CHAPTER I

INTRODUCTION

1.1 Background

The world continues to change in various aspects of life, such as technology, politics, social and cultural elements, and the economy. These changes have no specific limits in terms of producing positive or negative impacts; in other words, there is uncertainty. Every aspect of life, especially the economic aspect, has risks and uncertainties that threaten or cast doubt on policy-making decisions in that aspect. This happens in every country. Uncertainty is a significant factor in financial and economic decision-making (Baker et al., 2016; Bloom, 2014). The economic aspect is a major factor that influences the quality of life, social welfare, and development of a country (Kainama, 2024).

The current global economic situation is facing challenges in the form of uncertainty surrounding global economic policy. Global Economic Policy Uncertainty (GEPU) is uncertainty caused by changes or inconsistencies in economic policies in major countries. For example, the Federal Reserve's aggressive interest rate hikes without clear signals in the 2022-2023 period, the US government's sudden change in import tariffs due to the 2018 US-China trade war, etc. This uncertainty can be measured using the Global Economic Policy Uncertainty Index. Similarly, the Global Price of Brent Crude is one of the indicators of external shocks for various countries.

GEPU Index is a composite measure or index of domestic Economic Policy Uncertainty (EPU) from 20 major countries in the world, namely Australia, Brazil, Canada, Chile, China, France, Germany, Greece, India, Ireland, Italy, Japan, Mexico, the Netherlands, Russia, South Korea, Spain, Sweden, the United Kingdom, and the United States (Baker et al., 2016).

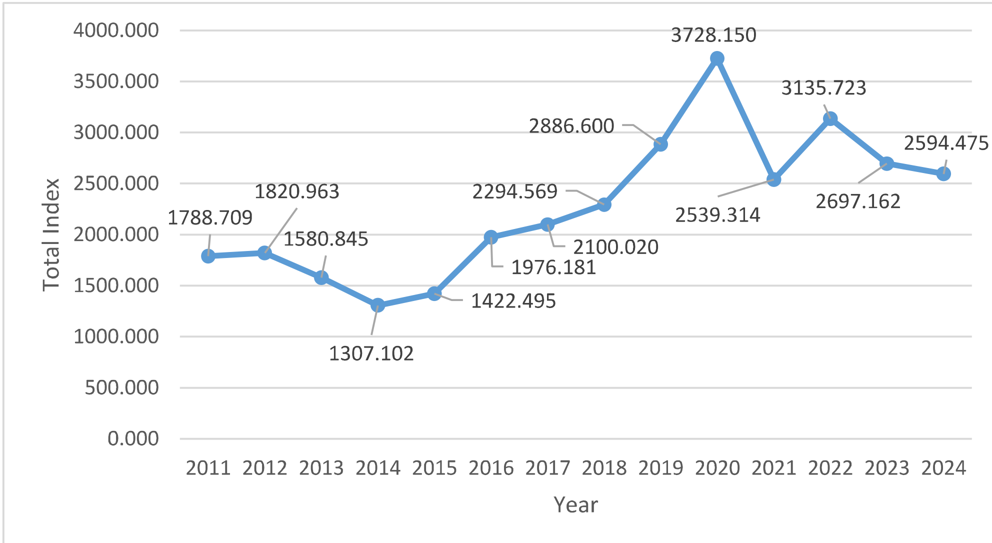

Figure 1. 1 Total Index per Year of Global Economic Policy Uncertainty

Source: Data Processed from FRED, 2025

Figure 1.1 shows that the total GEPU Index in 2011 reached 1,788.709, and since 2016, there has been an increase in GEPU, peaking in 2020 due to the COVID-19 pandemic, which resulted in rapidly changing policies and higher risks (PwC, 2023), reaching a total index of 3,728.150. In 2021, the index declined as it began to adjust to the pandemic conditions. Then, in 2022, there was a significant increase due to high inflation, the strengthening of the US dollar, interest rate hikes, and the impact of the Russia-Ukraine war (PwC, 2023). From 2022 to 2024, the total GEPU index graph shows a consecutive decline. This decline is due to declining and stabilizing inflation rates, clear policy predictions, and more manageable global risks (Kementerian Keuangan, 2022; Limanseto, 2022). This indicates that the greater the increase in the GEPU index, the greater the uncertainty in the direction of fiscal, monetary, trade, and global regulatory policies. This increase in GEPU also determines the extent of the shock received by an economy (Ayeni & Fanibuyan, 2022). In addition to GEPU, the Brent Oil Price also has an impact on a country's economy.

