



## Unemployment, Inflation and Economic Misery in Nigeria

Benedict Ikemefuna UZOECHINA<sup>1</sup>, Kenneth JEGBEFUMWEN<sup>2</sup>, Ngozi Florence EZENWOBI<sup>3</sup>, Chika Maureen OKAFOROCHA<sup>\*4</sup>, Josephine Obiageli OPENE-TERRY<sup>5</sup>, and Geraldine A. EKWOH<sup>6</sup>

<sup>1,3,4,5</sup>Department of Economics, Nnamdi Azikiwe University, Awka, Anambra State, Nigeria

<sup>2</sup>Department of Economics, Novena University, Ogume, Delta State, Nigeria

<sup>6</sup>Department of Economics, University of Nigeria, Nsukka, Enugu State, Nigeria

Received: 20.12.2025 | Accepted: 14.01.2026 | Published: 17.01.2026

\*Corresponding author: Chika Maureen OKAFOROCHA

DOI: [10.5281/zenodo.18277727](https://doi.org/10.5281/zenodo.18277727)

### Abstract

### Original Research Article

Nigeria is presently bedeviled by severe economic hardship which threatens the survival of many Nigerians especially the poor ones due to rising inflation. This study aims at establishing the causal link between inflation, unemployment and economic misery experienced in the Nigerian economy and thus, understand and address the complex interplay between inflation, unemployment and wellbeing of the Nigerian populace. The study used the Tado-Yamamoto Dynamic Granger Causality test approach and found that on the one hand, inflation rate and bank lending rate granger-cause economic hardship, while unemployment rate and per capita GDP growth rate have bi-directional relationship with economic hardship, on the other. The findings emphasized the dire need for structural reforms targeted at urgently improving agricultural productivity, reducing dependence on imports, and the fostering of a stable political and economic environment to improve/build investor confidence and attract the necessary investments for sustainable growth.

**Keywords:** Economic misery, Inflation, Unemployment, GDP growth rate.

Copyright © 2026 The Author(s). This is an open-access article distributed under the terms of the Creative Commons Attribution-Non Commercial 4.0 International License (CC BY-NC 4.0).

## 1. INTRODUCTION

Misery is an economic concept created by Arthur Okun in the 1970's to explain the economic discomfort of a country contributed by the simultaneous existence of rising unemployment and inflation in an economy at a particular period of time. The United States was used as a snapshot to this effect (Halton, 2023). Hanke (2014), calculated the misery index as the total of unemployment and inflation rates, stating that average citizen's economic condition is

determined by the index which is the sum of the annual inflation rate and the seasonally adjusted unemployment. Halton (2023) stressed that since unemployment and inflation are both considered detrimental to any economy, their combined value is useful as an indicator of overall economic health and well-being of the people and this is known as the misery index.

The latest misery index developed by Hanke (2014) considered the addition of bank lending rate and GDP per capita growth rate; hence, it



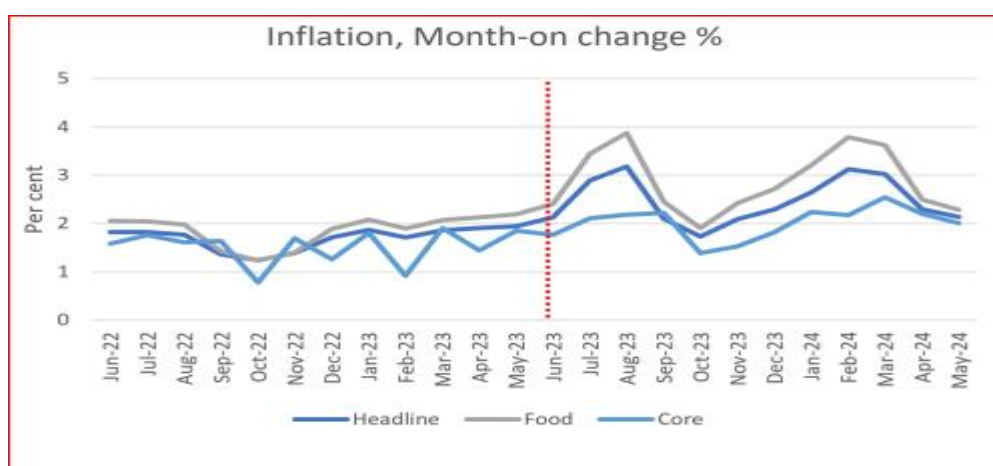
was determined by summing up the three components of inflation, unemployment, and the lending rates of banks deducting the growth rate of per capita GDP. The variations in these indicators have enormous impact on the misery index. The high values of the first three factors plus the low value of the fourth one will, without a doubt, increase the index and worsen the level of misery among the people (Dauda, 2023). A high or increasing misery index has the potential to cause poverty and affect negatively the low-income class since they are the ones who bear the brunt of the negative impacts of the different components of the index (Dauda, 2023).

