International Journal of Management, IT & Engineering
Vol. 8 Issue 3, March 2018,
ISSN: 2249-0558 Impact Factor: 7.119
Journal Homepage: http://www.ijmra.us, Email: editorijmie@gmail.com
Double-Blind Peer Reviewed Refereed Open Access International Journal - Included in the International Serial Directories Indexed & Listed at: Ulrich's Periodicals Directory ©, U.S.A., Open J-Gage as well as in Cabell’s Directories of Publishing Opportunities, U.S.A

IMPACT OF GDP AND INFLATION ON UNEMPLOYMENT RATE: "A STUDY OF INDIAN ECONOMY IN 2011-2018"

Dr Rubee Singh*

Abstract

This study has examined the impact of inflation on GDP and unemployment rate in India. It is a longitudinal study for the period in 2011-2018. The data has been taken from secondary sources. The study concludes that inflation insignificantly influences GDP and unemployment and the correlation is negative. The correlation between unemployment and inflation is positive i.e. 0.477 and is insignificant at 10% level of significance. The correlation between GDP and unemployment rate has also been found insignificant with a value of 0.196. It is, therefore, concluded that inflation has a role which influential but for GDP and unemployment with insignificant levels in the macroeconomics factors of Indian economy.

Key Words: GDP, Unemployment, Poverty, Inflation

* **Assistant Professor in HR, Department of Business Management (MBA), H.R Institute of Technology (Ghaziabad) U.P, India**

Introduction

For successive governments in Indian poverty stands as a single main challenge like other developing and underdeveloped countries. Presently, governmental and certain non-governmental organization have estimated more than quarter of indian population living under poverty line. According to Human Development Index (HDI) report, April 2017, India have medium human development with 0.624 category, alongside countries such as Congo, Namibia and Pakistan respectively and it is ranked third among the SAARC countries behind Shri Lanka (73), Maldives (105) and India 131 ranked among the 188 countries. Where as Norway become first ranked with 0.949. India HDI value increased from 0.428 in 1990 to 0.624 in 2016. This report also shows an uneven distribution of wealth in India where top 10% of the population earning 27.6% and bottom 10% earning only 4.1% of the income. There are many factors responsible for poverty in India; such as heavy pressure of population, unemployment and employment, capital deficiency, lack of skilled labour, rural economy, net national income, increase in price, under-developed economy. Although in this study relation

between inflation, unemployment and poverty has been studied. Inflation and unemployment both vary from economy to economy. (Slesnic (1993). Some economies have found high inflations related to higher unemployment. Some economies have found high inflation moderately related to unemployment and others high inflation with low unemployment. Blank, R.M. (1993). Similarly some countries are in the situation where the economy is in moderate to low inflation and moderate to lower

unemployment and others are moderate to low inflation but moderate to high unemployment. Therefore inflation exists in different economies differently.

Therefore inflation in economy exists everywhere and it would be a proper research objective for investigation. The impact of inflation on unemployment would also be critically investigated in the current study. As research student of higher studies the identification of these two variables will provide something insights into the economic problems with a critical look on the issues of inflation and unemployment and their relationship. The research study would be contributive to lay down the main reasons for the stated phenomena and critically draw some imperative statements for the improvement of the current status.

Objectives of the Study

- To examine the role of inflation in the economy of India
- To examine the role of GDP in the economy of India
- To examine the role of unemployment in the economy of India
- To examine the influencing role of inflation in relationship to GDP
- To examine the influencing role of inflation in relationship to unemployment

Literature Review

Changes in the unemployment rate are important to explain variation in the conventional earnings or income as the rate of unemployment determines the basis of consumptions. There can be differences over the fixed ratio of unemployment but it is widely believed that the problem of unemployment in india has increased during the decade of 1990s after that its has decreseaes. According to UN ILO report (2017), In percentage terms unemployement rate will remain at 3.4% in the year of 2017-2018 like as unemployment rate 3.8% in the year of 2011-2012. Similar outcome have been observed on approach based about central needs and unemployment and opportunity trends. Social indicators such as literacy rate, infant mortality rate, population growth rate, access to water, nutritional items etc., all verify the above results that Unemployment weak social and human development are not only at a high level in the country but also have deteriorated over the last decade of the century. The findings also claim that there is little effect of inflation on the income and the relationship between

inflation and the unemployment while the relationship with consumption was found positive. The conclusive statement about this phenomenon relationship is found was that inflation and unemployment are positively associated to each other.

Inflation

Inflation affects economics in various positive and negative ways. The negative effects of inflation includes an increase in the opportunity cost of holding money, uncertainty over future inflation which may discourage investment and saving. Positive effects include reducing the real burden of public and private debt, keeping nominal interest rates above zero so that central banks can adjust interest rates to stabilize the economy and reducing unemployment due to nominal wage rigidity. Inflation are caused by an excessive growth of money supply. Research studies documented significant facts about the phenomenal relationships between inflation and unemployment. The quantitative results about these variables were found that inflations and unemployment are positively associated to each other (Mocan,1995) & 2011 to 2018.

