

Proceedings of Femfest International Conference on Economics, Management, and Business

Volume 1, 2023 https://ejournal.unida.gontor.ac.id/index.php/JTS/index

Effect of Cryptocurrency Marketplace Incentive Distribution with Burning Token Method on Halal Crypto Exchange Token Value

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Abstract

At the beginning of the 21st century, one of the most in-demand technology investments was blockchain/cryptocurrency technology. Cryptocurrency usage globally has increased from 106 million in January 2021 to 295 million users in December 2021 or an increase of 178% in 2021. The world market capitalization value of cryptocurrency has increased from 787 billion dollars in January 2021 to 2.3 trillion dollars in December 2021 or an increase of 192% in 2021. In the Cryptocurrency world, one method of sharing incentives is to "burn" tokens, namely using dividend allocations to be used to buy back cryptocurrencies and reduce the supply of circulating tokens. This is different from stock investment, namely the distribution of incentives through cash. This paper aims to develop a conceptual model of the Cryptocurrency Marketplace incentive distribution model in the form of "burn" tokens against the Halal Crypto Exchange Token.

Keywords; Halal Crypto Exchange Token, token burns, incentive, blockchain technology

Introduction

This study examines the method of sharing incentives carried out by cryptocurrency exchanges to their investors. The concept offered by cryptocurrency exchanges through the burning token method is a development of the incentive sharing method on companies listed on the stock exchange using incentive sharing in the form of fiat currency. Incentives are often defined as changes in a value managed by an institution/manager that aims to provide benefits/benefits to shareholders (Ingersoll, 2006).

The concept of incentive sharing using the burning token method is that developers buy tokens on the open market and remove them from circulation (burning tokens), often done to maintain / fix the value of tokens to investors without paying dividends in cash. As the supply of tokens in the market decreases, the value of the remaining tokens in circulation will increase (Ooi, 2022). This research refers to halal crypto exchange tokens, so the crypto exchange token used in this study is BNB tokens because they are included in the halal token category according to the shariah review bureau ((Advisor et al., 2017).

On crypto exchanges, one of the methods of sharing incentives is in the form of burning tokens. On the stock exchange, dividend distribution was found to have a partial impact on stock prices (Sunaryo, 2020). In addition, on the stock exchange, based on research, it is found that the distribution of company profits does not affect the stock price because part of the

retained earnings is used for operational needs and future business development (Kurnia, 2022). The amount of company dividends distributed is a significant factor in the volatility of movements and increases in stock prices (Ajao & Robinson, 2022).

The activity of distributing incentives using the burning token method carried out by cryptocurrency exchanges is expected to provide benefits for not only investors but also for increasing the value of cryptocurrency exchanges. Incentives move stakeholders to store their tokens because they consider them to be stores of value whose market price is expected to grow. The potential for appreciation/improvement is very strong on tokens driven by incentive factors (Freni et al, 2022). Reiff (2022) suggests that there are several objectives in the practice of burning tokens, namely reducing assets spread across the market to control availability, making tokens more valuable, and to prevent injustice for new investors.

Based on the literature review of dividend distribution, many of the methods presented are in the form of cash in fiat form as stated by (Sunaryo, 2020), (Kurnia, 2022), and (Ajao & Robinson, 2022). There has been no article that discusses the method of dividend distribution through burning tokens as is commonly done in the cryptocurrency market.

Therefore, this study intends to develop the concept of dividend / incentive distribution through the method of burning tokens. This is expected to be an alternative solution in dividend / incentive distribution that can make the price of crypto exchange tokens stable and continuously increase crypto exchange token value. In addition, this concept intends to reduce the presence of traders who take advantage of the momentum of dividend distribution that is widely carried out in the stock market. On the stock exchange, based on research, it was found that the stock price fell significantly on ex-day rather than the dividends distributed after being taxed. This is because insignificant trading volumes occur before ex-day and investors keep stocks on-day so as to earn dividends and sell on ex-day (MD Mohibul Islam, 2015).

The concept of dividend / incentive distribution using the token burning method will be tested on the crypto exchange token owned by the world's largest crypto exchange market, BNB. Where BNB is included in the halal crypto token. This study aims to develop a conceptual model of the effect of dividend distribution / cryptocurrency marketplace incentives in the form of burning tokens against halal crypto exchange token value. This analysis considers the effect of bitcoin price and trading volume on crypto exchange token value.

