



EXPLORING THE DYNAMIC RELATIONSHIP BETWEEN INFLATION RATES AND CHANGES IN THE COST OF LIVING IN INDIA

Dikshita Borah, Monali Borah,

Former Student, Department of Economics, Cotton University, Guwahati, Assam, India

Former Student, Department of Economics, Cotton University, Guwahati, Assam, India

dikshitaborah97@gmail.com , borahmonali22@gmail.com

ABSTRACT:

This study investigates the relationship between inflation rates and changes in the cost of living in India. Inflation is a critical economic indicator that can significantly impact people's purchasing power and overall well-being. By analyzing historical data on inflation rates and cost-of-living indices over a specific period, this research aims to provide insights into the extent to which inflation affects the affordability of essential goods and services for Indian households. The Consumer Price Index (CPI) serves as a vital economic indicator in assessing changes in the cost of living for households in India. This study delves into the significance of CPI as a tool for measuring inflation and its role in providing insights into the purchasing power of consumers. By analyzing the CPI components, including food, housing, transportation, and other goods and services, this study examines the impact of price fluctuations on the overall cost of living. Additionally, it aims to provide policymakers, economists, and consumers with a comprehensive understanding of how CPI reflects changes in the cost of living, thereby aiding in the formulation of effective economic policies and personal financial planning. Through this examination of the Consumer Price Index, this research contributes to the broader discourse on inflation measurement, cost of living analysis, and the overall economic well-being of individuals and families in India.

DOI: 10.48047/ecb/2023.12.si12.155

1. INTRODUCTION:

The Consumer Price Index (CPI) is a measure that tracks changes in the average price level of a basket of goods and services typically purchased by households. It is used to assess inflation and reflect the cost of living for consumers. Increases in the CPI indicate rising inflation, while decreases suggest deflation. Governments and central banks often refer to CPI when making economic policy decisions. On the other hand Inflation rate refers to the percentage change in the general price level of goods and services over a specific period, typically a year. It is commonly used to measure the rate at which the purchasing power of a currency declines. Inflation can be caused by various factors, such as increased demand, rising production costs, or changes in monetary policies. Central banks and governments closely monitor inflation rates as they have significant implications for the economy and affect the cost of living for consumers. Moderate inflation can be seen as a sign of a healthy economy, but high or hyperinflation can lead to economic instability and erode the value of money. In India, the consumer price index (CPI) and inflation rate play a crucial role in evaluating the fluctuations in the cost of living. The CPI serves as a vital indicator, reflecting

the changes in the average prices of essential goods and services consumed by households across the country. Meanwhile, the inflation rate measures the percentage change in general price levels over a specific period. Analyzing these economic metrics enables us to understand how inflation impacts the purchasing power and standard of living for Indian citizens. By examining the CPI and inflation rate trends, policymakers, economists, and individuals alike can gain valuable insights into the prevailing economic conditions and make informed decisions concerning budgeting, financial planning and policy formulation to foster economic stability and prosperity.

2. LITERATURE REVIEW:

John Williams (2000) a U.S. economist, described his view of this manipulation when he was interviewed in early 2006. Williams prefers a CPI, or inflation measure, calculated using the original methodology based on a basket of goods having quantities and qualities fixed.

David Ranson (2002) another U.S. economist, also questions the official CPI's viability as an indicator of inflation. Unlike Williams, Ranson doesn't espouse the viewpoint that the CPI is being manipulated. Instead, his view is that the CPI is a lagging indicator of inflation and is not a good indicator of current inflation. According to Ranson, increases in the price of commodities are a better indicator of current inflation because inflation initially affects commodity prices, and it may take several years for this commodity inflation to work its way through an economy and be reflected in the CPI. Ranson's preferred inflation measure is based on a commodity basket of precious metals.

Reddy, Y.V. (1999) states that rising food grains prices feed other prices in the economy and cause an inflationary price spiral. So, it makes perfect sense to look in to the inside of WPI inflation and see whether food grains prices have grown faster than the price rise in other categories of WPI and the contribution of food inflation in overall inflation.

