

# INFLUENCE OF CRYPTO CURRENCY PERFORMANCE ANALYSIS OF BITCOIN, STOCKS AND GOLD ON INVESTMENT DECISION MAKING IN THE MILLENNIAL GENERATION

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**Abstract:** The purpose of the study was to find out and analyze the comparison of the performance, risk and return of bitcoin, stocks and gold to investment decisions. The population in the study was the monthly closing price of crypto currency bitcoin, LQ45 shares, and gold from September to December 2021 which was 230 data and the second population of the study was a millennial community that invested in crypto currency bitcoin, stocks and gold as many as 50 people. The sampling technique in this study is a saturated sample. The analytical method used in this study is a comparative method and the data used is secondary data. The results of this study revealed that in performance and return there is no real difference between crypto currencies, stocks and gold but there is a difference in risk between crypto currencies, stocks and gold. The second study revealed that millennials at 40% invest in bitcoin crypto currency because of its significant movements and 60% of millennials prefer to invest in stocks and gold with considerable risk than crypto currency.

**Keywords:** *performance, risk, return, crypto currency bitcoin, stocks, gold, investment decision*

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## 1. Introduction

Cryptocurrency is a digital or virtual currency designed as a medium of exchange. Cryptocurrencies secure and verify transactions, as well as control the creation of new tokens from a cryptocurrency using a cryptographic system. Bitcoin is the first cryptocurrency known to people and became the coin that has the largest market capital to date. Bitcoin was created in 2009 as virtual money created by Satoshi Nakamoto. In Indonesia, the commodity futures trading supervisory agency (Bappebti) has legalized cryptocurrency (cryptocurrency) into the subject of commodities that can be traded on futures trading exchanges (www.kontan.co.id, 2018). According to Nandana, Luno Country Manager 2021 | Management and Organizational Science Study (SIMO)/ Vol 2 No. 1, 33-45 34 Indonesia QQ), Bitcoin is an attractive asset that can be used as a modern and sophisticated currency or investment tool. This can be known from the number of crypto asset exchanges in Indonesia as well as the number of people who discuss Bitcoin in Bitcoin forums often compared to other investment instruments, such as stocks and gold. Several researchers have conducted research on Bitcoin, stocks, and gold. According to Nurcahya (2019), Bitcoin and stocks have

higher levels of risk and return when compared to futures instruments, such as gold and forex. Mahessara & Kartawinata (2018) conducted research on returns, risks, and performance on Bitcoin, stocks, and gold. The results stated that Bitcoin, stocks, and gold perform the same, but the results of the analysis stated that Bitcoin is the best investment instrument based on comparison using sharpe, treyner, and jensen models. The results of the study contradict research conducted by Liu & Tsyvinki (2018) which compared 3 types of cryptocurrencies, namely Bitcoin, Ethereum, and Ripple with stocks, forex, and precious metals. The results of his research stated that the three cryptocurrencies are different from stocks, forex, and precious metals. Meiyura & Azib (2020) conducted research on Bitcoin and gold, the results of which stated that there is a difference in return and risk between Bitcoin and gold.

## 2. Literature Review

### Investment

According to Tandelilin (2010:2), "investment is a commitment to a number of funds or other resources made at this time, with the aim of obtaining some future benefits".

According to Gumanti (2011), there are 2 forms of investment, namely investment in assets.

Physical assets and financial assets.

#### a. Physical Asset

Physical assets are assets that can be clearly seen the value of physical assets often. It is associated with shape, size, weight, or physical properties. An example of a physical asset is buildings, soil, metals, jewelry, etc.

#### b. Financial Asset

A financial asset is an asset that cannot be clearly seen in its physical form. and the value contained in financial assets cannot be seen from their form and form because their size and shape do not reflect their value. Examples of financial assets are bonds, stocks, warrants, or options.

Investment Decision according to Wijaya and Wibawa (2010) is "Investment decision decision as a composition between assets owned and investment options in the future".