The misery index in Nigeria went up from around 61.2 in the last quarter of 2022 to nearly 73.1 in the mid-year 2023. According to the latest report of Steve Hanke's Annual Misery Index (HAMI), which covers 156 countries, Nigeria has shifted its ranking from 15th position in 2020, then to 11th in 2021 worldwide and the fourth in Africa. This means the country is considered the 11th most miserable nation in the world and the fourth in Africa, respectively. The present annual misery index using the Hanks index valuation stands at 53% on average with each quarter having values between 50-70% on average in 2023.

Among the Hanken annual misery index indicators, inflation is the most volatile. The

Central Bank of Nigeria (2020), considers inflation as the increase in prices measured over a specified time period. Normally, inflation is represented by quite a broad indicator that may be e.g. the total cost of living or the overall price increase in a country. To put it differently, it is the gradual but continuous rise in the general price level of goods and services in an economy that lasts for a specific period (Oner, 2020). As defined by the Nigeria Bureau of Statistics (2022), the inflation rate in Nigeria was on average 13.0% during the ten years period that ended in 2022. At present, inflation rate is approximately 33.6% (NBS, 2024). The most typical and widely referred to measure of inflation is the Consumer Price Index (CPI) which indicates the percentage movement in prices of the basket of goods and services typically consumed by households. This upward swing in inflation in Nigeria in this current and last administration is expected to impact heavily on the misery index.

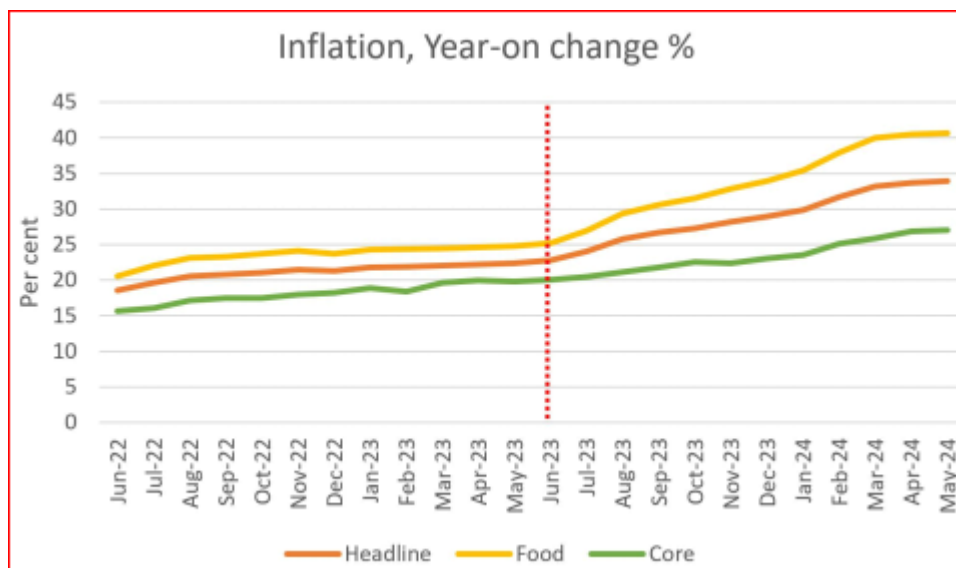
According to NBS, (2023), month-on-month inflation has increased since the present administration while also having a higher variance. In **Figure 1**, food inflation was the highest in August, 2023 and February, 2024 followed by headline inflation.



**Figure 1:** Inflation month – on – month % of past administration and present administration  
Source: NBS, 2024

In **Figure 2**, the year-on-year change in inflation has also increased since the present administration. According to NBS (2023) on the latest consumer price index and inflation, headline inflation climbed to 33.95% by May

2024. Food inflation rose to 37.95% in March and 40.66% in May 2024. The rising inflation is untamed by the present government regime in Nigeria.



