

CHAPTER 1

INTRODUCTION

1.1 Research Background

The global economy is certainly progressing, alongside technological developments caused by globalization. Cryptocurrency is one of the emerging new financial assets. Bitcoin is a cryptocurrency asset that was first introduced in 2008 by a figure known as Satoshi Nakamoto. Bitcoin was introduced as a decentralized peer-to-peer electronic payment instrument (Nakamoto, 2008). Since the introduction of Bitcoin in 2008, approximately more than 1,600 crypto assets have been listed on crypto exchanges, both local and global crypto exchanges. The goal of developing Bitcoin as a cryptocurrency asset is to address the need for a system that accepts and charges low fees for transactions without the use of trusted third-party intermediaries such as banks (Rejeb *et al.*, 2021).

The covid-19 pandemic has had a negative impact globally. Financial and political crises, high unemployment rates, supply chain disruptions, and other global events were felt in every country. During the Covid-19 pandemic, all high- risk financial assets, such as stocks, experienced significant price declines, and Bitcoin was no different. However, when the increase in stock and bitcoin financial assets is compared, Bitcoin shows a greater increase than stocks.



Figure 1.1 Jakarta Composite Index During Covid-19

The Indonesian Stock Exchange (COMPOSITE) shows that when the Covid-19 case was first declared, the COMPOSITE Index plummeted by -38.40%. After a significant drop, the COMPOSITE Index was able to bounce back and reach its all-time high price of 7,377 (+88.41%).

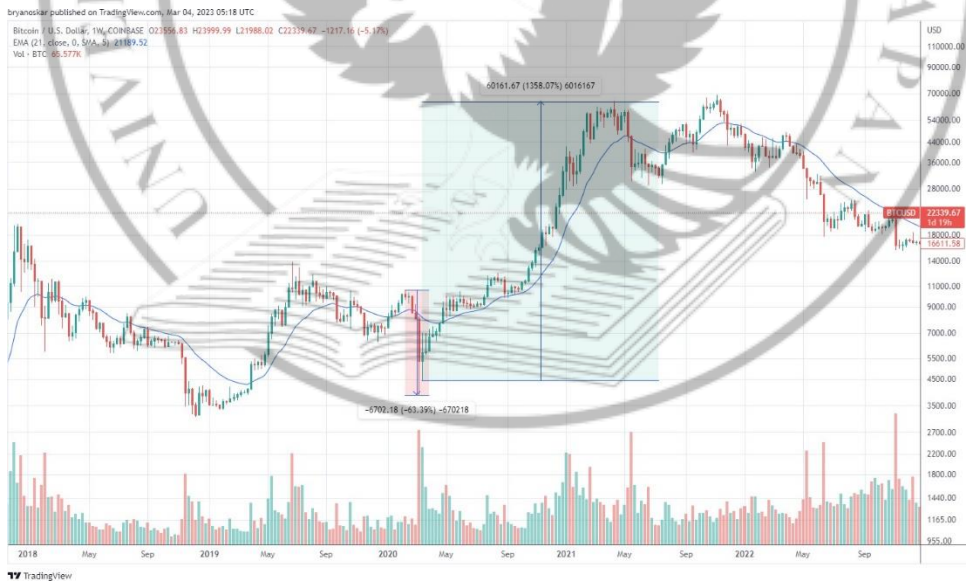


Figure 1.2 Bitcoin Price During Covid-19

The price movements of the COMPOSITE and Bitcoin indices are comparable in that there was a decline carried on by Covid-19, which was then followed by such a significant upward movement by both instruments. However, we can see that the price of Bitcoin fell by 2x from the COMPOSITE index, which was at -63.39%, when Covid-19 occurred. However, following this decline, the price of Bitcoin increased nearly ten times faster than the rise in the COMPOSITE index, peaking at \$ 69,000 (IDR 1,035,000,000), or a gain of about 1,358.07% and reaching its new all time high.