. The concept of sharing incentives using the burning token method has benefits for cryptocurrency investors as well as academics. When viewed from an investor's point of view, the results of this study can be used as a consideration in making decisions, especially in the sustainability and increase in the price of crypto exchange tokens when burning tokens as an effort to reduce and limit the supply of tokens in circulation. From an academic point of view, this research is expected to contribute to the development of financial management science, which is a model for improving the performance of crypto exchange tokens in the cryptocurrency market.

Materials & Methods

Sharing Incentives Using Metode Burning tokens

Incentive is defined as a change in a value managed by an institution / manager that aims to provide benefits / benefits to shareholders (Ingersoll, 2006). In an ideal environment, the incentive system on investment works well to encourage investment growth. Therefore, incentives are considered as rewards for investors to make digital investment options (Muturi,

2015). Based on the results of research by Freni et, al (2022), there are several forms of incentives in cryptocurrencies, namely:

- Access: The token offers access to ecosystem services and content. In general, token holders are required to spend or store their tokens to enable "Get access" incentive provision is one of the most common incentive deterrents, and is often used in ICOs, STOs, and IEOs.
- Discounts: Services and content in the ecosystem get discounts for token holders. To
 obtain a discount, token holders must keep their tokens for a certain period of time. To
 drive initial use and control the speed at which tokens grow, token issuers often
 include this mechanism.
- Dividends: Token holders profit from the success of the ecosystem and can receive a portion of the dividend by storing tokens. Publisher tokens can compensate token holders by minting new tokens, releasing some tokens from the token reserve, or distributing a portion of dividends in other currencies (either crypto or fiat).
- Upgrade potential: token holders want a price increase on the tokens they own. In this case, incentives move stakeholders to store their tokens because they consider them to be stores of value whose market price is expected to grow. The potential for appreciation/improvement is very strong on tokens driven by incentive factors.

According to Cryptopedia (2022), a Crypto Exchange Token is a digital asset issued by a Crypto Exchange. Crypto Exchanges can issue their own tokens for a variety of reasons and exchange owners often distribute their own tokens as user incentives. There are several crypto exchange tokens that provide incentives such as tokens issued by Bitmax, Binance, and Kucoin. These tokens can be used on issuing exchanges to be able to obtain benefits when buying and selling on crypto exchanges and also allow token holders to benefit from the overall transaction volume of the issuing exchange. Where Binance provides profits to token holders through buybacks and permanently removes them from circulation (token burning) whereas Bitmax and Kucoin explicitly pay incentives to their token holders (Gryglewicz et al., 2021).

One form of incentive that some crypto exchanges do is to burn tokens. The term "Burn" in cryptocurrencies is a method of reducing the supply of coins to make them scarce and it is expected to increase the value of a cryptocurrency. In tokenomic cryptocurrency there is the term "circulating supply" which is the number of coins currently circulating in the market, "Total Supply" is the number of coins that exist now (minus coins that have been "Burned"), Max Supply is the maximum number of coins allowed to circulate (Mark Grabowski, 2019). Burning tokens is a deliberate act that has the purpose of exerting an influence on the value of the remaining tokens (Ooi, 2022).

The actions taken by crypto exchanges in terms of buybacks and removing their crypto exchange tokens from circulation (token burning) are commonly used on some crypto exchanges. Here are some examples of crypto exchanges that burn tokens (Allen et al., 2022):

- FTX conducts token burning (FTT) which is carried out every week. Where they make repurchases and eliminate from circulation 33% of the transaction fee profit. FTX wants to continue this up to 50% of the total supply of tokens that have been burned.
- Binance burns tokens (BNB) every 3 months based on the profit earned from transaction fees. Binance intends to burn BNB tokens at 50% of the total supply.

- Bitfinex burns tokens (LEO) daily based on 27% of its revenue. Bitfinex intends to burn tokens until there are no LEO tokens in commercial circulation.

Based on the literature on incentive sharing using the burning token method, this token burning method is a development of the incentive sharing method which initially used a cash payment system. This method of burning tokens has been carried out by several crypto exchanges since 2019 which is expected to make the value of tokens increase as the number of tokens in circulation decreases and makes tokens even rarer.

Trading Volume and Crypto Exchange Token Value

Trading volume is defined as buying and selling digital assets that are carried out on a daily basis. This is an important parameter in a technical analysis and is used as a reference for strength in the price movement of a digital asset (Abbondante, 2010). The most commonly used in decision making in the digital asset market as a strategy in predicting digital assets and future prospects is trading volume. Trading volume is one of the instruments / tools used by investors to see the reaction of the digital asset market in terms of financial information that causes movements in value activity in digital assets (Hariyanto, 2021).

