

Ashurbayli, Nigar; Yusifov, Ali

Article

INVESTING IN CRYPTOCURRENCY AS AN ALTERNATIVE WAY OF FINANCIAL INVESTMENTS

Agora International Journal of Economical Sciences (AIJES)

Provided in Cooperation with:

Faculty of Economic Sciences, Agora University of Oradea

Suggested Citation: Ashurbayli, Nigar; Yusifov, Ali (2023) : INVESTING IN CRYPTOCURRENCY AS AN ALTERNATIVE WAY OF FINANCIAL INVESTMENTS, Agora International Journal of Economical Sciences (AIJES), ISSN 2067-7669, Agora University Press, Oradea, Romania, Vol. 17, Iss. 2, pp. 10-16, <https://doi.org/10.15837/aijes.v17i2.6436>

This Version is available at:

<https://hdl.handle.net/10419/302977>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



<https://creativecommons.org/licenses/by-nc/4.0/>

INVESTING IN CRYPTOCURRENCY AS AN ALTERNATIVE WAY OF FINANCIAL INVESTMENTS

N. ASHURBAYLI – HUSEYNOVA, A. YUSIFOV

Nigar Ashurbayli – Huseynova¹, Ali Yusifov²

Azerbaijan State University of Economics (UNEC), Azerbaijan

¹ <https://orcid.org/0000-0002-2641-7520>, E-mail: nigar.ashurbeyli-huseynova@unec.edu.az

² <https://orcid.org/0009-0002-9251-4801>, E-mail: ali.yusifov.1945@gmail.com

Abstract: *In the realm of finance, cryptocurrency has emerged as a captivating alternative to traditional investment avenues, such as stocks, bonds, and real estate. Its decentralized nature, unfettered by government or financial institution control, presents a unique proposition in the world of wealth management. The allure of cryptocurrency lies in its potential for substantial returns. Its value has experienced remarkable growth in recent years, offering investors the prospect of significant financial gains. Additionally, cryptocurrency serves as a valuable tool for portfolio diversification, as its performance is often uncorrelated with traditional asset classes. Moreover, cryptocurrency boasts portability and accessibility, making it a convenient and inclusive investment option. Its digital nature allows for seamless storage and transferability, while its global reach enables anyone with an internet connection to participate in the cryptocurrency ecosystem. However, alongside these potential benefits, cryptocurrency also harbors inherent risks. Its volatility poses a challenge, as its value can fluctuate dramatically in a short period. Regulatory uncertainty looms, as governments worldwide grapple with the implications of cryptocurrency and may impose restrictive measures. Furthermore, security concerns persist, as cryptocurrency exchanges and wallets have fallen prey to cyberattacks, jeopardizing investors' assets. In light of these considerations, investing in cryptocurrency demands a thoughtful approach. Investors must carefully assess their risk tolerance and align their investment goals with the inherent risks associated with cryptocurrency. Thorough research and a well-diversified portfolio are crucial for navigating the complexities of this emerging asset class. The purpose of the article is to analyze the profitability and safety of investments in cryptocurrency and study the different methods associated with it*

Keywords: *dividend policy, crisis, cryptocurrency, FEC.*

INTRODUCTION

This article summarizes information and conducts a comparative analysis of the advantages and disadvantages of investing in cryptocurrency instruments on the corresponding platforms in the conditions of existence of classical financial markets and increasing global risks in all areas of activity and investment activities and investments. The work applies the tools and methods of comparative analysis, as well as the methods of deduction, induction, classification and systematization. The work is useful for determining the peculiarities of realization of investments in cryptocurrency as an alternative channel of investment of companies and individuals in conditions of increasing variability of conditions of functioning and within the framework of all existing instruments of financial investments. In the conditions of rapidly changing macroeconomic and microeconomic conjuncture, accompanied by often large-scale structural and technological changes, crypto-instruments are becoming increasingly relevant and the cryptocurrency market is increasingly developing. The prerequisite for the rapid development of

the crypto-instruments market is the growing interest of Individuals and business both from the position of a settlement and payment instrument, and from the position of potential investment investments. Within the framework of this article it is the investment potential of cryptocurrency and other crypto-instruments is of scientific interest, because these quasi-financial instruments can be used both for long-term and medium-term investment strategies, and for short-term investment strategies, as well as for short-term trading speculation.