**Figure 2:** Inflation year – on – year % of past administration and present administration  
Source: NBS, 2024

The other factor very important in the estimation of the misery index is unemployment. The unemployment rate in Nigeria which is not as volatile as inflation rate still remains

problematic, even though it has not risen as fiercely as the inflation rate. Nigeria's unemployment rate according to the World Bank (2023) stands at 5%.

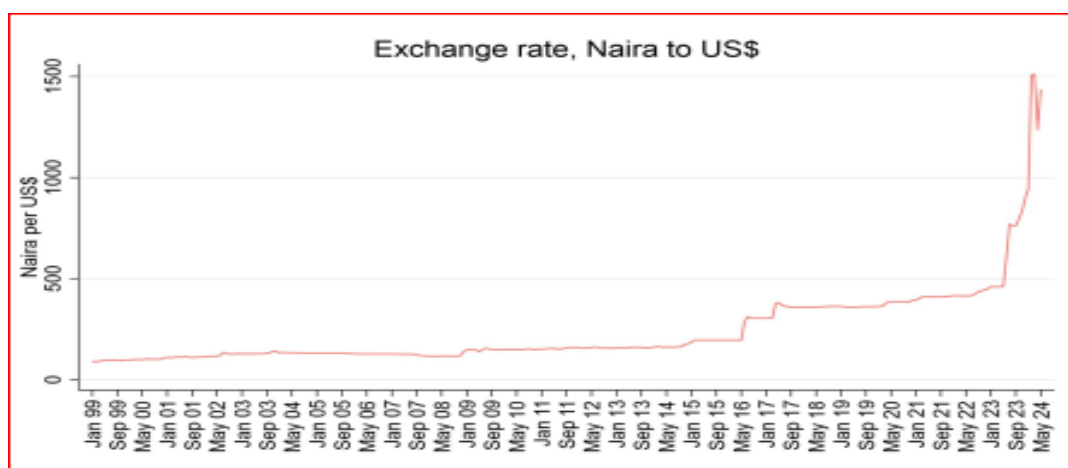
Indicators	Q4 2022	Q1 2023	Q2 2023	Q3 2023
Labour Force Participation Rate	77.8	79.9	80.4	79.5
Employment-to-population Ratio	73.6	76.6	77.1	75.6
Share of employed people in self-employment	84.0	86.0	88.0	87.3
Own-use Producer of foodstuff	5.6	3.9	4.8	4.1
Youth Unemployment Rate	8.3	6.9	7.2	8.6
Urban Unemployment Rate	6.3	5.4	5.9	6.0
Rural Unemployment	4.0	2.9	2.5	4.0
Wage Employment Rate	13.4	11.8	12.0	12.7
Informal Employment	93.5	92.6	92.7	92.3

**Table 1:** Employment and unemployment rates for past and present administration  
Source, NBS, 2024

However, in **Table 1**, NBS put youth unemployment, urban unemployment and rural unemployment in 3rd quarter of 2023 at 8.6%, 6.0% and 4.0% respectively. The size of the labour force decreased in 3rd quarter of 2023, evidenced by the participation rate and employment-to-population ratio. Youth unemployment increased in 3rd quarter of 2023. Urban Unemployment increased marginally, while rural unemployment grew significantly. This is due to the rise in population that has outpaced economic growth in the country. In accordance to Ubah (2021), another possible

reason is that the current investment situation is not very appealing in Nigeria as local and foreign investments do not meet the required levels.

Furthermore, stability of the economy is not guaranteed in the face of high inflation as many economic activities are halted down. Economic growth is hindered as risk of uncertainties in price fluctuation discourage investment and business expansion. NBS, (2024) postulates that persistent inflation largely contributed to exchange rate volatility.



**Figure 3:** Monthly exchange rate from 1999 - 2024  
Source: NBS, 2024

Money loses its value during inflation. Its purchasing power keeps depreciating. Consumers cannot afford to buy much with the same amount of money as prices of commodities are persistently shooting up. The situation is worsened with depreciating and high volatility of the exchange rates as seen in **Figure 3**.

