



EUROPEAN CENTRAL BANK

EUROSYSTEM

Paradise lost? How crypto failed to deliver on its promises and what to do about it

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Shifting crypto narratives

- Crypto has relied on **constantly creating new narratives**:
 - from digital cash or digital gold to allowing finance to operate without trusted intermediaries
- But cryptos have **failed to provide an efficient, scalable means of payment or a reliable store of value**
- And they are **increasingly relying on centralised solutions and market structures**
- The bursting of the crypto bubble does not necessarily spell the end of cryptos, as they offer a **way to gamble**

Technical limitations

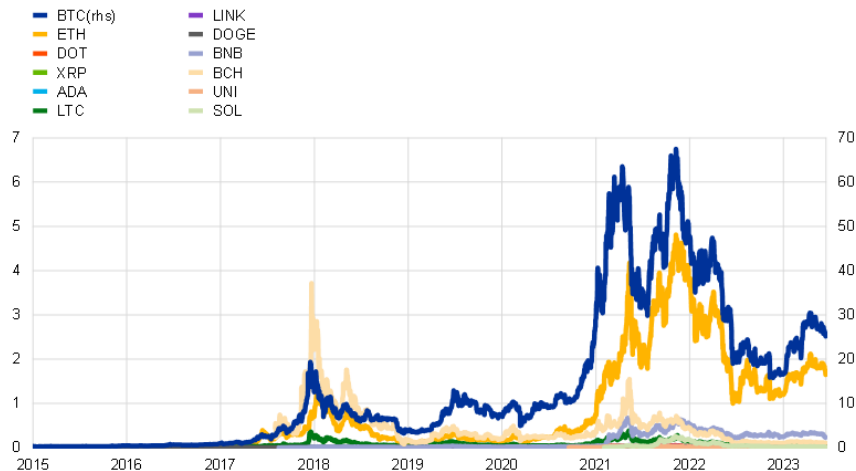
- Transacting cryptos on blockchains can be **inefficient, slow and expensive**
- **Blockchain trilemma**: security, scalability and decentralisation cannot be achieved at the same time
- Risks of public blockchains: **lack of an accountable central governance body**, potential for **code errors**
- **Challenges in handling crypto-assets**
 - Blockchains do not permit transaction reversal
 - Risk of theft or loss of personal keys

Cryptos exhibit instability and high volatility

Chart 1

Prices of bitcoin and selected altcoins

(USD thousands)



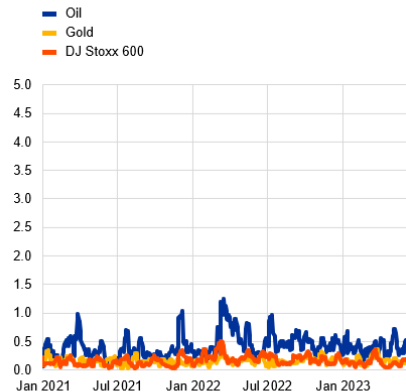
Source: CryptoCompare.

Chart 2

Price volatility of cryptos compared with other assets

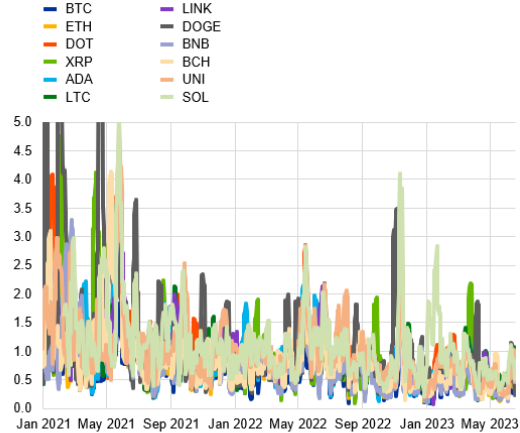
(annualised seven-day rolling standard deviation of daily percentage changes of prices)

a) Gold, oil and equity index



Sources: CryptoCompare, Bloomberg, Refinitiv and ECB calculations.

b) Bitcoin and selected altcoins



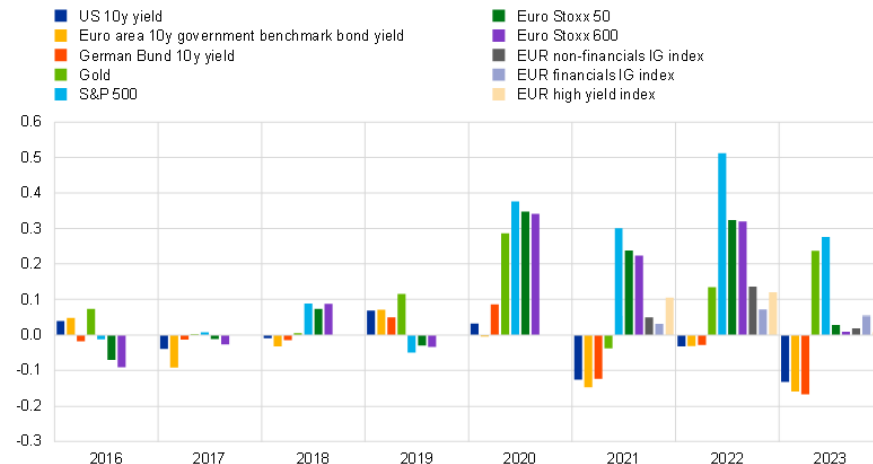
Cryptos do not perform any socially or economically useful function

- ❖ They are not used for payments
- ❖ They do not fund consumption or investment
- ❖ They often generate enormous damage to the environment
- ❖ They do not improve our capacity to hedge against inflation (chart 3)

Chart 3

Returns correlations of bitcoin vis-à-vis selected financial assets

(yearly rolling correlation)



Sources: Bloomberg, S&P Global iBoxx, CryptoCompare and ECB calculations.

Cryptos as a means of gambling and circumvention

- Instability of unbacked cryptos makes them appealing as a **means of gambling**
 - Facilitated by the establishment of a centralised market structure and integration into the financial system to support their broader use
- Cryptos are also being used as a **means to circumvent** taxes, regulations and sanctions
 - Bitcoin used to evade restrictions on international capital flows and foreign exchange transactions

Risks arising from the growing centralisation of the crypto ecosystem

- **Dependence on often unregulated third-party intermediaries** increases the risk of **failures** and **contagion**:
 - Concentration risks from the role of stablecoins and large crypto exchanges
 - Interconnectedness and opacity of crypto markets
- Attempts by the crypto industry to strengthen **ties with actors in the financial system** (including banks, big techs and public sector)
 - Risks for banks associated with raising deposits from the crypto sector
 - Contradiction: crypto touts itself as an alternative to the financial sector, yet seeks shelter within that very sector to address its inherent risks

The public response: backing, regulating or innovating?

→ Resist the temptation to offer public backing to cryptos

- ❖ Would **socialise crypto risk**
- ❖ If the stablecoin issuer were able to invest its reserve assets in the form of risk-free deposits at the central bank, this would effectively **outsource the provision of central bank money**, endangering monetary sovereignty and financial stability

→ Establish a comprehensive framework regulating crypto activities

- **Avoid legitimising unsound crypto models** in a bid to attract crypto activities
- **Regulate all activities** related to the crypto industry and **enhance transparency**
- Importance of **global regulatory cooperation**

→ Innovate by developing reliable digital settlement assets

- ✓ **Central bank digital currencies** would offer a digital, risk-free standard and uphold the singleness of money
- ✓ For both **retail** and **wholesale** transactions

Thank you