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THE EMERGENCE OF DEFLATIONARY CRYPTOCURRENCIES: A NEW ERA OF DIGITAL ASSETS

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Introduction. In recent years, cryptocurrencies have become increasingly popular, and earning money from them has attracted the attention of tens of thousands of people around the world, making them a subject of investment and a means of value storage. One of the most important aspects of cryptocurrencies is their impact on the economy and the financial system as a whole. In particular, some cryptocurrencies, such as Bitcoin, Ethereum, and Litecoin, have a deflationary effect, which makes them attractive to investors seeking long-term value storage opportunities. The concept of deflation is becoming increasingly relevant in the world as we observe a decrease in the money supply in many countries, as well as an increase in the number of central banks that lower interest rates and print money. Thus, the growing interest in deflationary cryptocurrencies may be a response to these economic trends.

The aim of the work is to study cryptocurrencies with deflationary effects and their impact on the economy.

Materials and methods. The scientific and methodological foundations of studying cryptocurrencies and their role in the national economy are poorly researched in the Ukrainian scientific community. Most of the works on cryptocurrencies are studied by foreign scientists and international organizations,

such as the Basel Committee on Banking Supervision, the International Monetary Fund, and the International Association of Financial Analysts. Although some domestic economists, such as Matskevych V. and Vitlinsky O., have dedicated their works to this issue.

Analysis of scientific works indicates that further research on cryptocurrency is necessary in Ukraine, as it is important for several reasons. Firstly, cryptocurrencies are already actively used in the economy and their importance will only continue to grow in the future. Research will allow for a better understanding of the principles of cryptocurrency functioning and their impact on the economy and society. Secondly, the Ukrainian economy has great potential for the development of the FinTech industry, including the development of cryptocurrency technologies. Research will help identify obstacles to the development of the cryptocurrency market in Ukraine and develop effective strategies for its development. Thirdly, research on cryptocurrencies in Ukraine can contribute to the development of various initiatives related to cryptocurrencies, including the development of new technologies and products based on blockchain, the creation of cryptocurrency exchanges, and other infrastructure projects. All of this can become a new source of economic growth in Ukraine and increase its competitiveness in the international market.

Results and discussion. In the modern world, cryptocurrencies have become popular means of storing and exchanging value. Among different types of cryptocurrencies, those with deflationary effects are worth noting. Cryptocurrencies with a deflationary effect are digital currencies that have a limited amount in circulation. This means that over time, when demand for these currencies increases, their value also increases, as the amount in circulation remains unchanged. Cryptocurrencies with deflationary effects are an interesting alternative to traditional currencies as they can provide stable value and increase investment potential. However, it is important to understand that the deflationary effect can have both positive and negative consequences for the economy. Therefore, it is important to study and analyze the characteristics of cryptocurrencies with deflationary effects to better understand their impact on the financial system and the economy as a whole.

Cryptocurrencies with deflationary effects have certain characteristics.

Firstly, cryptocurrencies with deflationary effects have a limited amount in circulation. This means that once all the coins have been mined, no new ones will be produced. This creates a deflationary effect, as demand for the coins increases over time while the number of new coins remains fixed. Additionally, as the number of new coins being issued gradually decreases, mining becomes increasingly difficult and requires more powerful equipment.

Secondly, cryptocurrencies with a deflationary effect are resistant to inflation. Since the amount of coins that can be created is limited, there is no possibility of increasing their quantity during a decrease in their value. This means that owners of deflationary cryptocurrencies can be confident that their currency will retain its value over time, barring any market influences due to factors such as changing demand and government regulation.

Thirdly, competition in the market of deflationary cryptocurrencies can lead to a decrease in the value of some coins in favor of others. This can happen because owners of coins switch to other currencies with similar characteristics if they believe that other coins have better prospects for increasing in value.

Fourthly, some deflationary cryptocurrencies, such as Bitcoin, require a large amount of energy to mine new coins [1]. This can have a serious impact on the environment and cause ecological problems. Estimates suggest that Bitcoin consumes 127 terawatt-hours (TWh) of electricity annually, which exceeds Norway's total annual electricity consumption. As of August 2022, published estimates of the global energy consumption for cryptocurrencies range from 120 to 240 billion kilowatt hours per year. This range exceeds the total annual electricity consumption in many individual countries, such as Argentina or Australia [2].

Fifthly, because deflationary cryptocurrencies are typically stored in digital form, they can be susceptible to cyber attacks and hacker attacks. This can lead to loss of funds and private keys to wallets.

The global cryptocurrency market is booming, with thousands of cryptocurrencies fighting for a place among the top deflationary cryptocurrencies

under \$1 USD. The world is changing quickly and digital finance is having a greater impact on our lives and the global cryptocurrency market. The number of cryptocurrencies on the market is also growing fast. With more than 11,000 cryptocurrency projects available today, the cryptocurrency market capitalization exceeds \$2 trillion, and analysts expect this figure to grow. Deflationary cryptocurrencies play a significant role in this. The main goal of deflationary cryptocurrencies is to keep the digital finance market from being oversaturated with digital assets while increasing the value of the currency over time. With this in mind, it is worth considering the best deflationary cryptocurrencies.