The World Bank Report 2002 reveals that inflationary uncertainty pushes up real interest rates, as lenders demand a bigger risk premium on their money. Longer-term interest rates are especially punished as a high inflation premium is added to account for inflationary uncertainty. As a result, the cost of borrowing by businesses and consumers increases substantially, reducing the rate of real economic growth.

3. RESEARCH METHODOLOGY

a. Research Approach:

This study adopts a qualitative research approach to analyze the data on CPI values, inflation rates and the cost of living in India.

b. Data Collection:

All data used in this research is secondary, sourced from reliable and publicly available databases, which include publications on Bureau of Labor Statistics, data from the Ministry of Statistics and Programme Implementation (MoSPI), Government of India, RBI, and other relevant scholarly articles.

c. Data Period:

The data used in the analysis spans a specific period to ensure consistency and comparability, from 2011 to 2021.

d. Data Analysis:

The study involves conducting descriptive statistics to provide an overview of the Cost of living trends in India over the selected period. Graphs, charts, and tables have been utilized to present the data visually.

e. Data Limitations:

As this research relies solely on secondary data, it is subject to the limitations of the data sources used. There may be potential discrepancies, missing data points, or variations in data across different sources.

3. CONSUMER PRICE INDEX AND INFLATION

3.1 CONSUMER PRICE INDEX:

The Consumer Price Index (CPI) is a measure that tracks the changes in the average prices of a basket of goods and services commonly consumed by households over time. It is an essential economic indicator used to assess inflation and cost of living for consumers.

Importance of CPI:

a. Inflation Measurement: CPI helps to gauge the rate of inflation in an economy. Central banks and policymakers use this information to make decisions on monetary policies, interest rates, and economic stability.

b. Cost of Living: CPI reflects the changes in prices of goods and services, affecting the purchasing power of consumers. It helps individuals, businesses, and the government to understand how living costs evolve over time.

c. Wage Adjustments: Many labor contracts and government benefits are indexed to CPI. Changes in the index can influence salary adjustments, pensions, and social security payments.

d. Economic Planning: Businesses use CPI to forecast demand and adjust pricing strategies. Government agencies use it for budgeting and economic planning purposes.

e. Comparing Regions: CPI allows comparisons of price levels and inflation rates between different regions or countries, aiding in international economic analysis.

Overall, CPI is a crucial tool for understanding and managing economic conditions, guiding policy decisions, and ensuring the well-being of consumers and the overall economy. The Consumer Price Index (CPI) is crucial for examining changes in the cost of living in India because it measures the average price changes of essential goods and services that households

consume over time. By tracking the CPI, policymakers, economists, and individuals can assess inflation rates, which directly impact purchasing power and the overall standard of living. It helps in understanding how price fluctuations affect different segments of the population and assists in making informed decisions on economic policies and budgeting.

3.2 INFLATION

Inflation refers to the general increase in prices of goods and services over time, resulting in a decrease in the purchasing power of money. Inflation is widely perceived as the persistent increase in commodity prices, but its definition and measurement are challenging to ascertain. It's vital for policymakers and the general public to have a common understanding of this complex concept. Inflation can be described as a condition where money incomes rise faster than real output, leading to an unsustainable pursuit of higher incomes and resulting in rising prices. Another perspective is to view inflation as the degree of depreciation of domestic currency compared to foreign currency in an open economy. Overall, comprehending inflation is crucial for formulating effective policies. Let's delve further into this topic in the following chapter

There are various types of inflation, including:

- a. Demand-pull inflation: Occurs when aggregate demand exceeds aggregate supply, leading to increased demand for goods and services and driving prices higher.
- b. Cost-push inflation: Arises when production costs, such as wages and raw materials, increase, causing businesses to raise prices to maintain profit margins.
- c. Built-in inflation: Also known as wage-price inflation, this occurs when businesses raise prices to compensate for higher wages, and workers demand higher wages due to increased prices.
- d. Hyperinflation: A rapid and uncontrollable increase in prices, typically exceeding 50% per month, leading to a loss of confidence in the currency.

