UNIVERSITI TEKNOLOGI MARA

THE DETERMINANTS OF PRICE VOLATILITY IN BITCOIN

NUR AISYAH BINTI MOHAMAD SUKHIR
2020980937

BACHELOR OF BUSINESS ADMINISTRATION (Hons)
Investment Management

Faculty of Business and Management

FEBRUARY 2022

ABSTRACT

The research of the factor for Bitcoin price volatility has been limited despite the emergence interest of public. This is why this research aims to expand the current literature reviews and expand current leads in order to determine the Bitcoin price volatility. However, the objectives of this research are to analyzing the relationship between the Bitcoin price volatility and the selected factors that influence the Bitcoin price volatility. This research presents a study of Bitcoin price volatility over the period of 2011-2020. The total that has been observed from this study is 10 years. This research is to indicate Oil price, Gold price, Nikkei 225 performance and S&P 500 performance as independent variable while the dependent variable Bitcoin price. In addition, this research is utilizing descriptive analysis, correlation analysis, Ramsey Reset test, multicollinearity test, heteroskedasticity test, and regression analysis to determine either the independent variable is significant or insignificant towards Bitcoin price volatility. Moreover, the findings result indicates the price of Bitcoin is affected by the S&P 500 performance which shows consistency with results from previous literature.

Keywords: Bitcoin Price volatility, Oil price, Gold price, Nikkei 225 performance, S&P 500 performance

ACKNOWLEDGEMENTS

Bismillahirahmanirrahim

Alhamdulillah. First of all, I have finally accomplished my research with triumph for my final year project in order to complete my Bachelor. I cannot complete my research without the help of Allah Azzawajalla that gives me all the strength to the best as I can.

During the process of completing the task, I've faced various challenges which make the research harder to complete. Nevertheless, I managed to complete the task with flying colours. I would like to give a big thank you to my advisor, Puan Yuslizawati Binti Mohd Yusoff for her help and guidance, who always being patient and her good care in giving moral support to me. Thank you for her commitment, I able to manage this task until the last page. My highest gratitude goes to her for tremendous number of advices and directions to me.

Finally, I would also like to thank my friends especially my classmates who are willing to support and share their knowledge together. Thank you for helping me throughout the journey and may we succeed with flying colours. Additionally, they also offer me a great deal of moral encouragement and wisdom to go through this research. Lastly, I want to thank my Family members who always there to encourage me and support me from the first step taken.

Thank you very much.

TABLE OF CONTENTS

CHAPTER 1 : INTRODUCTION

1.1 INTRODUCTION

Cryptocurrencies has raised the ability to hedge traditional assets of professionals and investor where it can be shown by the increasement in digital currencies last year. During the COVID-19 outbreak, the number has shown solid increasement in digital currencies due to the uncertainty during the pandemic. Cryptocurrencies can be play as the role of money where it is meant to be a medium of exchange that require to transact any good physically and digitally in subsequent sale in exchange of goods. This helps traders to perform thousands of transactions in daily life since it can be traded in online crypto exchange platform easily.

Bitcoin has been the first decentralized cryptocurrency developed in 2009 by Satoshi Nakamoto (Eli Duarado & Jerry Brito, 2014). These currencies are believe to allow distributed manner of digital tokens exchange that uses a system called cryptography. The tokens are traded at market rates for fiat currencies where its eliminates third parties. In addition, these innovations are alongside with the modern calls to make transactions accessible. Jonathan Chiu (2018), cryptocurrency rely on decentralized network of validators to maintain and update copies of the ledger which resulted to an accuracy of the transactions record. In order to ensure distributed updating, verification and record storage of the transaction history, Bitcoins and other cryptocurrencies uses a blockchain system that contains the history of past transactions which creates a ledger.

Among digital currencies, Bitcoin has been the most traded digital currencies where this 2009 virtual currency serves as a peer-to-peer version of electronic cash that let to do transactions on the internet without the intermediation of the financial system (Nakamoto 2008). Investors and traders seeks to reduce the investment risk by diversifying their portfolio in which includes the new digital assets into their portfolio, thus optimal profit. Bekiros market et al. (2017) and Shahzad et al. (2019) explain the weakness ability of gold to hedge and the reaction of gold prices are the reason to change the trading habits. This failure has seen to outbreak the normal norm and move out to other trading opportunity in this recent years.