the end of September 2022 and therefore will most likely not be available before the adoption of this EESC opinion.

⁽²⁾ The TFR is basically the result of the FATF recommendation to create an obligation on payment service providers to accompany transfers of funds with information on the payer and the payee. New technologies such as the ones used in crypto-asset transfers will be covered by the TFR.

1.6. The EESC is of the view that blockchain, as the main underlying technology for crypto-assets, could help address the risks that currently prevail in the market. The potential benefits of blockchain range from real-time transactions allowing risk reduction and better capital management to improved regulatory effectiveness, for example by using blockchain for Know-your-Customer or anti-money-laundering checks.

1.7. The EESC also notes that technological developments can help address existing tax compliance limitations, thus improving transparency and the quality of data sent to the tax authorities for control purposes, addressing tax fraud and illicit transactions.

1.8. Further technological developments in blockchain could also motivate banks to cooperate within the blockchain ecosystem, enabling them to share information and experience with the wider blockchain community via a blockchain-based trade finance platform.

1.9. Finally, the EESC fully supports the role played by the ECB in monitoring developments in crypto-assets and their potential implications for monetary policy and the risks crypto-assets may pose to the smooth functioning of market infrastructures and payments, as well as for the stability of the financial system.

2. Background

2.1. Crypto-asset market capitalisation more than tripled in 2021 to USD 2,6 trillion, yet crypto-assets remain a small portion of overall global financial system assets ⁽³⁾. In terms of numbers, crypto-assets compare to some of the established asset classes, though they are nowhere close to the importance of government bonds, stock markets and derivatives. The rapid growth of crypto-assets has attracted several new players in the ecosystem with an increasing number of crypto-assets being offered, some of them referred to as 'virtual currencies' or digital 'coins' or 'tokens'. The most prominent crypto-assets to date include Bitcoin and Ether, which together represent about 60 % of the total market capitalisation of crypto-assets.

2.2. Over the past year, the demand for a class of crypto-assets called stablecoins ⁽⁴⁾ has seen an unprecedented growth aided by developments in technology, notably blockchain. In particular, stablecoins trading volumes have outstripped almost all other crypto-assets mainly because they are heavily used to settle spot and derivatives trades on exchanges. The relative price stability of stablecoins also helps shield crypto-asset holders from the volatility associated with non-stablecoin crypto-assets.

2.3. Decentralised finance or DeFi ⁽⁵⁾ based on blockchain technology and providing financial services using stablecoins and other crypto-assets is one of the main reasons for the increase in demand for crypto-assets, since it has allowed users to trade crypto-assets without an intermediary. There is also no need for a credit risk evaluation of the client during a transaction. Interestingly, such transactions involve mainly institutional players from developed economies where stablecoins are commonly transacted ⁽⁶⁾.

⁽³⁾ Assessment of risks to financial stability from crypto-assets.

⁽⁴⁾ Liao and Caramichael, 'Stablecoins: Growth potential and impact on banking', International Finance Discussion Papers No 1334, Washington: Board of Governors of the Federal Reserve System (2022).

⁽⁵⁾ DeFi basically means the provision of financial services in a decentralised way, i.e. without the use for an intermediary to facilitate the provision of the financial service. Once developed by individuals, DeFi applications are deployed on the blockchain and gradually take on a life of their own as governance is ceded to the user community. The ultimate form of a DeFi application is a decentralised autonomous organisation (DAO). This comes into contrast with the traditional financial system, which relies on centralised intermediaries that control access to financial services. The use of blockchain technology alone does not make something DeFi, it is rather the absence of intermediaries (made possible by i.e. blockchain) that leads to DeFi.

⁽⁶⁾ Chainalysis (2021)

2.4. Blockchain or distributed ledger technology (DLT) can be described as one big public file that is shared and stored across a huge network of computers containing all the transactions in crypto-assets. As it is publicly shared and its contents validated, it is not possible to reverse or alter the transaction. Hence, the public file produced as a consequence of DLT use precludes fraudulent transactions.