Inflation is commonly measured using various indices, such as the Consumer Price Index (CPI) and the Producer Price Index (PPI). These indices track the average price changes of a basket of goods and services over time and provide a gauge of the inflation rate in an economy. Central banks and policymakers closely monitor inflation to implement appropriate monetary policies and control its impact on the economy. Inflation rates are crucial in examining changes in the cost of living in India because they indicate the general price level of goods and services over time. When inflation is high, the cost of living tends to rise, impacting purchasing power and the overall standard of living. Monitoring inflation helps policymakers and individuals make informed decisions regarding budgeting, investments, and economic policies. It also plays a significant role in assessing the country's economic health and stability.

4. TRENDS AND PATTERNS OF THE CPI VALUES AND INFLATION RATES IN INDIA

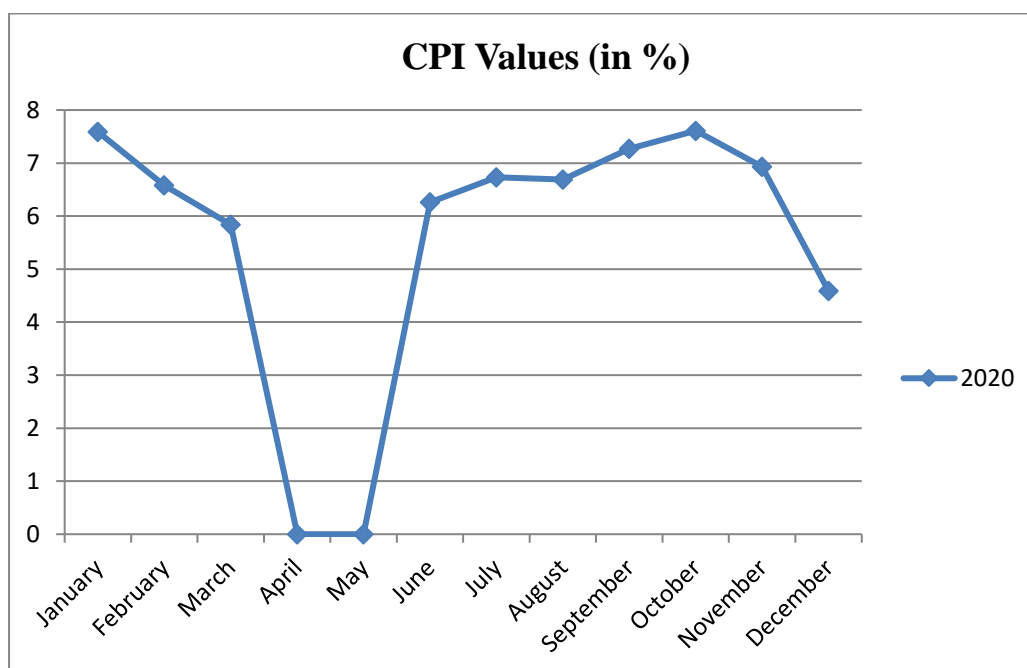
The Consumer Price Index (CPI) values of a particular period indicate the average price level of a basket of goods and services consumed by households. It measures the changes in the cost of living over time. When the CPI increases, it suggests that the general price level of goods and services has risen, leading to a decrease in the purchasing power of money. Conversely, a decrease in the CPI indicates a decrease in the overall price level. CPI is commonly used as an economic indicator to assess inflation and make adjustments in various financial contexts.