Although there are studies such as Smith, (2020), Jones, (2019) that investigated the effect of inflation on economic hardship, however, investigating whether a causal relationship exists between unemployment, inflation and economic misery in Nigeria has been largely neglected and this study seeks to fill this gap and so provide a more nuanced insight into the menace of inflation in the economy.

## 2. LITERATURE REVIEW

Several studies have articulated empirically various outcomes of inflation from macroeconomic policies and the impact on economic growth. Some studies went as far as investigating the contributions of these policies to misery index in Nigeria. While others went ahead to question the impact and relationship of unemployment, exchange rate and inflation to the Nigerian economy.

George-Anokwuru, (2023) studied the nexus existing between monetary policy and Nigeria's misery index over the period 1985 to 2019. The misery index was calculated as a combination of inflation, unemployment, and lending rates,

minus the percentage change in Per capita Real Gross Domestic Product. Findings indicated that during the time of the study, exchange rate and monetary policy rate were significantly related to the misery index in Nigeria. On the other hand, the broad money supply did not exhibit any significant relationship with the misery index in Nigeria. The research then drew the conclusion that monetary policy has the capacity to lower the misery index in Nigeria but it has not been properly managed to such an extent during the period of study. In other words, monetary policy has not been effective in bringing down the misery index in Nigeria during the time of the study.

Effiong, Okon, and Arinze, (2022) conducted a study on the frustrating economic situation in Nigeria, thus asking the question whether we can rely on monetary policy? The long-run estimates showed that the impact of monetary policy rate on economic misery is significant and positive. In addition, it was found that the impact of monetary policy rate on inflation has been positive and significant while the impact on unemployment has been negative but insignificant. The impulse response function depicted that economic misery reacted positively to monetary policy shocks in the short-run but this reaction is being broken down in the long-run.

In their study, Anaele and Nyenke (2021) analyzed the impact of fiscal policy on the misery index in Nigeria for the period of 1981 through 2018. Findings indicated that government recurrent expenditure (GREX), government external debt (GEDT), and government capital expenditure (GCEX) reduced the misery index in Nigeria for the current period. However, the rising external debt in the current period worsened the misery index in Nigeria. Moreover, results also reveal that fiscal policy alone under the present regime of market-based policy had a poor performance in alleviating economic misery in Nigeria because it was insignificant.

The study conducted by Aderemi et al. (2022) analyzed the relationship between economic growth and unemployment in Nigeria. Their findings showed a significant positive correlation between economic growth and

unemployment rate in the short run. This means that the Nigerian economy was growing without creating jobs in the short run but the opposite scenario was in place in the long run. The study suggested that if the Nigerian policy makers are aiming at inclusive growth (reduction of unemployment), then the policies which promote productivity rise across all sectors of the economy along with restricting imports should be implemented.

Çuhadar and Cafri, (2021) studied the relationship between unemployment or inflation and crime and came out with the question of what the misery index indicates about the causes of crime? For the period of 2004-2017 they applied dynamic panel data methodology and reached the conclusion that the increases in the index of misery led to an increase in the number of crimes.

Zahid, (2018) looked into the relationship between economic misery, exchange rate, interest rate, and foreign direct investment (FDI) in Pakistan empirically during the years from 1972 to 2013. The results of the study showed that economic misery and political instability had a negative and insignificant impact on FDI in Pakistan. On the other hand, the exchange rate proved to be positively and significantly correlated with FDI during the period under consideration. In spite of the fact that exports are crucial to the growth of the economy, the study found a negative and insignificant influence of exports on FDI. The interest rates and the GDP were strong factors determining FDI flows into Pakistan, as they have positive and significant relationship with FDI. It can be deduced from these results that the country would get more FDI inflows when the interest rates are lower and the GDP is higher. Yet, it can be inferred from the findings that dealing with economic problems, like political instability and export dynamics, is necessary to make Pakistan more attractive as an FDI destination.

The study by Audi and Ali, (2023) covered a period of 32 years from 1987 to 2019 and analyzed the interconnection between public policy and economic misery between the developed and the developing countries. By way of empirical evidence, the article suggested that domestic investment, foreign debt, and

government revenue were the three factors discouraging economic misery in developing countries. Although economic development and population level were the two other factors encouraging economic misery in developing countries. In developed countries, the level of domestic investment promoted economic misery, while government revenue and economic development decreased economic misery. When analyzing the whole sample, the factors of domestic investment and government revenues were found to lower the level of economic misery, while population, foreign debt, and economic development were the three factors that depressed the economic misery.