RESEARCH METHODOLOGY

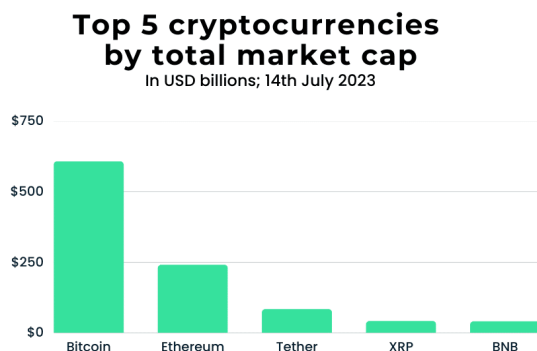
Blockchain technology has become widespread in the world because of its unique features. These features are being actively utilized by various organizations and even some central banks (Heideman, M., Johnson, D., Burrus, C., 1984) Initially, it is necessary to give a definition of Cryptocurrency. Cryptocurrency, according to many modern analysts and on the actual realization of its economic functions is a special form of money, for the issuance of the which requires minimal expenditure of physical material, but requires computational power. Cryptocurrencies are issued in the form of digital tokens that can be used for commodity exchange transactions with individuals or legal entities (Härdle, W.K., Trimborn, S., 2015. Masters, B., 2023) The investment potential of cryptocurrencies is formed at the moment of its exchange for official currencies or other values. Currently, in the world practice it is customary to compare the value of other currency or commodity, immovable value, converting into reserve world currencies, which are accepted for payment and convertible in most countries of the world: it is the dollar, euro, Chinese yuan and others (Masters, B., 2023).

In this case, the essence of investment in cryptocurrency is similar to the purchase of reserve or foreign currency, different from the currency of the investor's country. Because in the modern world macroeconomic processes are accelerated, and the topics of development and growth of various countries, expressed in terms of gross domestic product, differ from each other, the value of each country's currency of each country's currency in relation to the major reserve currencies and in relation to the currencies of other countries (Nasekin, S., Chen, C., 2020).

Thus, by exchanging a national currency for a reserve currency, a person can build up investment financial capital, which, as the changes in cross rates, inflationary dynamics, economic growth dynamics and many other factors may change, because under the influence of these factors the ratio of currencies operated by the investor will also change. For example, when buying U.S. dollars for Turkish Lira in 2021 and selling back US dollars in 2023, the amount of cash denominated in Turkish Lira will be higher. Based on this we obtain the investment function of currencies at its convertibility (Petukhina, A.A., Reule, R.C.G., Härdle, W.K., 2021). Cryptocurrencies have similar properties, which have a certain volatility of exchange rates and are subject to fluctuations over time. At the same time, given that the amount of computing power in the world is limited, uncontrolled emission of this currency becomes extremely difficult, and therefore the full-fledged acquisition of investment properties of this asset acquires already and may be comparable, according to the estimation of some analysts, with monetary gold for these purposes. Anyway, at the moment there are certain difficulties in investing in cryptocurrency. These difficulties consist of significant risks, as pointed out by public authorities, which in addition fear not only the volatility of cryptocurrencies, but also the uncontrolled issuance, use and cross-border movement of cryptocurrencies movement. Currently, many cryptocurrencies are available for purchase (Fig. 1), including bitcoin, Ethereum and others.