Let us study the trends in the cost of living over the past three years (2020-2022) by looking at the CPI values with the help of the following table and graphs:

Months	CPI values (in percentage)		
	2020	2021	2022
January	7.59	4.06	6.01
February	6.58	5.03	6.07
March	5.84	5.52	6.95
April	*	4.29	7.79
May	*	6.30	7.04
June	6.26	6.26	7.01
July	6.73	5.59	6.71
August	6.69	5.30	7
September	7.27	4.35	7.4
October	7.61	4.48	6.77
November	6.93	4.91	5.88
December	4.59	5.59	5.72

Source: Bureau of Labor Statistics

(*The Government of India did not release the CPI inflation rate for April and May 2020 due to nationwide lockdown induced by the Covid-19 pandemic.)

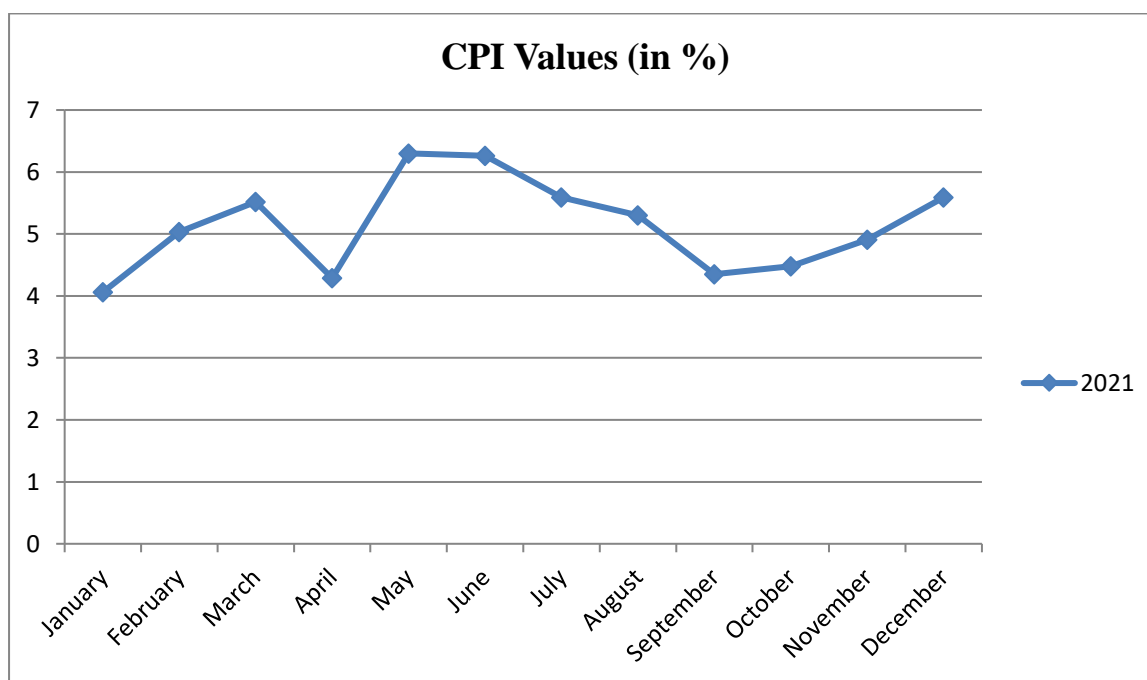


In the context of the year 2020, during the Covid-19 pandemic, the lockdown measures had significant impacts on the economy, causing disruptions in the supply chain, reduced consumer demand, and changes in spending patterns. As people stayed at home, there was a shift in consumption from certain goods and services to others. For instance, spending on travel, entertainment, and dining-out decreased, while spending on essential goods like groceries and household supplies increased.