Ovat (2020) examined the issue of whether macroeconomic policies could alleviate the citizen's misery in a developing economy. Their research concluded that Nigerian people's difficulties could not be lessened through the real GDP (an indicator of economic growth) and fiscal policy; meanwhile, the substantial impact of monetary and trade policies in easing the suffering of the Nigerian people was considered.

Tule, Egbuna, Dada, and Ebu (2017) analyzed a dynamic disaggregation of the misery index in Nigeria for the period 2002Q1 to 2016Q4. The findings revealed a lowest and highest misery rates of 16.92% (2007Q3) and 53.42% (2016Q4), respectively, with a mean value of 31.49% during the study period. The index was found to have a skewness of 0.31% suggesting moderate level of asymmetry and a kurtosis of 3.26% indicating that the index is leptokurtically distributed with a rough standard deviation of 8.00%. This points to the presence of a considerable amount of volatility. The calculation also showed that a reduction in the expected variation in inflation leads to an increase in the unemployment rate by 61.0 percent decrease in the variation in expected inflation related to a unit change in the variation between the potential and actual rates of unemployment throughout the study duration, which corroborates theoretical assumptions. Overall, the outcomes indicated that the quality of life in Nigeria has deteriorated over time, particularly between 2013Q3 and 2016Q4.

Akinlo (2024) analyzed the nexus between corruption and misery index in Nigeria through

the method of autoregressive distributed lag over the period of 1980-2018. The results revealed that corruption and poverty were almost the same in Nigeria. The inflation and unemployment rates reduction in the country has to be done by the right monetary and fiscal policies. In addition, government initiatives aimed at boosting the country's economic activity would mainly reduce the level of corruption in the long run.

## Theoretical review

### Okun's Law

The theoretical framework that is relevant for explaining economic discomfort is the Okun's law of misery index. The misery index was conceived by Arthur Okun, the pioneer economist who, in 1966, came up with a measure for the level of misery or economic discomfort experienced by citizens in an economy. The index indicated the loss of general welfare as well as the level of objective economic malaise in an economy as the unweighted sum of the annual inflation and unemployment rates.

That is,  $MI = \pi + U$  (1)

Where: MI = Misery Index  $\pi$  = Annual Inflation rate U = Total unemployment rate.

Okun's misery index has been the subject of numerous criticisms lately, especially regarding its oversimplification, though it has been widely used as a contemporary measure of economic well-being. In this regard, Steve Hanke made a slight modification to the original Okun's misery index in 2019.

Hanke (2019) improved the Okun's misery index by summing up the inflation, unemployment and bank lending rates and then deducting the real GDP per capita's percentage change. This can be symbolically represented as:

$$MI = \pi + U + R - \Delta Y \quad (2)$$

Where: MI,  $\pi$  and U, are as defined in equation (1) R = Bank lending rate  $\Delta Y$  = Percentage change in real GDP per capita.

Higher readings on the first three variables in equation (2) in his words, are "bad" and make people miserable. On the other hand, higher readings on the fourth variable (GDP per capita

growth) are “good” and are thus subtracted from the sum of the “bads”, to offset the misery index.

### The granger causality test

This test is conducted to see whether there is a causal relationship that exists between the

variables concerned. The hypothesis testing is thus:

**H<sub>0</sub>:** There is no causal relationship between the variables

**H<sub>1</sub>:** There is a causal relationship between the variables

## 3. METHOD

### 3.1. Data Source

**Table 2: Variables of the study, measurement and sources**

Variable	Measurement	Source
<b>Inflation rate</b>	Annual series in index (2009 = 100)	CBN, 2024
<b>Unemployment rate</b>	Annual series in rate of % of Population	World Bank, 2024
<b>Bank Lending Rate</b>	Annual series in rate (%)	World Bank, 2024
<b>Per capita growth rate</b>	Annual series in rates (%)	World Bank, 2024
<b>Misery Index</b>	Annual rate in %	WDI, 2024

Source: Author's compilation

Table 2 presents the sources of data and their units of measurement.