### Cryptocurrency bitcoin

According to Aves (2018), cryptocurrency is a digital peer-to-peer medium of exchange that uses cryptography to process and secure transactions. The term cryptocurrency was first coined by Wei Dai in 1998 in an internet article under the name. Many cryptocurrencies are designed decentralized, where transaction records are managed by the world's computer networks. Cryptocurrencies are generally designed using blockchain technology. A blockchain is a list of records linked together using cryptography. Cryptocurrency is a digital currency that is often built using blockchain technology to control payments and transactions. Cryptocurrency is digital cash. Anyone who can access the internet can have a digital wallet so that it can send, receive, and store cryptocurrencies.

### Stock

Shares are proof of ownership of a company. Tradable shares are stocks that are already listed on the capital market. In Indonesia, the capital market is PT Bursa Efek Indonesia. IdX has a Composite Stock Price Index (JCI). IDX also has various sectoral stock indices based on their company field (Fahmi, 2015). According to Fahmi (2015), shares contain several characteristics of shares, namely:

1. Dividends are paid when the company earns a profit of
2. Have rights in the General Meeting of Shareholders (GMS)

3. Have the ultimate right in the division of the company's property if the company is liquidated.
4. Have responsibility for the claims of the other party amounting to the proportion of funds
5. Have the right to transfer share ownership.

**Gold**

Gold is the highest valued metal in the world even in its raw form. According to Dipraja (in Mahessara & Kartawinata (2018), gold is always referred to as barometer of fear. Gold has advantages compared to other metals because it is different from other metals that easily rust, change color, or fade. These natural properties are what cause the value or price of gold to be very valuable. In times of recession, people usually allocate their funds to buy gold to protect the value of their wealth. Two types of economic situations that make people anxious are inflation and deflation. Gold has proven to be a storage tool to maintain wealth against both deflation and inflation.

**Risk and return**

According to Fahmi (2015), risk and return are conditions experienced by investors for their investment decisions in the form of both profits and losses in a period. In the world of investment, the relationship of risk and return is very strong. If the risk is high, then the yield received is also high, conversely if the risk is low, then the return received will also be low.

**3. Method**

This research is quantitative research using comparative methods. In this study there was no manipulation from researchers so the data is completely accurate. This research is done as naturally as possible by collecting data with a command and the results can be analyzed statistically to look for a difference from the variables being studied. This type of research according to the explanatory level is comparative research. This study is called comparative research because it tests population parameters in the form of comparisons. This study was conducted to compare the return, risk, and investment performance of bitcoin, stocks, and gold.

**4. Result and Discussion**



**Figure 1: table chart of cryptocurrency bitcoin**  
Sources: investing.com

At the beginning of September 2021 the bitcoin currency was at 580742636 and rose significantly with its highest number for four months being at 977782480. Actually compared to ordinary money, crypto currency is classified as having more advantages. The value of the currency is not influenced by government policy, does not require a particular bank as the organizer or manager of the crypto currency. On the other hand not everyone is able to do crypto currency mining, considering that complicated computers and algorithms are needed. The discussion on investment risk in cryptocurrencies is focused on risks related to price changes that can be modeled based on changes in the price of cryptocurrencies.



**Figure 2: table chart of cryptocurrency bitcoin**  
 Sources: investing.com

From the chart movement image above shows that LQ45 shares from the beginning of September to the end of December 2021 continue to rise and stagnate at the end of the month. The value of LQ45 shares is lowest at 841.46 while the highest number disaham LQ45 is at 982.42 this indicates that the movement of LQ45 shares is still quite at the normal limit. Keep in mind that stocks are a type of investment that is influenced by the socio-cultural and political economy of a country.



**Figure 3: table chart of cryptocurrency bitcoin**  
 Sources: investing.com

In contrast to the value of gold against the rupiah, on this chart movement shows that the lowest gold number in 246016 while the highest number in the month of research is at 266980. It can be seen that even the movement of gold does not experience a very significant movement between its risk and return.