Gold, on the other hand, has long been regarded as a safe haven in times of economic turmoil. Investors commonly use gold as a hedge against inflation and market volatility. Oil is another key commodity whose price swings can have serious economic consequences, particularly for countries that rely largely on oil exports. Exchange rates are crucial in the global economy. Exchange rate fluctuations can have an impact on import and export prices, hence impacting trade and economic growth. The Indonesian Rupiah (IDR) currency rate was particularly volatile during the Covid-19 pandemic, swinging dramatically in response to global events.

In summary, the COVID-19 pandemic has severely affected the global economy, leading to price fluctuations in stock markets and Bitcoin, price variations in commodities such as the price of gold and the price of crude oil, as well as changes in the local exchange rate. It is critical for investors and policymakers to comprehend the relationships that exist among all of these variables in order to effectively navigate the unpredictable economic landscape that the pandemic caused.

1.2 Research Problem

Several studies have been conducted to evaluate whether the volatility of the Bitcoin prices and stock index at Indonesia Stock Exchanges are influenced by utilizing macroeconomic measures such as CPI, inflation, and interest rate data. The purpose of this study is to determine the influence between exchange rates, the price of gold, and the price of crude oil to Bitcoin prices and stock index at Indonesia Stock Exchanges by using VAR analysis.

1.3 Research Purpose

The purpose of this research are as follows:

- To determine the influence between exchange rate, the price of gold, and the price of crude oil to Bitcoin prices and stock index at Indonesia Stock Exchanges using VAR analysis.
- To identify whether the Bitcoin price and the stock index at Indonesia Stock Exchanges can be predicted by using the price of gold, the price of crude oil, dan exchange rate using VAR analysis.
- To help investors understand the role of macroeconomic factors like gold, crude oil, and exchange rate to Bitcoin prices and stock index at Indonesia Stock Exchanges.

1.4 Use of Research

This research is used for:

- To determine if there's an influence between exchange rates, the price of gold, and the price of crude oil to Bitcoin prices and stock index at Indonesia Stock Exchanges using VAR analysis
- To identify whether exchange rates, the price of gold, and the price of crude oil can be used to predict the Bitcoin prices and Stock index and Indonesia Stock Exchanges using VAR Analysis.
- To help investors understand the role of macroeconomic factors like gold, crude oil, and currency rates, that are affected by the price fluctuations of Bitcoin prices and stock index at Indonesia Stock Exchanges the Covid-19 pandemic crisis, as well as taking into account investable asset allocation if the crisis recurs.

1.5 The Limitation of Research

There are several limitations in the study that aim to keep the study focused on the formulation of the problem and research objectives:

- The data used is limited to 5 years, from 2018 to 2022.
- This research was only conducted before and after the Covid-19 crisis.
- The macroeconomic variables included in the study are: exchange rates, the price of gold, and the price of crude oil.

- When this research was conducted, cryptocurrency assets were still regulated by BAPPEBTI as commodities assets that may be traded or invested in. Currently, the governing organization for cryptocurrency is shifting from BAPPEBTI to Indonesia Financial Services Authority (OJK).

1.6 Writing Systematics

Chapter 1 Introduction

Chapter 1 includes research background, research problems, research objectives, the use of the researchers, research limitations and systematic discussion.

Chapter 2 Literature Review

Chapter 2 covers the theories supporting the study and a review of the literature from previous relevant studies, especially related to the influence between the exchange rate, the price of gold, and the price of crude oil to Bitcoin prices and stock index at Indonesia Stock Exchanges. These theories will eventually serve as the foundation for creating a framework or model for formulating research hypotheses.

Chapter 3 Research Method

The data utilized in the study, the empirical model, the measurement of variables, and the analytical techniques that will be applied to the quantitative study's analysis are all covered in Chapter 3.

Chapter 4 Results and Discussion

The statistical description, data processing findings, and empirical model results from research on the influence of exchange rates, the price of gold, and the price of crude oil on Bitcoin prices and stock index at Indonesia Stock Exchanges will be discussed in Chapter 4.

Chapter 5 Conclusion and Suggestion

Chapter 5 presents the conclusions of the research carried out and suggestions on what can be developed from the research carried out.