### 3.2. Estimation Technique

The author used Tado-Yamamoto Dynamic Granger Causality test to estimate the causal relationship between inflation and economic misery proxied by the misery index. The Tado-Yamamoto dynamic Granger Causality is adopted in order to overcome the problem of non-

stationary or uncorrelated error terms. Testing for Granger-causality using F-statistic when one or more time series are non-stationary could lead to spurious results.

The Toda and Yamamoto multivariate framework for our study is stated as follows:

$$\begin{aligned}
 MI_t = & \alpha_1 + \sum_{i=1}^{k+dmax} \beta_{1i} MI_{t-1} + \varepsilon_{it} + \sum_{i=1}^{k+dmax} \beta_{1i} Infr_{t-1} + \varepsilon_{it} + \sum_{i=1}^{k+dmax} \beta_{1i} Unemp_{rt-1} + \varepsilon_{it} \\
 & + \sum_{i=1}^{k+dmax} \beta_{1i} BLr_{t-i} + \sum_{i=1}^{k+dmax} \beta_{1i} PGr_{t-1} + \varepsilon_{it} \dots \dots \dots 1
 \end{aligned}$$

Where: MI is the misery index; Infr is the inflation rate; Unemp<sub>r</sub> is the unemployment rate; BL<sub>r</sub> is the bank lending rate; and PGr is the per capita GDP growth rate.

## 4. RESULTS AND DISCUSSION

### 4.1. Analysis of Result

#### a) Trend analysis of the relationship between inflation, unemployment and economic misery.

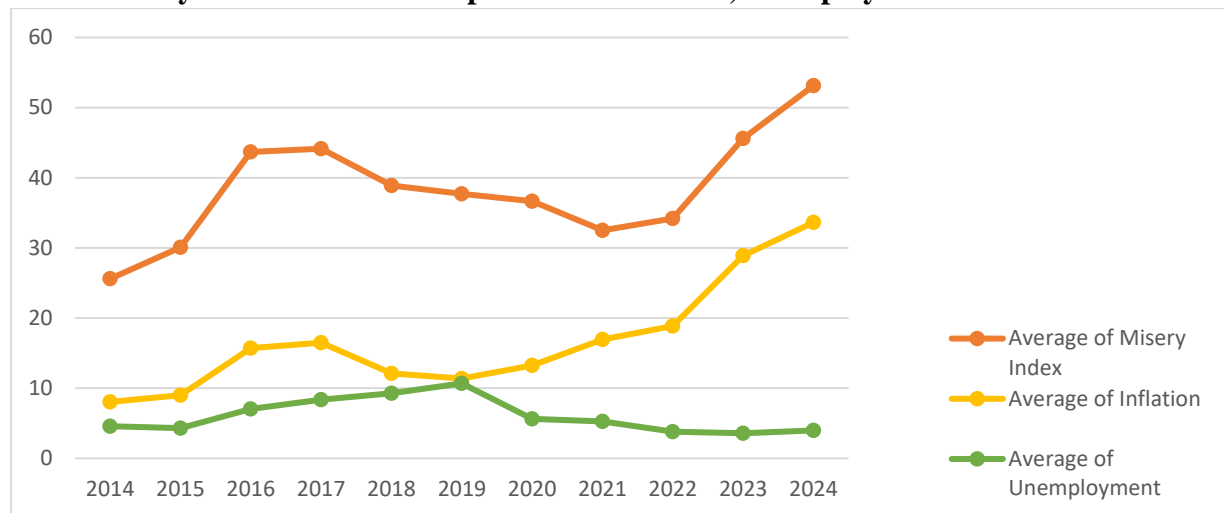


Fig 4: Trend analysis of inflation rate, unemployment and misery index (2014-2024)  
Data Source: The World Bank, 2024

**Figure 4** shows a ten year trend of inflation rate, unemployment and the resulting misery index in Nigeria. The graph shows the misery index having similar curve with inflation whereas, unemployment trends differently. In terms of unemployment, the trend above shows that Nigeria had the highest occurrence of unemployment in 2019 evidenced by a sharp surge in population and the prevalence of drastic economic recession in the country at that time. However, during that period, the inflation rate had a slight fall but increased the next year and has maintained an upward trend since then. In 2020, the unemployment rate fell to an average value of 5.63% from 10% of 2019. In 2021, the unemployment rate still maintained the 5% valuation and fell to an average value of 3% till the first quarter of 2024 where it stands at 5% (NBS, 2023). Comparing an unemployment rate of 4.63% at 2014 and 5% at 2024, one would be compelled to say that the average unemployment rate increase is not significant, but it is important to take into consideration the geometric growth rate of the population and other economic variables.