INVESTING IN CRYPTOCURRENCY AS AN ALTERNATIVE WAY OF FINANCIAL INVESTMENTS

Figure 1. Top 5 cryptocurrencies by market capitalization



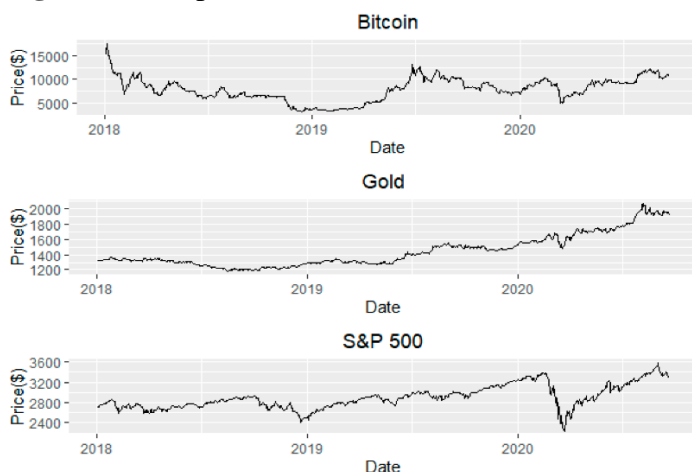
Source: Coin Market Cap

Source: <https://coinmarketcap.com>

Unlike standard financial instruments, to make a transaction using cryptocurrency, you need to register with special software and open a digital wallet, which today can be obtained at a specially organized crypto exchange. At the same time, each investor has a unique identifier, which is used to record transfer of ownership within the framework of blockchain technology and for the operation of the exchange's personal cabinet. Analysts and experts highlight a number of advantages and disadvantages of using cryptocurrency as an investment asset. Firstly, it is a high yield potential instrument. Perhaps, the main argument of many traders and analysts in favour of using cryptocurrencies as a financial investment asset compared to investments in the classical currency market or, for example, compared to the stock market, is the possibility of a high yield high returns.

For example, over the five-year period to 2020, the S&P 500 index of shares of American companies with the largest capitalization grew at a rate of about 14% per year, while the bitcoin price over the same period, expressed in dollars, grew at a rate of about 14% per year. The same period, expressed in US dollars, grew at over 130% per year (some of the movement is demonstrated in Figure 2).

Figure 2. Comparison of the movements of the S&P 500 index, gold prices and Bitcoin (BTC)



Source: compiled by the author according to Bitmex.com and Bloomberg

The second argument in favour of cryptocurrencies for investment is the opportunity for potential diversification. As mentioned above, many traders and analysts compare cryptocurrency to gold (Trimborn, S., Härdle, W.K., 2018.) The comparison is usually made in the context of being able to hedge a portfolio against macroeconomic downturns, as in this case instruments behave in a multidirectional manner, so, for example, in the second half of 2021. There was a fall in the S&P 500 index and a simultaneous rise in the value of bitcoin. A portfolio with 10 per cent invested in bitcoin and 90 per cent in the S&P 500 would have delivered a compound annualized return of 26.8%. The third argument is the limited supply of this instrument. Returning to bitcoin, which we use to analyse as a representative sample of the underlying cryptocurrency market, according to current estimates, there is the possibility of issuing a maximum of 21 million coins, of which more than 18 have already been created (Table 1). This feature makes it possible to predict the number of bitcoins in circulation over time, given the possibility of them. The number of bitcoins in circulation in dynamics, taking into account the possibility of them.

This feature makes it possible to forecast the number of bitcoins in circulation in dynamics, taking into account the possibility of their issuance, on the basis of which, in conjunction with several other factors, it is possible to predict the future dynamics of this instrument. Logically, that as the mining limit is approached, the value of one bitcoin traded on the market will rise, contrary to the general rule of money, which reflects a fall in the value of a monetary unit when the mining limit is approached. An increase in their quantity without a commensurate increase of its collateral. In this sense, an analogy can also be made with gold, the extraction of which is also limited and becomes more difficult over time.

Table 1. Dynamics of the number of bitcoins in circulation as of 31 December of each of the years from 2016 to 2021

2016	15,016
2017	16,079
2018	16,808
2019	17,483
2020	18,163
2021	18,595

Source: compiled by the author based on Bloomberg data

In addition to the advantages of diversification and hedging inflation risks, there are several disadvantages and risks associated with cryptocurrencies. High volatility is one major concern, as the prices of cryptocurrencies can fluctuate significantly within short periods of time. (Huang, X., Zhang, W., Tang, X., Zhang, M., Surbiryala, J., Iosifidis, V., Liu, Z., Zhang, J.,2021)