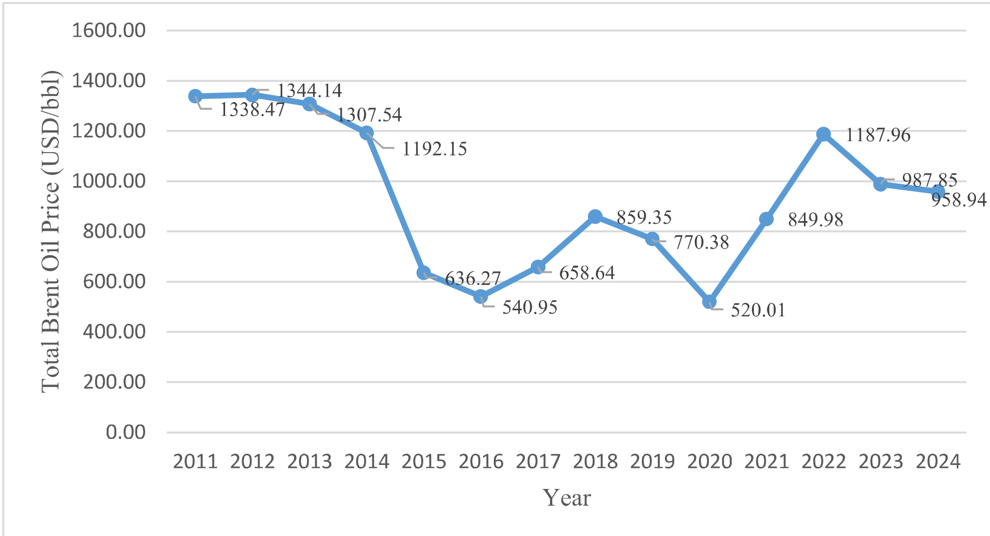

Figure 1. 2 Annual Total Global Price of Brent Crude

Source: Data Processed from FRED, 2025

Figure 1.2 shows that the total Global Price of Brent Crude from 2011 to 2014 was relatively high and stable. In 2015 and 2016, the world oil price fell drastically. This condition was associated with oversupply and OPEC's policy of not cutting production to maintain market share. Policy alignment began to occur in the period from 2017 to 2019, but it was still unstable due to geopolitical tensions during those years. A year later, in 2020, there was a significant decline due to the COVID-19 pandemic. After the pandemic, in 2021 and 2022, oil prices began to rise, in line with the recovery period. Finally, from 2023 to 2024, oil prices can be considered stable because they have experienced very little decline. With the Global Price of Brent Crude varying due to a combination of events, this reflects that global external shocks not only affect economic activity and price stability globally, but can also increase the level of domestic economic uncertainty in various countries.

Global economic uncertainty and external shocks in the form of the Global Price of Brent Crude are global in scope, which will undoubtedly spread to the level of internal uncertainty within a country. Indonesia is one of the countries affected by these two threats. This is illustrated by the World Uncertainty Index for

Indonesia, which is used as a reference to observe developments in domestic uncertainty.