Trading volume indirectly affects the price of a digital asset, but trading volume cannot directly explain the price effect of a digital asset in the future (Hsieh, 2014). For digital assets that have a low market cap (illiquid assets) there is a negative relationship between trading volume and the price increase of a digital asset, but for digital assets that have a large market cap (liquid assets) there is a positive relationship between trading volume and price increase of a digital asset (Brown et al., 2009). Bouri, Lau, Lucey, & Roubaud, observed that trading volume is very useful information for predicting the positive or negative price value for all cryptrocurrency both bitcoin and altcoins (Bouri et al., 2019).

Based on the literature above, it can be concluded that trading volume has a positive correlation with the value of a digital asset. Trading volume can be an indicator of investor interest in a digital asset. Therefore the hypothesis that we put forward is as follows:

H1: Trading volume is positively correlated to the Crypto Exchange Token Value

The Role of Burning Token Moderation

Based on the explanation above, the distribution of incentives using burning tokens is expected to play a role in moderation between trading volume and crypto exchange token value. Reiff (2022) suggests that there are several objectives in the practice of burning tokens, namely reducing assets spread across the market to control availability, making tokens more valuable, and to prevent injustice for new investors. Burning tokens use a proof of burn system using a dynamic burning rate so as to achieve great volatility and profits and wellbeing (Saleh, 2018).

Methods of burning tokens, such as share buybacks are an unusual practice. Developers buying tokens on the open market and removing them from circulation (burning tokens) is often done to maintain/fix the value of tokens to investors without paying dividends in cash. As the supply of tokens in the market decreases, the value of the remaining tokens in circulation will increase (Ooi, 2022). There is a possibility for entrepreneurs to repurchase tokens and burn them (burning tokens) which is considered the best way to protect the sustainability of the token's value.

Based on the literature review of the distribution of incentives with the burning token method, this method is expected to play a role as a moderation of trading volume in increasing the crypto exchange token value on an ongoing basis. With a periodic reduction in token circulation, it can make tokens less and more valuable. So the value of the crypto exchange token is increasing. So that the hypothesis that we put forward is as follows:

H2: Trading volume moderated by burning tokens has a positive impact on the Crypto Exchange Token Value

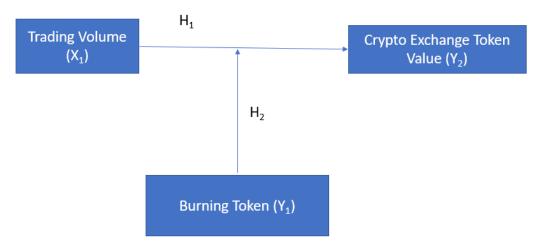


Figure 1. Conceptual Model of the role of burning tokens as moderation

Research Methods

This research is a conceptual development of halal crypto tokens where BNB is one of the crypto exchange tokens included in halal crypto. Binance as the owner of a crypto exchange and BNB token uses a token burning mechanism in its dividend distribution method. Burning of these tokens is carried out every quarter by purchasing BNB tokens and destroying tokens so that it will reduce the tokens circulating in the market.

Trading volume moderated by burning tokens can increase the value of the crypto exchange token in this case BNB. This is because the more trades made on a crypto exchange can increase the profit of the crypto exchange so that the burning of tokens is bigger and has a positive effect on crypto exchange token value.

Future research can conduct empirical research using the e-views application where the data collection method is carried out through data observation from parties that provide the secondary data needed including the price of BNB, trading volume in coingecko as the most widely used and open source database in the cryptocurrency world. , the announcement of BNB Token burning, BNB Token Burning quantity, and total BNB token supply were obtained through a whitepaper as the main document of the BNB token issuance .

Conclusion

Incentive sharing in the form of burning tokens is a development of an incentive sharing method that focuses on increasing the value of a digital asset / crypto token. The distribution of incentives in the form of cash in an investment in digital assets provides positive sentiment towards the value of a digital asset. The development of incentive sharing using the token burning method can focus on increasing the value of the crypto exchange token

because the distribution of incentives is not in the form of cash but funds it is used to repurchase crypto exchange tokens on the crypto market and eliminate the crypto tokens from circulation (burning tokens) thereby reducing the supply that cause. The value of the crypto exchange token is increasing. The crypto exchange token that enters into halal crypto is BNB.

