

Introduction by Prof. Paolo Savona
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The economics with cryptocurrency

In my *Lectio* on 1st October at the University of Cagliari, I put forward some thoughts on the need for a review of the dominant economic theory and econometric models to include cryptocurrencies (cryptos for short).¹

The accelerating reality of cryptocurrencies and the valuable comments of some colleagues lead me to add on this occasion some further points.

To allow today's audience to understand my position, I will briefly summarise the ideas developed in my *Lectio*.

I started saying that, at least in perspective, cryptos must be taken into account in the way we think economies work and in explanatory equations of the macrovariables that constitute the currently used econometric models.

I continued by putting forward the hypothesis that cryptos will encompass publicly created ones (CBDC-Central Bank Digital Currency) and privately mined ones (mainly, but not exclusively, stablecoin), along with financial cryptoassets (mainly tokens). I specified that Bitcoins are a special kind of cryptos, which have a systemic impact through the attractiveness of their huge increase in price and exchange with other cryptocurrency, as well as enter into contracts of credit, derivatives and their combinations. Bitcoins act as the La Fontaine's fable *The fly and the coach* (or, if you prefer to go back in time, the Fedro's fable *The fly and the mule*).

I also argued that in defining an economics with cryptocurrency, one should keep in mind the many knowledges of economic theory (that without cryptocurrency). On my *Lectio* I only focused on two of them: Gresham's law, claiming that 'bad money drives out good'; and the two-tier market framework for the same product, which have historically proven to be impractical. I clarified that these two concepts are not the only ones useful to consider the impact of cryptos on economics.

¹ Cfr. [Paolo Savona, *Lineamenti teorici e pratici di un'economia con le cryptocurrency*, Department of Economics and Business Sciences, University of Cagliari, 1st October 2021, \[www.consob.it\]\(http://www.consob.it\).](#)

Then, I extended the analysis on what remains a puzzle in the economic debate, that of the origin of market instabilities. The three main theories (I counted 19 of them) attribute this instability to trends in money and finance, in the real economy and in income distribution.

At the time I completed my analysis by stating that:

- the rise of an unregulated virtual private currency would increase the risks of systemic market instability based on all the main theories, as monetary creation would become endogenous affecting the parameters of public policy choices;
- if the virtual private currency were legitimised in the form of stablecoin, any evaluation could only be made once quantity and quality of the stabilizing reserves held against it were known. If these reserves were equal to zero, the essential exogeneity of monetary creation would be totally affected; if they were set equal to 100%, it would be tantamount to introducing a complication that would be better avoided in the governance of money and finance;
- the establishment of a virtual public currency (CBDC) would stabilise the economy and bring order to the innovative technologies used (blockchain or DLT), putting them at the service of the interest of the community;
- the mining of any kind of cryptos creates purchasing power in the hand of miners, acting as an instrument to redistribute income and wealth, weakening one of the redistributions function of democratic institutions;
- the emergence of cryptoassets (token, etc.) would make savings management more rational because it would introduce self-certifiable decentralised accounting and enable for lower management costs, which existing legislation and practice do not yet allow for;
- in a public authority monetary set-up such as the one indicated, banks would leave the money creation circuit and would have to focus on managing savings within objective, transparent and non-manipulable systems, such as those based on artificial intelligence algorithms and decentralised accounting techniques.

On today occasion I add five new considerations.

First. The suggestions I received and the information that emerged after my lecture lead me to clarifying that my proposals for economics with cryptocurrency are at a level of generality that conflicts with the complexity of the market for virtual assets, that I have only partially mentioned in my Lectio. CBDCs are not yet well defined, as recently highlighted in point 41 of the G20 final communiqué; even the stablecoins

are not exactly defined, as highlighted both by point 42 of the G20 conclusions and the simultaneous similar declaration released by Mr. Gensler, the SEC Chairman; the other thousands of cryptocurrencies (or unstable coins) display a mixture of characteristics not yet explored; cryptos embedded in all classes of contracts (domestic and cross-border payments, currency conversions and financial assets against themselves and against cryptos of all kinds, credits and derivatives based on cryptos implemented on variants of blockchain/DLT techniques and other complex forms such as image rights/NFTs) are like the phoenix: it exists, but we do not know how it is. Building the economics with cryptocurrency requires delving deeper into the examination of this complex financial world, which is still evolving. However, I think it is first necessary to accept the need for a new economic theory integrated with cryptos, which I have not yet heard of or at least not in the terms I have argued so far.

Second. I have strengthened my belief, already voiced in a doubtful way in my *Lectio*, that it is not virtual products that need to be regulated first, but rather their decentralised and 'block-chain' location, which is not impenetrable for all the cryptos. At present the market acts as it is possible to make a bundle of every grass. It is not so much the encrypted component that needs to be regulated, but the blockchaining that increases the asymmetries among market operators, preventing access to information for those who do not have the key to access to cryptocurrencies exchanges, being private operators which do not own the involved cryptos or supervisory authorities. The implication is the same as I have already repeatedly stated: there can be no technologically neutral regulation if we wish to retrieve the full transparency of the activity taking place on monetary and financial markets.

Third. Some regulators have argued that the existing legislation already allows, if properly applied, the distinction between traditional money and finance and cryptos, while they insist that technological platforms, i.e. the logical-mathematical basis on which cryptocurrency activity builds on, should be regulated. It is not just a problem of nuance, but of substance. In my opinion, if central banks decide to start their own crypto, i.e. to turn their monetary base into this form (cryptoeuro, cryptodollar, cryptoyuan, etc.) maintaining a monopoly on its creation, the issue should be faced jointly with the re-regulation of banking activity once this latter exits the money creation circuit.

Fourth. Another issue is the identification of the agents that should be subject to regulation and control. Some platforms claim that they are not intermediaries according to current regulations, as they do not gather funds for investment

purposes, but rather carry out operations with advanced technologies, faster and cheaper than the traditional ones. They say that allow two counterparties to meet, without interfering on their wills that are formed independently, and to realise their choices in an efficient and effective way (in terms of costs and time savings). These forms separate the act of exchange from actors as in the classic intermediation. On this basis, a debate is developing, especially in the United States, between private operators and judiciary or supervisory authorities, with the last two with different opinion. My position is that the existing legislation leaves room, especially in Italy, for these different interpretations, and that it would be better to regulate these distinctions to end which have been defined as the *Wild West* of finance to avoid its extension to Europe.

Five and final. Today I am suggesting to leave the global approach to the cryptos' market and to consider explicitly the different components and interpretations of the reality to be faced. Assessing the consequences of a lack of these kind of analysis, I proposed during the Conference organised by Consob within the official work in preparation for the G20 under the Italian Presidency an 'experimental regulation' to achieve a more substantiated regulation, benefiting from experience and mistakes. Regulation is a continuous process, being well known to economic and legal experts that the market finds a way around the rules once they are enacted. To conclude, doing that we cannot forgot that regulations can only be badly embedded into a civil law framework (as in Italy) bringing them towards a management of cryptos similar to that of the paradox of Achilles and the tortoise.²

² Cfr. [Paolo Savona, Opening Remarks to Regulation innovation in the financial system to power a resilient recovery: Squaring the circle between regulation, finance, innovation, and sustainability, Palazzo Spada, Rome, 25th October 2021. www.consob.it.](#)