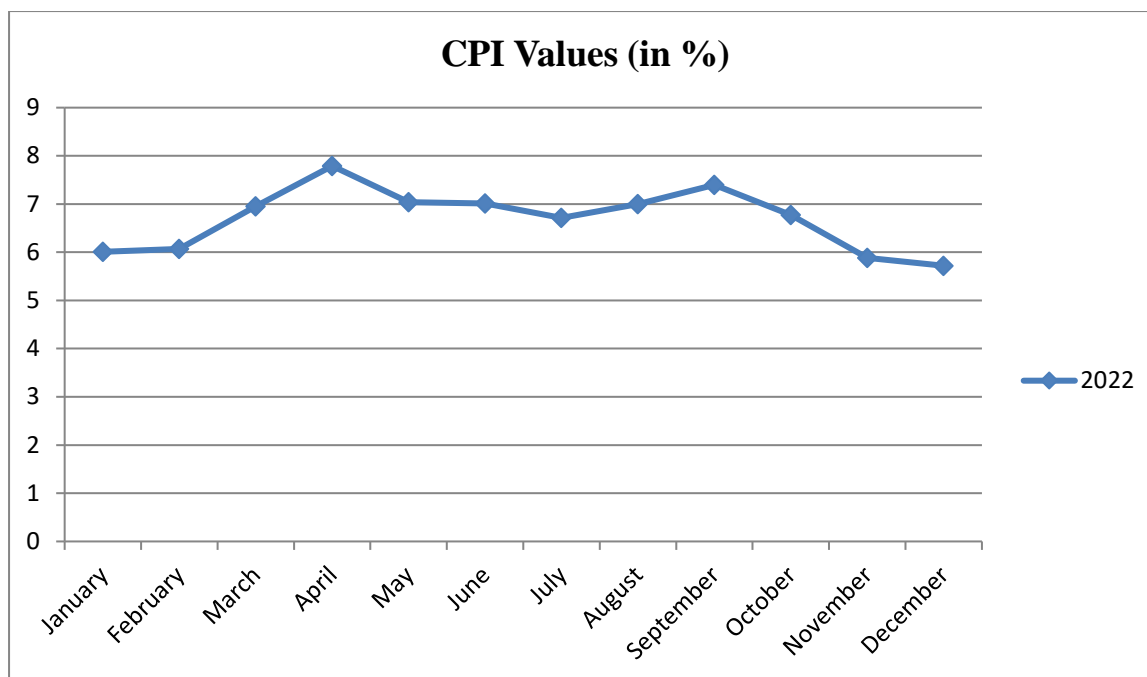
The CPI reflects these changes in consumer spending patterns. The market basket used to calculate the CPI was likely adjusted to account for the shifts in demand during the lockdown period. As a result, the CPI values have shown fluctuations, reflecting the changing prices of various goods and services during this time.

It's important to note that the CPI provides a general overview of inflation and cost of living changes, but individual experiences may vary based on personal circumstances and geographic location. Some individuals may have experienced a higher or lower cost of living depending on their specific needs and consumption patterns during the lockdown.

Overall, the relationship between the CPI values and the cost of living in 2020 was impacted by the unprecedented circumstances of the pandemic and the resulting changes in consumer behavior and economic activity.



In 2021, it can be observed that the CPI values have initially increased, then there was a downfall in the month of April, a rise in the month of May, a gradual decrease up to the month of September, followed by a gradual decrease for the rest of the year.



For the year 2022, the CPI values were more or less constant, which typically indicates that the average price level of goods and services has remained relatively stable during the year. This means that the rate of inflation has been minimal, resulting in little to no change in the purchasing power of consumers over the year. A constant CPI can also suggest that the economy has experienced low or controlled inflation rates, which can be seen as positive for consumers and businesses alike. However, it's essential to consider other economic indicators and factors to have a comprehensive understanding of the overall economic situation.

Over the past few years, the cost of living in India has experienced significant changes, influencing households' purchasing power and standard of living. Several factors have contributed to this evolution:

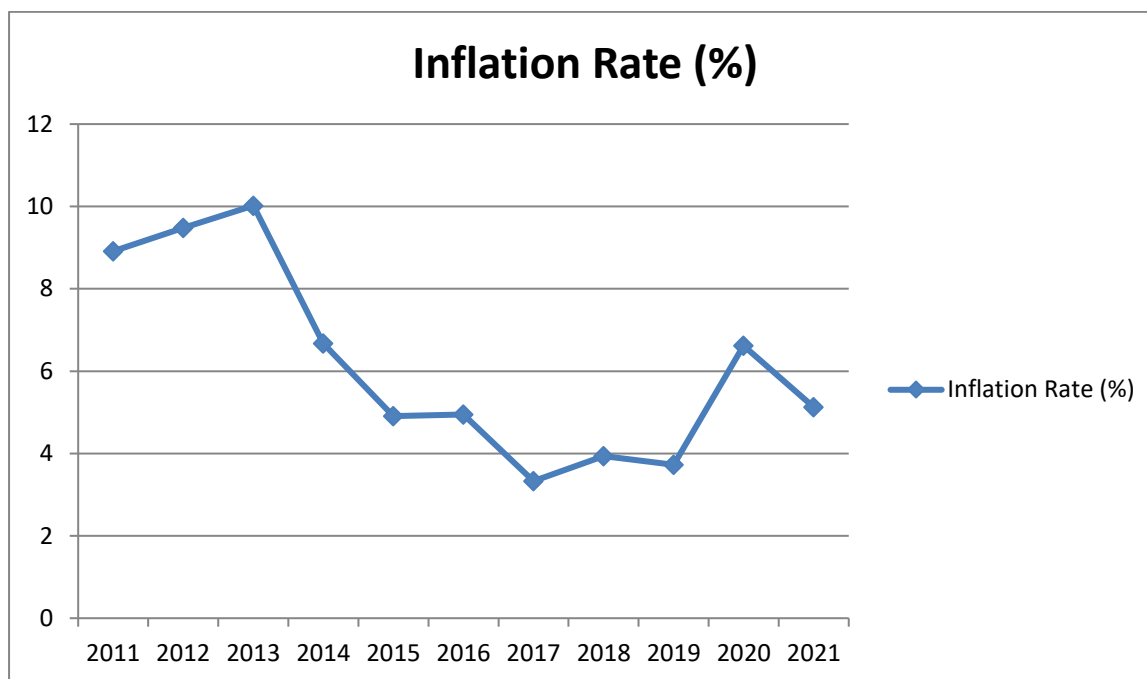
- **Inflation and Price Fluctuations:** Inflation is one of the key drivers of the cost of living. Rising inflation leads to an increase in the prices of goods and services, impacting the overall expenses of households. While India has experienced fluctuations in inflation rates over the years, they have, on average, contributed to an upward trend in living costs.

Let us look at the table below which represents the inflation rates from 2011-2021:

Year	Inflation Rate (%)	Annual Change (%)
2011	8.91	-
2012	9.48	0.57
2013	10.02	0.54
2014	6.67	-3.35
2015	4.91	-1.76
2016	4.95	0.04
2017	3.33	-1.62
2018	3.94	0.61

2019	3.73	-0.21
2020	6.62	2.89
2021	5.13	-1.49

Source: Reserve Bank of India



The inflation rate for consumer prices in India moved over the past 11 years between 3.73% and 10.02%.

The other factors have been discussed below:

- **Housing Costs:** Housing expenses, including rent and property prices, have seen substantial growth in urban areas due to increased demand and limited supply. This has affected the disposable income available to households for other essential expenditures.
- **Food and Fuel Prices:** The cost of essential commodities like food and fuel plays a crucial role in household budgets. Fluctuations in food and fuel prices have a direct impact on the purchasing power of households, especially for those with lower incomes.
- **Healthcare Expenses:** With the privatization of healthcare and advancements in medical technology, healthcare costs have risen. This can put a strain on household budgets, affecting their ability to access quality medical services.
- **Education Costs:** Education expenses, especially for professional courses and private schools, have been on the rise. This affects families' aspirations for their children's education and future prospects.
- **Wage Growth:** Wage growth has not always kept pace with the rising cost of living, leading to a disparity between income and expenses. This can result in reduced savings and limited financial stability for households.