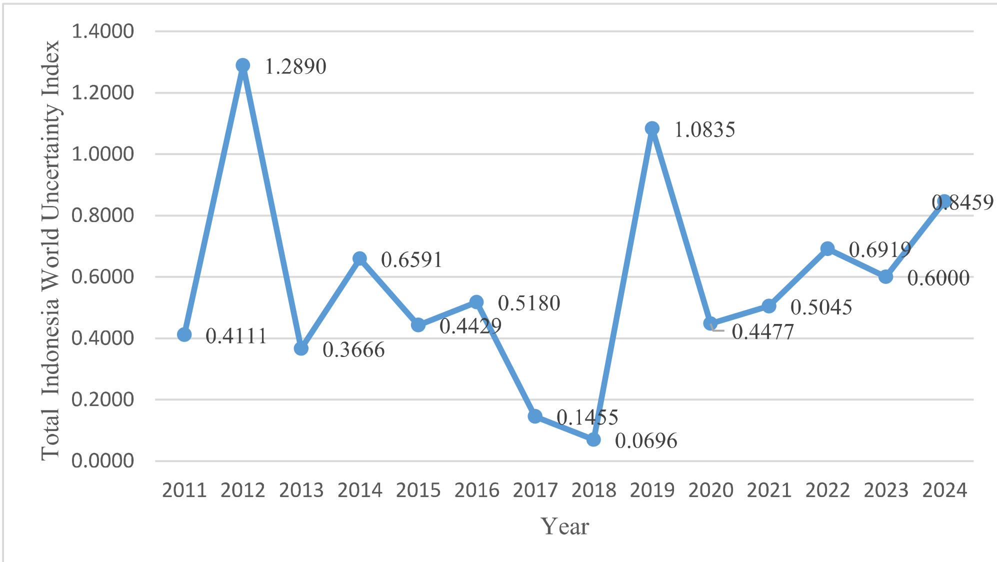

Figure 1. 3 Total Index per Year World Uncertainty Index of Indonesia

Source: Data Processed from FRED, 2025

As shown in Figure 1.3, 2012 saw the highest level of uncertainty. This phenomenon was driven by domestic and bureaucratic issues in Indonesia, the euro crisis and China's economic slowdown, as well as pressure from financial markets and capital outflows. The lowest level of uncertainty occurred in 2018, driven by several factors, including Indonesia's stable and positive economic growth of 5.07% in the previous year and 5.17% in 2018 (BPS, 2019), strong fiscal policies, and the dominance of household consumption at 55.74% of GDP (Kementerian Keuangan, 2018), and methodological factors that contributed to the low index, namely the minimal use of the word "uncertainty" in the Economist Intelligence Unit (EIU) report, or in other words, there was little uncertainty that was significant for Indonesia, so it was not highlighted too much. It can be said that the level of domestic uncertainty in Indonesia will have an impact on its own economic indicators, through macroeconomic variables, the behavior of producers and consumers, and policy.

The economic policy uncertainty index is related to many macroeconomic variables (Aytaç et al., 2022). Research by Perales & Borrego-Salcido (2024) found a relationship between GEPU and one of the macroeconomic variables, namely economic growth (GDP), in various regions of America, Europe, and Asia. Economic uncertainty also hurts money demand in Indonesia (Kurniawan et al., 2022). The effectiveness of monetary policy is also affected by economic uncertainty (Balcilar et al., 2022). Ultimately, the macroeconomic variable most affected by global economic uncertainty is inflation (Sun et al., 2019).

Uncertainty can affect inflation through various channels. Economic actors will adopt a "wait and see" approach before taking more risky actions. This could potentially lead to deflation due to a decline in demand for goods and services. Conversely, it could cause price inflation when economic policy uncertainty disrupts trade, leading to shortages of goods and higher production costs. Uncertainty can also hamper the central bank's ability to manage inflation by adjusting interest rates (Marasanti & Verico, 2024).

Inflation rates caused by global and domestic economic uncertainty, as well as external shocks, are more likely to occur in developing countries that generally adhere to an open economic system, such as Indonesia. Emerging market economies (EMEs) face challenges in managing monetary policy (particularly to reduce inflation) amid increasing global uncertainty. Emerging markets are highly vulnerable to external shocks (Hernández et al., 2024).

Figure 1. 4 Total Annual Inflation Rate in Indonesia

Source: Data Processed from BI Statistic, 2025

Figure 1.4 shows that Indonesia's inflation rate for the period 2011–2024 has been volatile and sensitive to changes in economic conditions. Inflation was relatively high in 2011-2015, then tended to be more controlled before experiencing a sharp decline during the COVID-19 pandemic. Subsequently, inflation rose again after the crisis, before finally showing a downward trend. This pattern shows that the inflation dynamics in Indonesia are influenced by a combination of demand and cost pressures, and demonstrates the importance of policy stability in maintaining price stability.