For example, the annual percentage volatility of bitcoin and Ethereum can be as high as 85%, making them highly unpredictable and risky for short-term trading. Furthermore, the correlation of cryptocurrencies with other financial assets, such as stocks included in the S&P 500 index, limits their effectiveness as a means of absolute hedging of stock market risks. While correlation may not be noticeable in the long term, it can appear at certain timeframes, reducing the potential benefits of diversification. Another drawback of cryptocurrencies is their constantly growing number. While there are technological limitations on the issuance of new bitcoins or other cryptocurrencies, there are no restrictions on the launch of new cryptocurrencies. This unlimited supply potential can lead to shifts in popularity, potentially causing a decline in the value and popularity of existing cryptocurrencies like bitcoin. Limited acceptance and recognition is another

INVESTING IN CRYPTOCURRENCY AS AN ALTERNATIVE WAY OF FINANCIAL INVESTMENTS

drawback of cryptocurrencies. While bitcoin has gained widespread popularity and recognition, most cryptocurrencies are not recognized as a means of payment or financial investment instruments by central banks. Only a few exceptions exist, and it is challenging to use cryptocurrencies for everyday transactions or in the traditional commodity circulation. (Cortez, K., Rodríguez-García, M.d.P., Mongrut, S., 2021.) The lack of acceptance and recognition is often due to the volatility, uncontrollability, and unregulated nature of cryptocurrencies. The lack of regulation also makes cryptocurrencies susceptible to criminal activities and fraudulent manipulation. The unregulated and unsecured nature of cryptocurrencies attracts individuals involved in illegal activities. Studies have indicated that a significant portion of bitcoin users and transactions are linked to illegal activities. Overall, while cryptocurrencies offer some advantages, such as diversification and potential protection against inflation, they also come with high volatility, limited acceptance, and increased risks of illegal activities. These drawbacks should be carefully considered before investing in cryptocurrencies.

The decision by El Salvador to recognize Bitcoin as legal tender has brought significant attention to the use of cryptocurrencies in the financial world. While other countries like the United States, Canada, and EU countries have not fully embraced cryptocurrencies as legal tender, they are open to limited use cases and exploring their potential. Cryptocurrencies are gaining relevance in developing countries where access to traditional financial services may be limited. They provide a way for individuals and businesses to overcome barriers and engage in financial transactions. The decentralized nature of cryptocurrencies also offers greater financial inclusivity and empowers individuals with control over their own finances. The increasing interest in using cryptocurrencies by legal entities and individuals can be attributed to several factors. Firstly, cryptocurrencies provide opportunities for income generation. With the volatile nature of these digital assets, there is potential to make substantial profits through trading or investing. Secondly, cryptocurrencies offer a means of risk hedging. In uncertain economic environments, some individuals and businesses seek alternatives to traditional assets like stocks, bonds, or fiat currencies. Cryptocurrencies provide an additional avenue for diversifying investment portfolios and mitigating risk. Lastly, the growing popularity of cryptocurrencies is fueled by the desire for portfolio diversification. (Saleh, Fahad 2020.) Many investors are looking for ways to diversify their holdings beyond traditional assets. Cryptocurrencies offer an alternative asset class that operates independently of traditional financial markets, allowing investors to spread their risk across various sectors. Overall, the attractiveness of using cryptocurrencies for investing funds lies in the potential for income generation, risk hedging, and portfolio diversification. While different countries have varying levels of acceptance and regulation around cryptocurrencies, the global interest in these digital assets continues to grow.

Table 2. The main advantages and disadvantages of investing in cryptocurrency

advantages	shortcomings
high profitability	high volatility, high potential losses
diversification	positive correlation with equities and gold
limited number of objects in some cryptosystems	low retention of value, poorly regulated in terms of legislation
protection against currency depreciation and inflation	low retention of value
growing acceptance and usage	susceptible to hacker attacks

Source: compiled by the author

DISCUSSION

In summary, cryptocurrencies are considered a non-traditional investment option at the moment. Access to the relevant infrastructure is difficult to restrict, making it an alternative investment channel. However, investors should carefully consider the advantages and disadvantages discussed in this article, assess the degree of risk, and define their goals before investing in cryptocurrencies. Cryptocurrencies are seen as a high-yield and high-risk investment that often falls short of expectations. It is not recommended for inexperienced investors to enter the cryptocurrency market with substantial financial resources. The decision to include cryptocurrencies in a portfolio should be based on an individual assessment of the balance between advantages and disadvantages. (Cong, Lin William, Zhiguo He, and Jiasun Li 2020.)

