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CRYPTOCURRENCY AND BLOCKCHAIN: AN ECONOMIC PERSPECTIVE

Abstract: cryptocurrency and blockchain technology have emerged as transformative forces in the global economy. Their implications span numerous sectors, challenging traditional systems and offering innovative solutions to long-standing inefficiencies. This article explores their economic impact by addressing key themes, from decentralization to regulatory challenges.

Keywords: cryptocurrency, blockchain, economic perspective.

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КРИПТОВАЛЮТА И БЛОКЧЕЙН: ЭКОНОМИЧЕСКАЯ ПЕРСПЕКТИВА

Аннотация: криптовалюты и блокчейн-технологии стали трансформирующими факторами в мировой экономике. Их влияние распространяется на многие отрасли, бросая вызов традиционным системам и

предлагая инновационные решения для устранения застарелой неэффективности. В этой статье исследуется их влияние на экономику, затрагиваются ключевые темы, от децентрализации до проблем регулирования.

Ключевые слова: криптовалюта, блокчейн, экономическая перспектива.

Cryptocurrency is based upon the very concept of centralization, which eliminates middlemen like banks in the process of financial transactions. By facilitating peer-to-peer transfer, cryptocurrencies reduce transactional costs and enhance operational efficiencies. Additionally, financial inclusion has been promoted. Cryptocurrencies provide unbanked and underbanked populations with access to financial instruments that allow them to participate in the global economy without relying on traditional banking infrastructure. This shift has profound implications for reducing poverty and stimulating economic growth in developing regions [1].

The potential of Blockchain to disrupt traditional banking systems is realized by the fact that it provides secure, transparent transactions without centralized oversight. This disruption is perhaps most pronounced in the growth of DeFi platforms offering alternatives to conventional financial services around lending, borrowing, and investing. By bypassing intermediaries, DeFi has the potential to democratize financial access while simultaneously challenging the dominance of established institutions [2].

The high volatility in cryptocurrency has made it a hotbed of interest among both retail and institutional investors. This very characteristic, while offering great opportunities for lucrative profits, also carries with it risks that could destabilize markets and deter more cautious investors. Over the last couple of years, institutional adoption has risen with big organizations taking up cryptocurrencies as part of their portfolio. This is changing perceptions about cryptocurrencies, moving them from speculative assets to recognized components of diversified investment strategies [3].

Beyond cryptocurrencies, blockchain technology itself is proving to be a game-changer. In supply chain management, blockchain enhances transparency and traceability, reducing fraud and inefficiencies in international trade. Another

revolutionary application lies in smart contracts, which automate and enforce agreements without intermediaries. This technology is streamlining industries such as real estate, law, and insurance, creating cost-saving opportunities and boosting productivity [3].

Regulation is directly proportional to the economic effect that cryptocurrencies are able to generate. In other words, there is the challenge of balancing innovation with protection from risks such as fraud, tax evasion, and money laundering. Appropriate regulation will create confidence and stability within cryptocurrency markets. However, global inconsistencies in regulation have created fragmented markets. While some countries embrace cryptocurrencies with progressive policies, others impose strict bans, influencing investment flows and technological advancement [4].

Cryptocurrencies are a modern financial phenomenon that disrupts traditional monetary policies with their innovative approach to money. For example, Bitcoin, a prominent cryptocurrency, is often likened to gold as it offers an intriguing hedge against inflation due to its limited supply. This unique characteristic poses a significant challenge to central banks, forcing them to reconsider their strategies for managing money supply and controlling inflation rates in the digital era. As a response to the rising popularity of cryptocurrencies, central banks around the world have been exploring the concept of Central Bank Digital Currencies (CBDCs). These digital currencies backed by governments aim to provide a more secure and stable alternative to decentralized cryptocurrencies by offering the assurance of state support [5]. In essence, CBDCs could revolutionize monetary policies by combining the efficiency of digital currencies with the credibility of government backing, thereby creating a well-regulated and reliable financial ecosystem. The emergence of CBDCs marks a pivotal moment in the evolution of currency, bridging the gap between traditional fiat money and cryptocurrencies while striving to address the challenges posed by the rapidly changing financial landscape.

The blockchain space has facilitated unprecedented economic activities-things like setting up companies and creating new jobs in hitherto unconventional fields

such as software development and cybersecurity, and other areas where the economy is really taking off from. Furthermore, the innovation brought about by blockchain technology could raise productivity in all industries, hence further contributing to the growth of the global economy [6].

The energy-intensive nature of cryptocurrency mining, especially for the proof-of-work coin Bitcoin, has raised concerns across the board. The environmental costs related to high energy consumption are one of the reasons policymakers are considering strict regulations. In an attempt to solve these, the industry is drifting toward energy-efficient consensus mechanisms such as proof-of-stake. The inclusion of economic incentives for mining best practices can further align the sector with the pursuit of sustainability goals around the world.

Cryptocurrencies are revolutionizing cross-border transactions with their fast and cheaper alternatives compared to traditional systems of settlement. This makes international trade cheaper and pays for remittances, especially for migrant workers sending money home. But as more cryptocurrencies become increasingly used in international trade, it could affect foreign exchange markets and even change some of the power dynamics in global commerce [7].

Blockchain technology is known for its innovative potential, but it also comes with its fair share of vulnerabilities that can be exploited by cybercriminals. One notable area of concern is the security of cryptocurrency exchanges and digital wallets, which are often prime targets for attackers due to the potential for financial gains. Additionally, the complexity of smart contracts, which are self-executing contracts with the terms directly written into code, can leave loopholes that hackers can exploit to steal funds or disrupt operations, resulting in significant financial losses for businesses and investors alike. The economic risks posed by these vulnerabilities cannot be understated, as they have the potential to undermine confidence in the entire cryptocurrency ecosystem. Moreover, the lack of consistent regulatory oversight in certain aspects of the cryptocurrency market creates opportunities for malicious actors to manipulate prices and engage in fraudulent activities. Such market manipulation not only harms individual investors but also erodes the overall

trust and stability of the markets, making it difficult for them to mature and attract mainstream adoption. To mitigate these risks and foster long-term growth, it is crucial to establish robust security measures and regulatory frameworks that address the unique challenges posed by blockchain technology [8]. By enhancing transparency, implementing best practices, and promoting adherence to industry standards, stakeholders can work together to create a safer and more resilient environment for conducting cryptocurrency transactions. Ultimately, the key to unlocking the full potential of blockchain technology lies in building a foundation of trust and security that enables innovation to flourish while safeguarding against potential threats and vulnerabilities.

The nooks and cranny of the global economic landscape are being reshaped by cryptocurrency and blockchain technology. While the potential to drive innovation and efficiency cannot be denied, challenges arise that need careful management. The evolving space requires the right approach from governments, businesses, and individuals in a manner that captures the benefits and mitigates associated risks. As these technologies continue to mature, their economic implications will likely deepen, influencing how the world approaches finance, trade, and growth.

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