2.5. During the peak of the COVID-19 crisis, a time of market stress, the value of Bitcoin peaked at USD 10 367,53 in mid-February 2020, dropping to USD 4 994,70 in mid-March of the same year. However, the sharp rise and fall in value had little to do with the pandemic and its effect on the share market ⁽⁷⁾. The seemingly erratic behaviour of Bitcoin's value is a result of the phenomenon miners and experts refer to as 'halving'. Bitcoin halving occurs every four years, or every time 210 000 blocks are mined. It occurred in 2012 and showed the same predictable fluctuations in Bitcoin prices. This pattern has not changed much since 2012.

2.6. As things stand, crypto-assets do not appear to pose a material risk to financial stability, as confirmed by the Financial Stability Board (FSB) in its 2018 report. That said, the FSB itself expressed concerns about the risks that increased market capitalisation could bring, particularly risks regarding investor confidence, risks arising from the direct and indirect exposure of financial institutions, and risks from the use of crypto-assets for payments and exchanges.

2.7. The same concerns have been expressed by the European Supervisory Authorities (EBA, ESMA and EIOPA) who have warned consumers that many crypto-assets are highly risky and speculative, and are not suited for most retail investors or as a means of payment or exchange. Their view is that consumers face the very real possibility of losing all their invested money if they buy high-risk crypto-assets. They also warn that consumers should be alert to the risks of misleading advertisements, including *via* social media and influencers. Consumers should be particularly wary of promised fast or high returns.

2.8. Direct connections between crypto-assets and systemically important financial institutions and core financial markets, while growing rapidly, are limited at the present time. Nevertheless, institutional involvement in crypto-asset markets, both as investors and service providers, has grown over the last year, albeit from a low base. If the current trajectory of growth in scale and interconnectedness of crypto-assets to these institutions were to continue, this could have implications for the global financial system.

2.9. The growth in scale and interconnectedness of crypto-assets reinforces the need and importance for crypto-assets to undergo consistent, comparable, and objective audits with the objective to report on the accuracy and completeness of financial information being reported to the public. Against this background, in September 2020, the European Commission presented a legislative proposal to harmonise and legitimise cryptocurrency regulation in crypto-assets ⁽⁸⁾. The proposal provides a comprehensive framework for the regulation and supervision of issuers and offerers of crypto-assets and crypto-asset service providers with a view to protecting consumers and the integrity and stability of the financial system. A provisional political agreement has been reached between the co-legislators on 30 June 2022. The final legislative text is expected to be published and enter into force in the coming months. The EESC's position on this is contained in its opinion on *Crypto-assets and distributed ledger technology* ⁽⁹⁾.

3. Risks posed by crypto-assets

3.1. The rapid growth of crypto-assets has generally been characterised by poor operational set-up, weak cyber risk management and weak governance frameworks. A combination of all three increases the risks for clients, with cybersecurity being an issue in the field of crypto-assets. Stolen crypto-assets typically find their way to illegal markets and are used to fund further criminal activity. Along the same lines, in the context of ransomware attacks, criminals often ask

⁽⁷⁾ See Sajeev, K.C., Afjal, M. 'Contagion effect of cryptocurrency on the securities market: a study of Bitcoin volatility using diagonal BEKK and DCC GARCH models'. *SN Bus Econ* 2, 57 (2022).

⁽⁸⁾ Proposal for a regulation of the European Parliament and of the Council on markets in crypto-assets, and amending Directive (EU) 2019/1937, COM(2020) 593 final, 24.9.2020.

⁽⁹⁾ OJ C 155, 30.4.2021, p. 31.

victims to pay the ransom in cryptocurrencies such as Bitcoin ⁽¹⁰⁾. The Regulation on Digital Operational Resilience for the financial sector (DORA), recently agreed by the co-legislators and currently in the process of being finalised in order to be published, provides uniform requirements concerning the security of network and information systems supporting the business processes of financial entities, including crypto-asset service providers, which is necessary to achieve a high common level of digital operational resilience.