Key Findings and Implications

1. **Potential for Diversification and High Returns:** Research suggests that cryptocurrency has historically exhibited low to negative correlations with traditional asset classes, such as stocks and bonds. This potentially makes it a valuable tool for portfolio diversification. However, it's crucial to note that past performance is not indicative of future results.

2. **Increased Adoption and Institutional Interest:** Growing adoption by individuals, businesses, and financial institutions is adding legitimacy to the cryptocurrency market. Institutional investors are increasingly allocating funds to cryptocurrency, indicating a potential shift in mainstream acceptance.

3. **Regulatory Uncertainty and Challenges:** The lack of clear and consistent global regulations surrounding cryptocurrency poses challenges for investors and businesses. Regulatory developments can significantly impact cryptocurrency prices and adoption rates.

4. **Technological Advancements and Security Concerns:** Ongoing advancements in blockchain technology, such as scalability and privacy solutions, could enhance the use cases and appeal of cryptocurrency. However, security breaches and hacks remain a concern for investors and developers.

5. Volatility and Risk Management:

The inherent volatility of cryptocurrency prices underscores the importance of risk management strategies, such as: Diversification across multiple cryptocurrencies and asset classes, setting appropriate investment goals and risk tolerance levels, employing stop-loss orders to limit potential losses

Future Research Directions: Exploration of factors influencing cryptocurrency price volatility and its correlation with traditional asset classes. Evaluation of the impact of regulation on cryptocurrency adoption and market dynamics. Development of robust risk management frameworks for cryptocurrency investing. Assessment of the potential for cryptocurrency to disrupt traditional financial systems. Examination of the ethical and social implications of cryptocurrency adoption.

REFERENCES

1. Heideman, M., Johnson, D., & Burrus, C. (1984). Gauss and the history of the fast Fourier transform. *IEEE ASSP Magazine*, 1, 14–21. doi:10.1109/MASSP.1984.1162257
2. Härdle, W. K., & Trimborn, S. (2015). *CRIX or evaluating blockchain-based currencies*. Oberwolfach Report, 42(2015). Oberwolfach Research Institute for Mathematics. doi:10.2139/ssrn.2892594.

*INVESTING IN CRYPTOCURRENCY AS AN ALTERNATIVE WAY OF FINANCIAL
INVESTMENTS*

3. Masters, B. (2023). BlackRock delves deeper into crypto with push for bitcoin ETF. *Financial Times*. URL: <https://www.ft.com/content/49963916-572b-4591-8bb6-7efd06ec0961>
4. Nasekin, S., & Chen, C. (2020). Deep learning-based cryptocurrency sentiment construction. *Digital Finance*, 2, 39–67. doi:10.1007/s42521-020-00018-y.
5. Petukhina, A. A., Reule, R. C. G., & Härdle, W. K. (2021). Rise of the machines? Intraday high-frequency trading patterns of cryptocurrencies. *The European Journal of Finance*, 27, 8–30. doi:10.1080/1351847X.2020.1789684.
6. Trimborn, S., & Härdle, W. K. (2018). CRIX an index for cryptocurrencies. *Journal of Empirical Finance*, 49, 107–122. doi:10.1016/j.jempfin.2018.08.004.
7. Huang, X., Zhang, W., Tang, X., Zhang, M., Surbiryala, J., Iosifidis, V., Liu, Z., Zhang, J. (2021). LSTM based sentiment analysis for cryptocurrency prediction. In: *International Conference on Database Systems for advanced Applications*, Springer, pp. 617–621. doi:10.1007/978-3-030-73200-4_47.
8. Cortez, K., Rodríguez-García, M.d.P., & Mongrut, S. (2021). Exchange market liquidity prediction with the k-nearest neighbor approach: Crypto vs. fiat currencies. *Mathematics*, 9. URL: <https://www.mdpi.com/2227-7390/9/1/56>, doi:10.3390/math9010056.
9. Saleh, F. (2020). Blockchain without Waste: Proof-of-Stake. In: *The Review of Financial Studies*, 34(3), 1156–1190.
10. Cong, L. W., He, Z., & Li, J. (2020). Decentralized Mining in Centralized Pools. In: *The Review of Financial Studies*, 34(3), 1191–1235.