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Is Inflation only a Monetary Phenomenon?

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Abstract: Ever since Milton Friedman famously stated, "inflation is always and everywhere a monetary phenomenon," there has been a debate over whether that argument is correct. This paper reviews a number of studies from around the world to evaluate the validity of the statement worldwide and under which conditions it is true. It has been observed that whether the real data in the economy conforms to the quantity theory of money (QTM), varies from country to country. In some countries, the economic data is aligned with QTM, but in others, they are not. Due to this, whether inflation is a monetary phenomenon or not has been questioned. My research revealed that whether or not inflation is a monetary phenomenon appears to be country-specific. In addition, the level of inflation might play a role in determining this argument. Money supply and inflation have a significant link in economies with high inflation, which corresponds to QTM. On the other hand, low-inflation countries have a relatively weak and negligible link between money supply and inflation.

Keywords: Inflation; Monetary Phenomenon; Quantity Theory Of Money; Countries

1. Introduction

Inflation, a common economic issue in the world, occurs when the buying power of a currency decreases due to rising product prices. While low inflation can stimulate economic growth, excessive inflation can be detrimental to the economy. Since controlling inflation is so important for any country, various hypotheses have been presented to explain why it happens. Economist Milton Friedman argued that "inflation is always and everywhere a monetary phenomenon" (Friedman, 1963), implying that only when the quantity of money rises faster than the number of items produced can inflation occur. The quantity theory of money (QTM) underlies the theory of Freidman, which has been supported by several studies undertaken in various nations.

However, some economists believe that non-monetary factors, such as oil prices and supply chain difficulties, also contribute to inflation. Inflation is not a monetary phenomenon. Many studies revealed results that were contrary to the statement of Friedman. The inconsistent findings led me to wonder whether inflation is essentially a monetary phenomenon. In this paper, I focus on analyzing the research conducted in different countries to explore whether the statement of Friedman is correct or not in different countries and under which conditions the statement is correct.

2. Research

The statement that inflation is a monetary phenomenon is established on the Quantity Theory of Money (QTM):

$$MV = PY$$

In this formula, M represents the money supply, V represents the velocity of money, P is the price level, and Y refers to the real gross domestic product.

Many studies gained results that supported QTM. Based on a study conducted by M. Ali Kemal (2006) in Pakistan, money growth and inflation were positively connected in the long term, and the results he obtained were compatible with QTM. Kemal concluded that inflation is a monetary phenomenon in the long run in Pakistan.

Also, some researchers analyzed how monetary and fiscal factors affect inflation rates and concluded that inflation is entirely a monetary phenomenon. For example, in Indonesia, Irma Febriana (2018) discovered a small link between government expenditure and real economic production but a large association between money supply and exchange rate, indicating that inflation in Indonesia is a monetary rather than a fiscal issue. Additionally, one study in central Sulawesi examined the impact of monetary and fiscal variables on inflation as assessed by the consumer price index (CPI). According to the study, monetary variables influence inflation more than fiscal variables, making inflation in central Sulawesi a monetary issue. (Anam, Haerul, and Failur, 2020).

While many studies support this statement of Friedman, a large number of studies have demonstrated that inflation is not always a monetary phenomenon.

Several researchers collected long-time statistics to confirm that inflation is not a monetary phenomenon. Salami Doyin and Kelikume Ikechukwu (2013) studied data from 42 years of quarterly observations in Nigeria for research on the link between money supply and price level. They got results that were contrary to QTM, finding that there was a negligibly inverse relationship between money and prices. In another study conducted in Malaysia, Chor Foon Tang (2008) examined monthly data from 1971 to 2008 to determine the relationship between money supply and price level and discovered that inflation is not always a monetary phenomenon in Malaysia.

Other studies compared monetary and non-monetary factors to demonstrate that the statement of Friedman was false. Using data from Uganda, David Kihangir and Albert Mugyenyi (2008) discovered that even though inflation and monetary variables had a significant relationship, inflation and non-monetary variables had a significant relationship as well. Consequently, inflation cannot be considered purely a monetary phenomenon. Furthermore, Heba Youssef Mohamed Hashem (2019) conducted research in Egypt and found out that there was a positive relationship between fiscal variables like taxation and the consumer price index. The results indicated that inflation in Egypt is a fiscal phenomenon rather than a monetary phenomenon.

Although whether Friedman is right about the causes of inflation differs from country to country, the degree of inflation appears to have an impact on whether the inflation in an economy can be seen as a monetary phenomenon. When inflation is low, the relationship between money supply and inflation is not significant. When inflation is high, there is a significantly proportional connection between money supply and inflation rate.

One study conducted in east European countries showed that money growth had a greater impact on high-inflation countries. Dejan Živkov, Jelena Kovačević, and Sanja Lončar (2020) investigated how money growth affected inflation in the Czech Republic, Poland, Hungary, and Russia when markets had different levels of inflation. In the Czech Republic, Hungary, and Poland, increased money supply had little impact on inflation rates. Russia had a far greater inflation rate than the other three countries, and money supply expansion had a considerable influence on the Russian economy.

In another study, Paul De Grauwe and Magdalena Polan (2006) examined approximately 160 countries to check whether the relationship between money supply and inflation was compatible with QTM. Under high inflation or hyperinflation, a substantial connection between money supply and inflation was identified in the long term. However, in nations with low inflation, the link is less clear.

By analyzing all these studies, the level of inflation may indicate whether inflation is a monetary phenomenon in an economy.

3. Conclusion

From reviewing the studies mentioned above, I discovered that whether inflation is a monetary phenomenon or not depends on different countries. On the one hand, studies from countries such as Pakistan, Indonesia, and central Sulawesi suggest that the statement of Friedman is correct; on the other hand, evidence from Nigeria, Malaysia, Uganda, and Egypt indicates that there is no substantial link between money supply and inflation. Another discovery is that the level of inflation can influence whether inflation is a monetary phenomenon. Researchers from all over the world found that countries with a high level of inflation tend to have a high association between money supply and inflation. However, countries that have low inflation are likely to have a negligible link between money supply and inflation.

My essay has certain shortcomings that should be addressed. Since my paper is based on the research of other people, I do not apply a certain methodology to analyze the data and get my conclusion about the relationship between money supply and inflation. Additionally, this paper is a qualitative study about whether inflation is simply a monetary phenomenon; I have not learned how to quantitatively analyze statistics. Moreover, because I have just started learning economics and finance, there are some parts in the essays included that I did not understand.

In my future research, I will conduct my research and collect data to empirically analyze the statistics and apply certain methodologies. I will keep on learning economics and finance to have a better understanding of the economic topics. The shortcomings in this paper will be addressed in my future research.

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