Evidence from the graph above also shows that since 2020, the inflation rate has been increasing with over 5% yearly. In 2020, Nigeria's inflation held at an average value of 13% but increased to 16.95% in 2021. In 2022, the inflation rate held an average value of 18.8%, and moved sporadically upwards to 28.92% in 2023 which is over a 10% increase. As at the first quarter of 2024, Nigeria's inflation stands at an average value of 33.63%.

Since the sum of inflation and unemployment would generate the misery index, statistics shows that inflation contributes more to misery index than unemployment rate if we take these two variables into consideration. More so, seeing that the misery index follows a similar trend with inflation rate, it is evident that the misery index responds more to the changes in inflation rate.

The misery index in Nigeria stands at an average value of 53% as at 2024, increasing rapidly from 45% in 2023 and 33% in 2022. However, to be empirically accurate, we will then go ahead to do a granger causality test to show the causal relationship that exists between the variables of the Hanks Misery Index Indicators in Nigeria.

#### 4.2. Tado-Yamamoto dynamic Granger Causality Test

This test is conducted to see whether there is a causal relationship that exists between economic misery and inflation. The hypothesis testing is thus:

**H<sub>0</sub>:** There is no causal relationship between the variables

**H<sub>1</sub>:** There is a causal relationship between the variables

The decision rule is to accept the alternative hypothesis that there is a causal relationship between the variables if the probability value (P Value) is less than the 0.05 level of significance chosen in the study. However, we will accept the null hypothesis if otherwise.

**Table 1: Results of the Tado-Yamamoto dynamic Granger Causality Test**

Dependent/ Variable	Sources of Causation				
	MI $\chi^2$	Infr $\chi^2$	unempr	Blr	PGr
MI	26.4521*	-	14.9567**	-	10.4632**
Infr	29.8034*				
unempr	16.7864**				
Blr	12.7894**				
PGr	17.9243*				

**Note:** \*\*\*, \*\* and \* indicate significance at the 1 %, 5 % and 10 % respectively.

Source: Authors' Computation, 2024, using E-view 10.0

The results of the Tado-Yamamoto dynamic granger causality test reveal that there is a bi-directional causality between current misery index and past misery index at 1% level of significance. For inflation rate and misery index, causality flows from inflation rate to economic misery at 5% level of significance. However, there is a bi-directional causal relationship between economic misery and unemployment rate at 5% level of significance on the one hand and economic misery and per capita GDP growth rate at 1% and 5% level of significance respectively, on the other. Bank lending rate is found to granger-cause economic misery with no reverse causation.

#### Discussion

Inflation has been found to cause economic misery in Nigeria. There is no doubt that economic misery has worsened from the

beginning of the present administration. As observed by World Bank (2022), about 95.1 million Nigerians were living below the national poverty line due to the compounding effects of inflation. Now that inflation rate has hit the roof with no solution in sight, poverty rate is expected to increase as more people slide into abject poverty. This drastic increase indicates that more citizens are finding it difficult to afford food, clothing, shelter, healthcare, energy, transport, and other basic needs. Prices of household commodities have doubled and, in some cases, tripled, and the income/salary of the majority still remains the same despite the rapid surge in inflation, and the resultant effect of this is economic misery and untold hardship. Staples such as rice, bread, and maize have seen unprecedented price hikes, which directly impact the poor and vulnerable populations who spend a large proportion of their income on food.



**Figure 5:** Pictorial evidence of protesting masses over economic hardship

Source: Daily Sun Newspaper, April, 2024

**Figure 5** shows pictorial evidence of the frustration and economic hardship faced by the people during the present administration in 2024 exemplified by the protesting masses. The Nigerian government and the Central Bank of Nigeria (CBN) have attempted various measures to combat inflation, including tightening monetary policy and implementing fiscal reforms. CBN has also raised interest rates to curb excessive spending and reduce money supply, aiming to stabilise prices. However, these measures have had limited success, as structural issues such as inadequate infrastructure, insecurity, and dependence on imports continue to drive inflationary pressures upwards.