- **Government Policies:** Government policies, such as changes in taxation, subsidies, and social welfare programs, can also impact the cost of living for households. These policies may provide relief or add to the financial burden, depending on their nature and implementation.
- **Urbanization and Lifestyle Changes:** As urbanization accelerates, the cost of living tends to be higher in cities due to increased job opportunities and better amenities. Additionally, changing lifestyles and consumer preferences can drive up expenses for discretionary items.

The evolving cost of living in India has influenced households' purchasing power and standard of living in various ways:

- **Reduced Disposable Income:** As expenses increase, the disposable income available for households decreases, affecting their ability to save or invest for the future.
- **Altered Spending Patterns:** Rising costs may force households to prioritize essential expenses over discretionary spending, potentially affecting their overall quality of life and lifestyle choices.
- **Economic Inequality:** The impact of rising living costs is often felt more acutely by lower-income households, exacerbating economic inequality in the country.
- **Savings and Investments:** Higher living costs may discourage saving and investing, impacting long-term financial security and planning.
- **Quality of Life:** The rising cost of living can lead to stress and financial insecurity, which can negatively impact the overall quality of life for many households.
- **Impact on Aspirations:** For some families, increasing living costs may hinder their ability to achieve certain aspirations, such as homeownership, education, or travel.

Hence, the cost of living in India has evolved over the years, affecting households' purchasing power and standard of living in various ways. It is essential for policymakers to address the challenges posed by rising living costs and implement measures that promote inclusive economic growth and financial stability for all segments of society.

5. CONCLUSION:

In conclusion, the Consumer Price Index (CPI) and inflation rates play a pivotal role in examining the changes in the cost of living. These metrics provide essential insights into the purchasing power of consumers and the overall health of the economy. By tracking the CPI and inflation rates, policymakers, businesses, and individuals can make informed decisions regarding budgeting, investment strategies, and monetary policy. A stable and reliable CPI ensures that the cost of living adjustments, such as wage increases and social benefits, accurately reflect the real changes in expenses faced by households. Furthermore, inflation rates impact interest rates and can influence borrowing costs, impacting economic growth and investment decisions. Understanding the dynamics of inflation and its effects on the cost of living is crucial for maintaining economic stability and addressing issues of income inequality. Policymakers can utilize this information to implement targeted measures and create effective policies to combat inflationary pressures and enhance the well-being of

citizens. In a rapidly changing economic landscape, the CPI and inflation rates remain indispensable tools for assessing the standard of living and the overall economic performance of a nation. As we navigate the complexities of the global economy, these metrics will continue to be indispensable for ensuring financial security, promoting economic growth, and safeguarding the prosperity of societies at large.

REFERENCES

- Ahortor, C.R.K., & Adenutsi, D.E. (2009). Inflation, Capital accumulation and Economic Growth in Import Dependent Developing Economies. *The 14th annual conference on Econometric modelling for Africa*, Abuja, Nigeria, 8-10 July 2009.
- Ambler, S. (2008). The Cost of Inflation in New Keynesian Models. Bank of Canada, winter 2007-2008, 5 – 14.
- Ayazi, A. R. (1968). Inter relationship between Agriculture and other sector and their implication in terms of planning. Near East Commission on Agricultural Planning.
- B. Rama Rau. (1960). *Evolution of Central Banking in India*. Vora and Co. Publishers Pvt. Ltd., Bombay, pp. 35-61.
- Baharumshah, A.Z., Hamzah, N.A. & Sarbi S.R.M. (2011). Inflation Uncertainty and Economic Growth: Evidence from LAD ARCH Model. *Journal of Applied Statistics* 38(1), 195 – 206
- Barro, R.J. (1995). Inflation and Economic Growth. *Bank of England Quarterly Bulletin*, 166 – 176.
- Baumol, W.J. (1999). *Retrospectives Say's Law*. *Journal of Economic Perspectives*, 13 (1), 195 – 204.
- Bruno, M., & Easterly, W. (1998). *Inflation crises and long-run growth*. *Journal of Monetary Economics*, 41, 3–26.

www.worlddata.info