3.2. The crypto-assets ecosystem is also exposed to some degree of concentration risk with trading dominated by a relatively small number of entities ⁽¹¹⁾. A study found that less than 10 000 people worldwide collectively owned 4,8 million Bitcoins ⁽¹²⁾ — nearly a third of the 18,5 million Bitcoins mined thus far. The latter carried a market value of nearly USD 600 billion. The situation has not changed much. The Bitcoin ecosystem is still dominated by large and concentrated players, be it large miners ⁽¹³⁾, Bitcoin holders or exchangers. This concentration makes Bitcoin susceptible to systemic risk, and also implies that the majority of the gains from further adoption are likely to fall disproportionately to a small set of participants ⁽¹⁴⁾.

3.3. In its latest report ⁽¹⁵⁾, the FSB states that market systems such as banking have been largely shielded from the volatility of crypto-assets. However, the FSB warns about the increasing importance of digital assets in the operations of financial institutions. Were a major stablecoin (used extensively for payments) to fail, this could further impact financial stability, at a time of growing uncertainty because of the war in Ukraine, with persistently high commodity prices. A failing stablecoin could also lead to liquidity shortages within the broader crypto-asset ecosystem, thus limiting trading volumes.

3.4. As noted in a previous opinion ⁽¹⁶⁾, the EESC fully supports efforts in the EU to increase supervision of crypto-assets. However, due to their perceived anonymity, crypto-assets may still fall prey to criminal intent despite improvements in their tracking. Crypto-assets have also recently featured most heavily as the preferred currency of cyber attackers, who use ransomware to hack into systems and then demand Bitcoin payments in return for not destroying or leaking the company's valuable data. Moreover, there has been an increase in reports of crypto-Ponzi schemes. The ECB also claims that cryptocurrencies are being used to evade sanctions imposed on Russian oligarchs because of the war in Ukraine ⁽¹⁷⁾. The risk of misusing crypto-assets to circumvent the sanctions against Russia is an important reminder that these markets must be required to comply with the required standards, including information about investors, anti-money laundering and disclosure requirements.

3.5. Misleading information and a lack of transparency is another cause of great concern. Some crypto-assets are aggressively advertised to the public, using marketing material and other information that may be unclear, incomplete, inaccurate or purposefully misleading, overstating the potential gains while overlooking the risks involved. Marketing is often done through influencers on social media who do not disclose whether they have a financial incentive to market certain crypto-assets, particularly the recent rise in non-fungible token art (NFT art) linked to various celebrities and sportspeople.

⁽¹⁰⁾ Crypto-assets: Key developments, regulatory concerns and responses.

⁽¹¹⁾ It is pertinent to highlight that the degree of concentration risk is in relative terms and limited to the crypto-assets ecosystem. It has no bearing on the concentration of wealth as described in, for example, the Forbes World's Billionaires List.

⁽¹²⁾ Makarov, I., Schoar, A., *Blockchain Analysis of the Bitcoin Market* (April 18, 2022).

⁽¹³⁾ Crypto mining is the process of creating individual blocks added to the blockchain by solving complex mathematical problems. The purpose of mining is to verify cryptocurrency transactions and show proof of work, adding this information to a block on the blockchain, which acts as a ledger for mining transactions.

⁽¹⁴⁾ Makarov, I., Schoar, A., *Blockchain Analysis of the Bitcoin Market* (April 18, 2022).

⁽¹⁵⁾ Assessment of risks to financial stability from crypto-assets.

⁽¹⁶⁾ EESC opinion on *Crypto-assets and distributed ledger technology* (OJ C 155, 30.4.2021, p. 31).

⁽¹⁷⁾ ECB President Christine Lagarde says that cryptos are being used to evade sanctions imposed on Russia.

3.6. The EU supervisory authorities believe that the extreme price fluctuations of crypto-assets pose a great risk to investors, although similar risks could also arise in global stock market fluctuations. In fact many crypto-assets are subject to sudden and extreme price swings rendering them highly speculative, with prices mainly dependent on investor demand. Extreme price swings raise fresh doubts over the future of cryptocurrencies as an asset class.