Furthermore, unemployment and economic hardship were found to have bi-directional causal relationship. This implies that economic hardship cause unemployment and unemployment causes economic hardship. This is in tandem with the study by World Bank, (2021) who found that high level of poverty and unemployment prevalent in an inflationary economy cause economic hardship as prices of goods and services keep hitting the roof.

### Conclusion and Recommendation

In conclusion, we deduced from the trend analysis and empirical methodology that rising inflation rate is an existential factor that causes increasing misery in Nigeria contributing a large portion to economic hardship in the country. Even those who are actively employed are also affected by the increasing rate of inflation

because the real per capita income largely reduces. Investments are not even encouraged to boost productivity as a result of the high lending rate. Thus, all these phenomena occurring simultaneously continue to cause an increase economic misery. This has negative impact on Nigeria's economy as money would lose its purchasing power, real household income impaired, standard of living drastically jeopardized, social vices such as kidnapping, human trafficking and banditry increased, rise in unemployment and hunger become the order of the day as is presently experienced in Nigeria. Therefore, inflation is a significant driver of economic misery in Nigeria. It erodes purchasing power, exacerbates poverty, and hampers economic stability. Without addressing this underlying issue, Nigerians are likely to remain trapped in a vicious cycle of poverty so much so that living becomes extremely difficult for majority of Nigerians leading to the existential threat and question. The time to act is now in order not to suffocate the average and poor Nigerians who must be allowed to breathe.

Looking forward, there is need to address Nigeria's inflation crisis and this requires a comprehensive approach that goes beyond monetary tightening. Structural reforms are necessary to improve agricultural productivity, reduce dependence on imports, and enhance the supply chain infrastructure. Also, fostering a stable political and economic environment can help build investor confidence and attract the necessary investments for sustainable growth. Issues bothering on power and energy sectors,

logistics and forex should also be prioritized in other to tame inflation. Epileptic power supply is detrimental to business growth in Nigeria. Owing to increased energy cost, production cost has increased. Rise in exchange rate raised prices of imported raw materials and other consumables. Again, it is high time Nigeria looked inwards to tackle her problems using her resources. Reducing cost of governance will go a long way to tackle inflation in Nigeria. It is senseless buying SUVs for members of the National Assembly after borrowing whopping \$1.5billion for budget support. It is obvious that inflation could not be tackled in the midst of this flamboyant spending.

## REFERENCES

- Central Bank of Nigeria. (2022). Annual Report. <https://www.cbn.gov.ng>
- Dauda, R., S. (2021). Misery index worsens poverty in Nigeria. <https://www.mondopoli.it/wp-content/uploads/2024/01/Misery-Index-Worsens-Poverty-in-Nigeria-final.pdf>
- Halton, C. (2023, January 26). Misery Index: Definition, Components, History, and Limitations. <https://www.investopedia.com/terms/m/miseryindex.asp>.
- Hanke, S.H. (2014). Measuring Misery around the world. *Cato Institute* <https://www.cato.org/publications/commentary/measuring-misery-aroun-world>
- Jones, M. (2019). Economic Crises and their Social Consequences. *Journal of Social Issues*, 75(2), 123-135.
- National Bureau of Statistics. (2022). Unemployment and Underemployment Report Q4 2022. Retrieved from <https://nigerianstat.gov.ng>.
- National Bureau of Statistics (NBS). (2023). Unemployment report. <https://www.nigerianstat.gov.ng>
- National Bureau of Statistics (NBS). (2024). Consumer Price Index report. <https://www.nigerianstat.gov.ng>
- Oner, C. (2020). Inflation: Prices on the rise. *Finance and development magazine*. <https://www.imf.org/en/Publications/fandd/issues/Series/Back-to-Basics/Inflation#:~:text=Inflation%20is%20the%20rate%20of,of%20living%20in%20a%20country>.
- Smith, J. (2020). The socio-economic impact of inflation. *Economic review*, 68(4), 202-215.
- Ubah J., I. (2021). Earth and Environmental Science Misery and Economic Growth Nexus in Nigeria; Implications for Electrical Energy Management. *IOP Conference Series: Earth Environ. Sci.* 665 012042
- World Bank. (2021). Nigeria economic update. <https://www.worldbank.org>
- World Bank. (2022). Poverty & Equity Brief: Nigeria. Retrieved from <https://www.worldbank.org/en/topic/poverty>