Maintaining price stability (inflation) is key to effective macroeconomics, monetary policies, and the national economy (Maulidya et al., 2025). The task of maintaining price stability is carried out by the central bank. The Indonesian central bank implements a monetary policy to maintain price stability, namely, low inflation and exchange rate stability (Hervino, 2025). One of Bank Indonesia's monetary policy instruments to achieve this goal is the benchmark interest rate policy (BI-Rate Policy). Inflation and interest rates have a two-way relationship. An increase in inflation causes a significant increase in interest rates (Aytaç et al., 2022). An increase in interest rates has a significant negative effect on inflation and inflation expectations (Adya Pandu Diputra Rizal et al., 2024; Arce-Alfaro & Blagov, 2023).

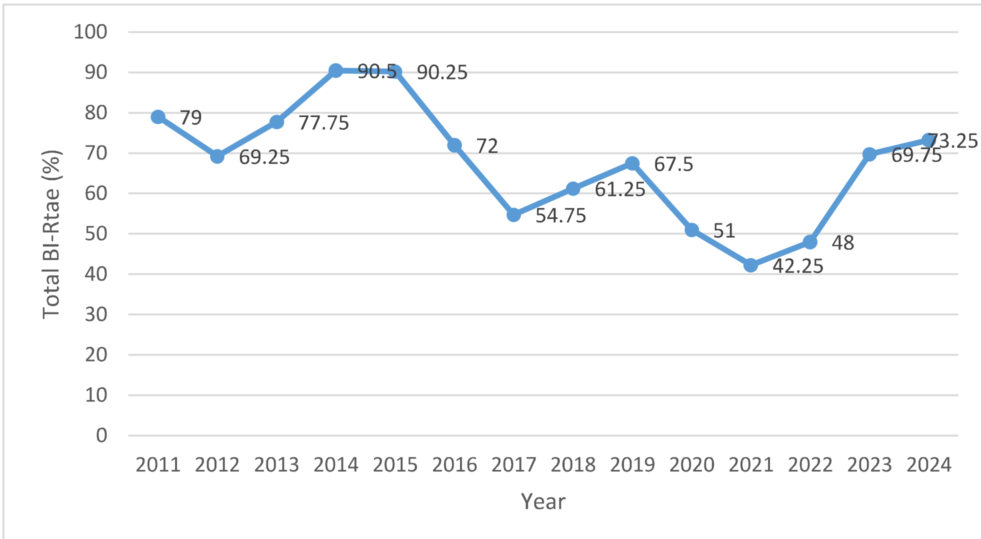

Figure 1. 5 Total BI-Rate per year in Indonesia

Source: Data Processed from BPS, 2025

Figure 1.5 is a graph of Indonesia's BI Rate for the period 2011–2024, showing that monetary policy is adaptive and responsive to economic dynamics. The BI-Rate has undergone phases of tightening, loosening, and readjustment in line with macroeconomic conditions, reflecting Bank Indonesia's active role in maintaining economic stability and the credibility of monetary policy. However, the BI-Rate policy to curb inflation and economic instability caused by global economic policy uncertainty also has an impact on other economic variables or sectors, such as the trade-off between price stability, economic growth, and employment (Sriyono, 2013), and a decline in investment and consumption, which can slow economic growth (Lesmana et al., 2025).

After a comprehensive review, when global economic policy uncertainty increases, it means that world economic conditions become more unstable and cause various pressures from abroad, including the dynamics of the Brent oil price.