3.7. Worryingly in the case of crypto-assets, investors often find it almost impossible to assert claims for damages or other legal claims for say, misleading information, particularly because until now these assets do not fall under the existing protection of the current EU regulations for financial services. Investors are also not protected by the banks' deposit guarantee schemes since they only cover currency and not crypto-assets, stocks or bonds.

3.8. From an EU perspective, with the eventual entry into force of MiCA, the lack of harmonisation among Member States that currently prevails should be addressed. As for taxation, diverse approaches apply across Member States, and several charge capital gains tax on crypto-asset-derived profits at rates of 0-50 %. In 2020, with the adoption of the digital finance package, aimed at regulating Fintech, the EU recognised the potential of digital finance in terms of innovation and competition, while mitigating the risks arising from it.

3.9. The EESC calls for an effective regulatory and operational framework to improve the tracking of transactions and tax compliance of crypto-assets. Whilst recognising the problems caused by the lack of centralised control for crypto-assets, its pseudo-anonymity, valuation difficulties, hybrid characteristics and the rapid evolution of the underlying technology, the EESC is of the view that tax compliance based on a symmetrical approach is achievable. A recent study⁽¹⁸⁾ reported that the tax revenue potential from capital gains from Bitcoin within the EU totalled EUR 850 million in 2020, which underscores the significant potential tax gains that can be reaped from this sector. This assumes, of course, that income derived from crypto-assets should be subject to taxation, much like traditional financial instruments. Again, this requires proper enforcement of tax obligations based on proper reporting and access to data provided to tax administrations. An added benefit of improved tracking in real time of business sales would be an enhancement to the VAT collection process.

3.10. It is pertinent to point out that some crypto-assets may qualify as financial instruments within the scope of the Markets in Financial Instruments Directive II (MiFID II), or qualify as electronic money within the E-money Directive (EMD), or as funds under the Payment Services Directive 2 (PSD 2). The problem is that some Member States have put in place bespoke rules at national level for crypto-assets that fall outside current EU regulations, leading to regulatory fragmentation. This distorts competition in the Single Market, making it more difficult for crypto-asset service providers to scale up their activities across borders, giving rise to regulatory arbitrage.

3.11. Whereas the EESC agrees that a holistic approach to target both crypto-assets that could qualify as existing financial instruments as well as crypto-assets that currently fall outside the regulatory perimeter is the preferred approach, the EESC strongly recommends that authorities abide by the 'same activity, same risks, same rules' principle. This requires building on existing regulatory frameworks in the case of businesses transacting in crypto-assets where similar risks as those arising in traditional ones need to be covered. The EESC believes this is necessary to avoid asymmetries between analogous services and assets that could fall under different frameworks due to technicalities. Also, any innovation in crypto-assets needs to be followed up by an effective regulatory response to mitigate risks.

3.12. Finally, the environmental consequences of crypto-assets and related mining activities are hugely important, given the EU's climate commitments as part of the Green Deal. A recent study by the Central Bank of the Netherlands (2021) reports that the carbon footprint of the Bitcoin network is increasing, with a total electricity usage of the network comparable to the electricity usage of the Netherlands and a resulting environmental cost of EUR 4,2 billion⁽¹⁹⁾. That said, it

⁽¹⁸⁾ Thiemann, A. (2021), Cryptocurrencies: An empirical View from a Tax Perspective, JRC Working Papers on Taxation and Structural Reforms No 12/2021, European Commission, Joint Research Centre, Seville, JRC126109.

⁽¹⁹⁾ Trespalacios, J.P., and Dijk, J., 'The carbon footprint of bitcoin', De Nederlandsche Bank, DNB Analysis Series, 2021.

may be pertinent to compare the global banking industry's electricity usage. In this connection, the EESC notes that emerging DLTs, such as blockchain, are apparently being used to enable the delivery of sustainable infrastructure for a low carbon future. However, there is as yet no tangible evidence that this is the case. On a positive note, developers across the energy sector are seeking to leverage DLT technology to help decentralise energy distribution, control energy networks through smart contracts and provide demand response services linked to electricity usage and supply forecasting.