Trading volumes moderated by the token burning method can amplify from an increase in the value of the crypto exchange token. This is because the larger the trading volume, the better the ranking of the crypto exchange which has an impact on the number of investors who enter. Trading volume moderated by the burning token method can increase the value of the crypto exchange token because the larger the trading volume, the greater the profit earned by the crypto exchange so that the more token burning done and will have a good impact on increasing the value of the Crypto Exchange Token.

References

- Abbondante, P. (2010). Trading Volume and Stock Indices: A Test of Technical Analysis. *American Journal of Economics and Business Administration*, 2(3), 287–292. https://doi.org/10.3844/ajebasp.2010.287.292
- Advisor, S., By, L., & Bank, C. (2017). Binance BNB Sharia Analysis.
- Ajao, M. G., & Robinson, F. E. (2022). Dividend Policy Determinants and Stock Price Volatility in Selected African Stock Markets. *International Journal of Finance Research*, 3(1), 27–48. https://doi.org/10.47747/ijfr.v3i1.659
- Allen, D. W. E., Berg, C., & Davidson, S. (2022). Buyback and burn mechanisms: Price manipulation or value signalling? September, 1–8.
- Bouri, E., Lau, C. K. M., Lucey, B., & Roubaud, D. (2019). Trading volume and the predictability of return and volatility in the cryptocurrency market. *Finance Research Letters*, 29, 340–346. https://doi.org/10.1016/j.frl.2018.08.015
- Brown, J. H., Crocker, D. K., & Foerster, S. R. (2009). Trading volume and stock investments. *Financial Analysts Journal*, 65(2), 67–84. https://doi.org/10.2469/faj.v65.n2.4
- Cryptopedia. (2022). What Are Crypto Exchange Tokens? Gemini.
- Freni, P., Ferro, E., & Moncada, R. (2022). Tokenomics and blockchain tokens: A design-oriented morphological framework. *Blockchain: Research and Applications*, 3(1), 100069. https://doi.org/10.1016/j.bcra.2022.100069
- Gryglewicz, S., Mayer, S., & Morellec, E. (2021). Optimal financing with tokens. *Journal of Financial Economics*, 142(3), 1038–1067. https://doi.org/10.1016/j.jfineco.2021.05.004
- Hariyanto, D. (2021). Effect of Trading Volume, Market Capitalization, Firm Size in explaining Return on Vultures. *Journal of Advanced Research in Economics and Administrative Sciences*, 2(2), 50–64. https://doi.org/10.47631/jareas.v2i2.228
- Hsieh, H. C. S. (2014). The causal relationships between stock returns, trading volume, and volatility: Empirical evidence from Asian listed real estate companies. *International Journal of Managerial Finance*, 10(2), 218–240. https://doi.org/10.1108/IJMF-10-2013-0103
- Ingersoll, J. E. (2006). The Subjective and Objective Evaluation of Incentive Stock Options Published by: The University of Chicago Press The Subjective and Objective Evaluation of Incentive Stock Options *. 79(2), 453–487.
- Kurnia, D. (2022). The Effect of Dividend Per Share (DPS), Earning Per Share (EPS), & Debt to Equity Ratio (DER) On Stock Prices with Percieved Risk of Stocks as Moderating

- Variables. Journal of Accounting, Vol 9 No. 2, July 2022, 9(2), 267–280.
- MD Mohibul Islam, A. I. and M. A. T. (2015). *Overlaps of Private Sector with Public Sector around the Globe*. III. https://doi.org/10.1108/s0196-382120150000031016
- Muturi, W. (2015). Stock Market Investment Incentives: A Gift or a Motivator? Evidence from Business, Management and Economics Stock Market Investment Incentives: A Gift or a Motivator? Evidence from Literature. September.
- Ooi, V. (2022). Institutional Knowledge at Singapore Management University A framework for understanding the taxation of digital tokens. 260–269.
- Reiff, N. (2022). What Does It Mean to Burn Crypto? Practical Applications. Investopedia.
- Saleh, F. (2018). Volatility and Welfare in a Crypto Economy. *SSRN Electronic Journal*. https://doi.org/10.2139/ssrn.3235467
- Sunaryo, D. (2020). The Effect of Earning Per Share (EPS) and Dividend Per Share (DPS) on Share Prices. *Journal of Research in Business, Economics, and Education,* 2(5), 1027–1038. http://e-journal.stie-kusumanegara.ac.id