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Asymmetric effects of inflation rate changes on the stock market index: The case of Indonesia

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Abstract. Over the years, macroeconomic fundamentals and the stock market were found to have symmetrical relationship in numerous scientific investigations. These fundamentals provide crucial knowledge regarding stock price indices by providing forecasts for the future and information on the current status of the economy. This study employs a Nonlinear Autoregressive Distributed Lags (NARDL) model to fill in the research gap by estimating the asymmetric relationship between inflation and stock market from 1996 to 2020. The study suggests that inflation has a long-run and short-run asymmetric affect on the stock price, while both positive and negative inflation changes harm stock prices. As it reveals, the asymmetric impact of inflation on the stock market, this study can assist investors and businesses in making well-informed decisions that result in a more efficient allocation of resources, ultimately benefiting the economy. Additionally, policymakers can utilize these findings to design effective strategies for managing inflation, stabilizing prices, promoting economic growth, and ensuring financial market stability.

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1. INTRODUCTION

The stock market performance can be a significant indicator signaling overall economic performance and of concern for the authorities. Stock markets have a unilateral impact on economic growth (Hoque & Yakob, 2017) and are a vital focus point of investors. The economy, economists, and investors are all affected by the stock market and the exchange rate.

Stock trading enables companies to raise capital to pay off debt and proceed with organizational expansion. The market offers investors the opportunity to profit from stock price increases and dividend payments from companies. There is a bilateral correlation between economic performance and stock markets. To reduce the risk of loss, investors are likely to increase their investment (Amado & Choon, 2020), conversely, stock prices impact consumer and business confidence, which influences the overall economy.

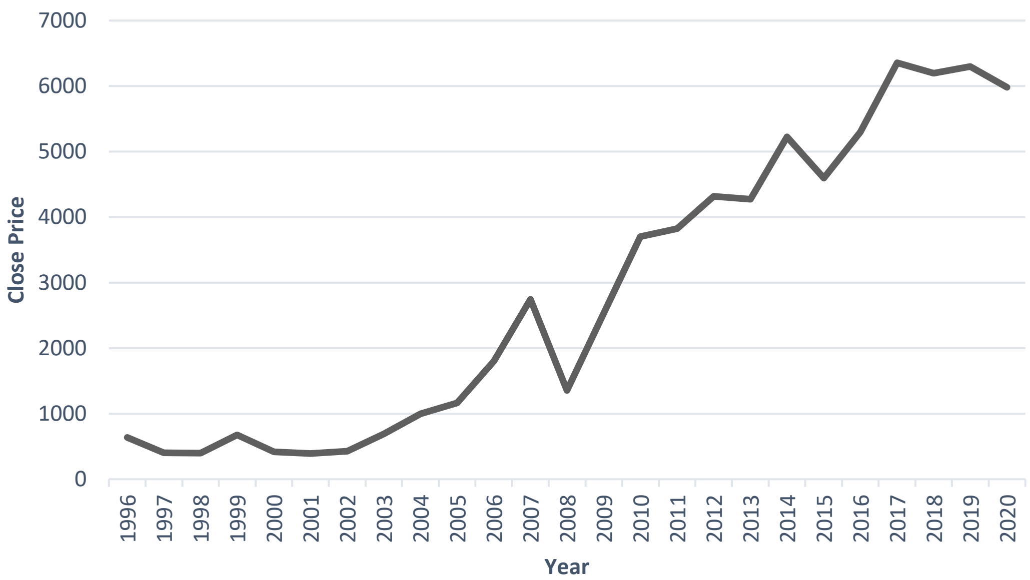

Figure 1. Indonesia equity market index: Jakarta composite
Source: CEIC (2021)

The stock market has experienced several crashes in the past few decades. Figure 1 presents the Indonesia Equity Market Index. The stock market indices determine a country's economic health, therefore, the stock price behavior must be investigated by policymakers to ensure preventive actions before the stock price changes further weaken the economy. In this regard, it is important to predict the stock prices. The presence of asymmetric responses of stock prices to the changes in macroeconomic fundamentals provides an additional avenue for the investigation of stock price behaviour, as more information can be obtained from asymmetric analysis.

Furthermore, monetary policies are linked to interest rates and credit availability, in which the instruments are short-term interest rates and bank reserves that function via the monetary base. The central bank of Indonesia or Bank Indonesia (BI) is a fully autonomous state institution that serves as the monetary authority. The inflation rate in Indonesia reflects the price stability of products and services, therefore, to attain and sustain price and financial system stability, exchange rate stability is essential. Indonesia has been using the Inflation Targeting Framework (ITF) to replace the base monetary policy target since July 1, 2005. In reality, the ITF was executed by using the interbank rate as the operational aim and the policy rate as the monetary policy signal. Subsequently, Flexible ITF was implemented as BI could not solely consider