This pressure then affects domestic inflation, for example, through price increases, supply disruptions, or credit channels and interest rates. This external shock is reflected in the dynamics of Indonesia's World Uncertainty Index (WUI), which measures the level of domestic uncertainty that determines the BI Rate policy response period. In response to this situation, Bank Indonesia adjusts the BI Rate as the main monetary policy tool. When inflationary pressures and global risks increase, the BI Rate tends to be raised to maintain price stability, while when pressures weaken or the economy slows down, the BI Rate is lowered to support recovery. These high and low conditions are represented by Indonesia's WUI. However, other domestic risks are also crucial in the implementation of this BI Rate policy. Based on data from Global Economic Policy Uncertainty, Brent Oil Price, World Uncertainty Index of Indonesia, Inflation, and BI-Rate discussed earlier, the relationship is still unclear. Most previous studies also use the more limited Economic Policy Uncertainty (EPU) variables and have not fully combined GEPU, Brent Oil Price, and periods based on domestic WUI in one research design, especially in Indonesia. From several previous studies, it can also be concluded that the relationship between economic policy uncertainty and inflation varies or is not linear (Aytaç et al., 2022; Marasanti & Verico, 2024). Meanwhile, others conclude that the effectiveness of monetary policy weakens amid high uncertainty (Balcilar et al., 2022; Bloom, 2014).

Therefore, research that directly tests the effectiveness of the BI-Rate as Indonesia's monetary policy response to inflation pressures caused by Global Economic Policy Uncertainty (GEPU) and the Global Brent Oil Price as external shocks remains very limited. The use of domestic WUI as a determinant of periods or regimes of high and low uncertainty makes this study more in-depth in examining the effectiveness of monetary policy in Indonesia. These conditions underline the urgency of this research. According to previously mentioned issues and urgency, the title of this study is: "The Effectiveness of BI-Rate in Controlling Inflation Under High and Low Uncertainty Conditions in Indonesia."

1.2 Problem Statement

Based on the background, this research will focus on:

1. How effective is the BI-Rate Policy in controlling inflation when there are conditions of high and low uncertainty in Indonesia?
2. How does the inflation respond to external shocks (GEPU and Brent Oil Price) when conditions of uncertainty are high and low in Indonesia?
3. How the contributions and spillover effects of the BI Rate, GEPU, and Brent crude oil prices on inflation under conditions of low and high uncertainty in Indonesia?
4. What is the relationship between Global Economic Policy Uncertainty, the Brent Oil Price, Indonesia's World Uncertainty Index, the BI Rate, and Inflation under conditions of high and low uncertainty in Indonesia?
5. Are there differences in the relationship between Global Economic Policy Uncertainty Index, the Brent Oil Price, Indonesia's World Uncertainty Index, the BI Rate, and Inflation under conditions of high and low uncertainty?

1.3 Research Objectives

Based on the previous part, which is the problem statement, the objectives of this research are:

1. To determine the effectiveness of the BI-Rate Policy in controlling inflation during periods of high and low uncertainty in Indonesia.
2. To explain the response of inflation to external shocks (GEPU and Brent Oil Price) during periods of high and low uncertainty in Indonesia.
3. To determine the contributions and spillover effects of the BI Rate, GEPU, and Brent crude oil prices on inflation under conditions of low and high uncertainty in Indonesia.
4. To understand the dynamics and patterns of the relationship between Global Economic Policy Uncertainty, Brent Oil Price, the World Uncertainty Index of Indonesia, BI-Rate policy instruments, and inflation under high and low uncertainty conditions in Indonesia.

5. To identify differences in the patterns of relationships between Global Economic Policy Uncertainty, Brent Oil Price, the World Uncertainty Index of Indonesia, BI-Rate policy instruments, and inflation under high and low uncertainty conditions.

1.4 Research Benefits

This research is expected to provide the following benefits:

a. For the Author

This research provides benefits in deepening the understanding of the relationship between Global Economic Policy Uncertainty and external shocks, domestic uncertainty in Indonesia, Bank Indonesia's monetary policy, and inflation in Indonesia. In addition, this research serves as a means of developing analytical and methodological skills that are useful for the author's academic and professional development in the field of economics.

b. For Government and Policy Makers

Specifically for Bank Indonesia, this study is expected to provide an empirical description of the role and effectiveness of interest rate policy in responding to global and domestic economic uncertainty, as well as external shocks to inflation. The result of this study can be used as consideration in formulating a monetary policy that is more adaptive and responsive to global economic dynamics, so that efforts to maintain price stability and national macroeconomic stability can be carried out more effectively.

c. For Academics

This study is expected to enrich the empirical literature on uncertainty and monetary policy in developing countries, particularly Indonesia. The results of this study can be used as a learning material in monetary economics and international economics studies.