4. Opportunities arising from Crypto-assets

4.1. In the light of the aforementioned risks, it is unclear whether cryptocurrencies will ever become a mainstream means of exchange. However, it is not unreasonable to predict that the shortcomings that have characterised crypto-assets such as processing capacity and the very high energy consumption for their mining, may be addressed with future developments in technology. The same could be said for the associated risks of criminal activity and money laundering where the illicit share of the cryptocurrency transaction volume dropped from 0,62 % in 2020 to 0,15 % in 2021 ⁽²⁰⁾ and law enforcement agencies are getting better at tracking and confiscating illicit cryptocurrencies. In the light of this, the EESC notes that since the publication of the EC's Fintech action plan in March 2018, the Commission has considered both the opportunities and challenges raised by crypto-assets.

4.2. As much as it is necessary to provide a robust legislative framework for crypto-assets as outlined in the Commission's Proposal ⁽²¹⁾, the EESC is of the view that blockchain, as the main underlying technology for crypto-assets, could go a long way to addressing existing risks. The potential benefits of blockchain range from real-time transactions allowing risk reduction and better capital management, to improved regulatory effectiveness, for example by using blockchain for Know-your-Customer or anti-money-laundering checks. In addition, blockchain also brings about enhanced cyber-security given that hacking into a blockchain-based ecosystem would require exorbitant resources in terms of network and computing power. There is also huge potential for integration with other emerging technologies, such as artificial intelligence and the Internet of Things, to support the technology for crypto-assets.

4.3. As noted earlier, the lack of transparency and information is a serious problem surrounding crypto-assets, leading to both pseudo-anonymity and scant tax data. Further technological developments can help address existing limitations, thus improving transparency and the quality of data sent to the tax authorities for compliance purposes, addressing tax fraud and illicit transactions. Additionally, synergies between blockchain and artificial intelligence could also be a solution, as blockchain technology provides high-quality data for AI applications, transparent patterns for benchmarking studies, and ensures the integrity of an automated tax assessment.

4.4. Further technological developments in blockchain could also motivate banks to cooperate within the blockchain ecosystem, enabling them to share information and experience with the wider blockchain community via a trading platform. Such an infrastructure could offer a fully integrated end-to-end trading, settlement and custody service for digital assets based on blockchain. It could also provide a safe environment for issuing and trading digital assets, and enable the tokenisation of existing securities and non-bankable assets to make previously untradeable assets tradeable.

4.5. Of course to achieve this, there needs to be a robust regulatory framework. That said, the regulatory framework needs to be consistent across jurisdictions and not just within the EU. Standards, based on level playing field principles, should be set within and outside the EU to protect consumers. In this context, the EESC supports the Transfer of Funds Regulation (TFR), although in some aspects it goes further than for traditional finance transactions. However, at the same time, the EESC supports innovation within the EU and it is important that ordinary products based on blockchain technology that are not financial in nature are treated as their physical counterparts and not as financial instruments, following the 'same activity, same risk, same rules' principle.

⁽²⁰⁾ The Chainalysis 2022 Crypto Crime Report.

⁽²¹⁾ Proposal for a regulation of the European Parliament and of the Council on markets in crypto-assets, and amending Directive (EU) 2019/1937, COM(2020) 593 final.

4.6. The final consideration relates to the possible introduction of a digital euro. It should be made clear that a digital euro is not a crypto-asset but another form of the euro⁽²²⁾. A digital euro would enable EU citizens to make digital payments throughout the euro area — just like they can use cash for physical payments. There are, of course, arguments in favour and against the entry of a digital euro but it does appear to be a logical step to take as payments become increasingly digitalised. This is critical for two main reasons: a digital euro could counter somewhat the prevailing US stablecoin market dominance, and it is relevant that the ECB continues to monitor developments in crypto-assets and their potential implications for monetary policy and the risks crypto-assets may pose to the smooth functioning of market infrastructures and payments, as well as for the stability of the financial system.

Brussels, 22 September 2022.

The President
of the European Economic and Social Committee
Christa SCHWENG

⁽²²⁾ See ongoing own-initiative opinion on *A Digital euro*.