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The results of this study show that the return provided by bitcoin, Stocks and gold don't have a significant difference. According to Fahmi (2015), return is one of the factors that motivate investors to invest and is also a reward for investing. The courage of investors to bear the risk of the investments they make. According to Aves (2018), bitcoin is classified between currencies and commodities with related financial benefits and most of the people who own bitcoin Use it as a speculative asset rather than as a means of payment. This is what makes the price of bitcoin volatile. In descriptive analysis, bitcoin It can provide a very high return and provide high losses as well. When viewed from the distribution of the frequency of return, the majority of returns provided by bitcoin is almost equal to the majority of returns given by equal and gold, being in the category of 25 percent and below.in contrast to the risk given that the results of this study show that the risks held by bitcoin, Stocks, and gold have a significant difference. This is seen from the value significance  $0.000 < 0.05$ . That is, there is a significant difference between the risks. Bitcoin, stocks, and gold. The results of this study are in line with research conducted by Liu & Tsyvinki (2018) which states that bitcoin, stocks, and gold are different. According to Jones (2016), risk is the level of potential losses that will arise because the actual return is not in accordance with the expected return. From the results of a descriptive analysis of risk, bitcoin line position It tends to be above the stock and gold lines. This means the risks you have. Bitcoin is much higher than stocks and gold.

## 5. Conclusions

The conclusion of the study is that the performance levels of bitcoin, stocks and gold investments have different risks and returns but that difference is not very significant. This allows millennials to decide to invest in these three investment opportunities. There are many factors that should be considered to invest in this type of investment, one of which is with the state of poliitk and the economy of a country that affects gold and LQ45 stock investments and does not affect the bitcoin cryptocurrency. But the ability of systematic algorithms is precisely what more affects the investment of the type of bitcoin cryptocurrency.

The investment role in this sector is almost 76% of the productive age, meaning it can be concluded that investors from bitcoin, gold and LQ45 shares are millennials who are familiar with technology. For the other 24% the public chooses the investment sector that is not high risk such as mutual funds and deposits.

## Acknowledgements

- a. Bitcoin is the investment with the highest risk than other types of investments in this study and followed by high returns as well. This needs its own calculations for investors when they want to invest in this type of investment.
- b. For research that will come it is expected to increase the research period, so as to know the movement of investments of the type of cryptocurrency bitcoin, gold and LQ45 stocks.

## References

- Fahmi, I. (2015). *Manajemen Investasi teori soal dan jawab* (2 ed.). Jakarta, Indonesia: Salemba Empat.
- Gumanti, T. A. (2011). *Manajemen Investasi: Konsep, Teori, dan Aplikasi*. Jember: Mitra Wacana Media.
- Jones, C. P. (2016). *Investments Analysis and Management*. New York: Wiley.
- Kontan.co.id. (2018, Juni 9). *Fokus*. Retrieved from fokus.kontan.co.id:
- Liu, Y., & Tsyvinki, A. (2018). Risk and Returns Cryptocurrency.
- Mahessara, R. D., & Kartawinata, B. R. (2018). Comparative Analysis of Cryptocurrency in Forms of Bitcoin, Stock, and Gold as Alternative Investment Portfolio in 2014 –2017. 38-51.
- Meiyura, A. P., & Azib. (2020). Analisis Perbandingan Return dan Risk Investasi antara Emas dan Bitcoin Periode Juli 2016 – Juni 2019. *Prosiding Manajemen*.
- Nurchahya, E. (2019). Perbandingan Tingkat Risiko dan Keuntungan dari Investasi Foreign Exchange dan Emas pada PT. Valbury Asia Futures Terhadap Investasi Saham dan Bitcoin. *Universitas Teknologi Yogyakarta*
- Tandelilin, E. (2014). Portofolio dan Investasi . In E. Tandelilin, *Portofolio dan Investasi Teori dan Aplikasi*. Yogyakarta: KANISIUS.