Bitcoin (BTC) is the first and largest cryptocurrency on the market, having been created in 2009. This currency has a limited supply of 21 million coins, of which more than 80% are in circulation. Every 10 minutes, additional Bitcoins are issued as a reward for the mining process, but over time, this process becomes more difficult and the reward decreases. The price of Bitcoin is known for its high volatility, but despite this, it has become the best performing asset of any class over the past decade - rising by a staggering 9,000,000% between 2010 and 2020. The current price of Bitcoin is \$28428.54 with a 24-hour trading volume of \$45758.76 million. In the current CoinMarketCap ranking, bitcoin is #1 with a real market capitalization of \$546.93 billion. (Fig. 1).

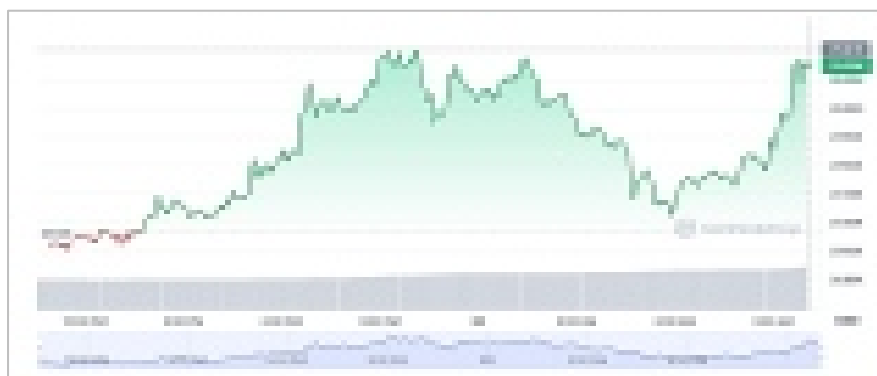


Fig. 1. Chart of Bitcoin to the USD. Source: [3]

Another cryptocurrency with a deflationary effect is Ethereum (ETH). Ethereum has a limited issuance of 18 million ETH per year. Additionally, according to the Ethereum protocol, the reward for a block decreases by 20% every 4 years. Another factor that contributes to Ethereum deflation is the growing popularity of

DeFi (decentralized finance) and NFTs (non-fungible tokens). These applications are based on the Ethereum blockchain and require fees to be paid in ETH. The price of Ethereum is \$1784.53 with a 24-hour trading volume of \$11,777.29 million. Ethereum has fallen by 0.38% in the last 24 hours. It ranks 2nd on CoinMarketCap with a real market capitalization of \$218.38 billion USD. There are 122,373,866 ETH coins in circulation (Fig. 2).



Fig. 2. Chart of Ethereum to the USD. Source: [3]

Solana (SOL) is a cryptocurrency with a fixed maximum emission limit of 489 million SOL tokens. This means that SOL can be considered a deflationary currency within this limit, as the number of coins in circulation cannot increase indefinitely. Solana's main innovation is its speed, thanks to a set of new technologies, including a consensus mechanism called "proof of history." Solana can process thousands of transactions per second, making it scalable and energy-efficient. In November 2022, the price of Solana dropped 40% in one day after FTX liquidity crisis triggered a sell-off by Alameda Research, as Solana was the second-largest holding of Alameda. At the time, FTX owned \$982 million worth of Solana tokens.



Fig. 3. Chart of Solana to the USD. Source: [3]

By the end of 2022, Solana had lost over \$50 billion in market capitalization since its peak in September 2021 when it reached an all-time high (ATH) of \$216. The price of Solana today is \$23.57 with a 24-hour trading volume of \$959.52 million (Fig. 3).

Shiba Inu (SHIB) is a meme coin created in 2020 as an alternative to Dogecoin. Currently, Shiba Inu is a multi-billion-dollar cryptocurrency and ranks among the top 15 projects by market capitalization. According to Etherscan, the total supply of SHIB coins that have been released is 1 quadrillion. However, the project's development team has taken steps to reduce the number of coins in circulation and make them more valuable.

For example, in June 2021, the team transferred 50% of the total supply of SHIB coins to the blockchain address of Vitalik Buterin, the founder of Ethereum, in order to reduce the total number of coins and increase their price. Additionally, they have released a new cryptocurrency called Leash (LEASH), with a total supply of 107,647 coins, which also has a deflationary effect. These coins are associated with the Shiba Inu project and can be used to obtain discounts on transaction fees on the ShibaSwap network.

The price of Shiba Inu is \$0.000011 with a 24-hour trading volume of \$302.02 million (Fig. 4). Its current CoinMarketCap ranking is 13th with a real market capitalization of \$6,377.31 million. It has a circulating supply of 589,543 billion SHIB coins.



Fig. 4. Chart of the Shiba Inu to the USD. Source: [3]

Conclusion. Despite the risks involved in investing in cryptocurrency, it can become an important tool for capital preservation and portfolio diversification. Investors should consider the possibility of including them in their portfolio, but do so with caution and after a thorough analysis of risks and potential benefits. Deflationary cryptocurrencies are a new and growing market, and investors should be constantly aware of the latest news and trends in this sector in order to adjust their investment strategies accordingly to changes in the market situation.

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