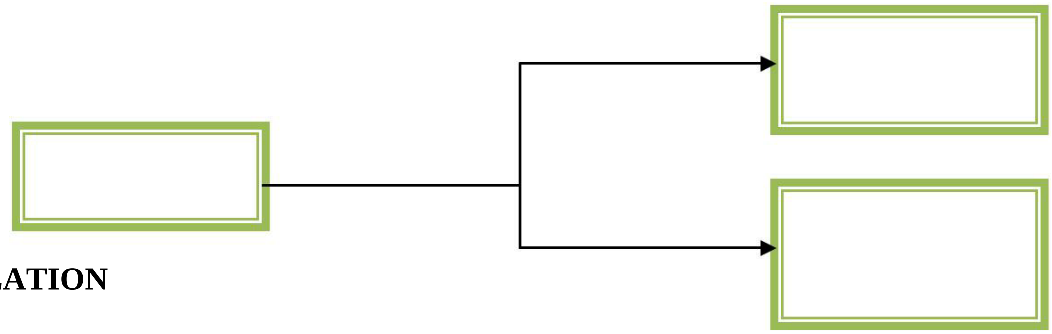
Unemployment

Metin (1991) finds that unemployment is an influential phenomenon found in the economies that is negatively influenced by inflation. The research study proved important facts with the help of multivariate co integration analysis. The scale budget deficit is also seen to significantly affect the inflation. Inflation also influences unemployment in the economic spheres. The economic prospect regarding unemployment can be measured as the product of the unemployment risk in the population and the amount to which people are protected from the income unemployment risk. We have taken alternative for the unemployment risk changes in the employment rate.

Inflation and Gross Domestic Product

Zafar and Mustafa (1998) prove a statistically positive relationship between macro factors for the economic growth of the Indian economy. They find that budget deficit negatively affects the GDP of the economy and at the same time it influences positively the inflation of the economy. The research study examines the private and public investments raises control on the inflations and employment opportunities that aid values as a control mechanism for unemployment. Therefore it is found that economic prosperity rises with proper guidelines, supporting strategies, and effective initiatives for the development and control of inflation and for the control of unemployment (Kemal, 1989). Zenneth (2007) investigates the economy of Nigeria. He finds that unemployment alleviation influences economic factors such inflation, deficit economy, unemployment low GDP growth rate. The same study examines role of fiscal policy in alleviating unemployment.

Figure 1. Conceptual Framework



INFLATION

a. Inflation = f
(GDP rate, Unemployment Rate)

b. Inflation = α + β1 (GDP Rate) + β2 (Unemployment Rate)

Unemployment Rate

GDP Rate

Whereas

α: representing the coefficient intercept term as constant,

β: representing the slop intercept as vibrant due the multiplicative value of inflation in time series i.e representing the error term of the study

Inflation

According to Catao and Terrones (2003) inflation is the continuous rise in the price with the passage of time and declination in the value of money.

services.

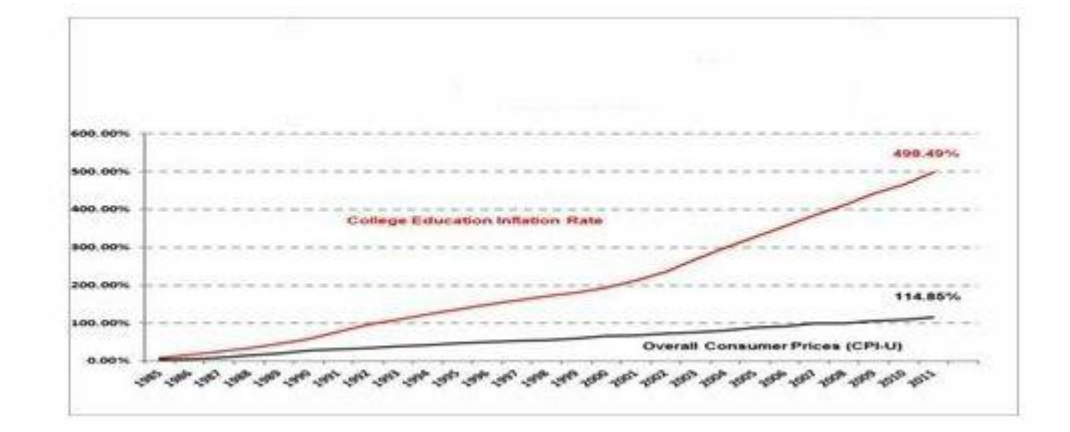
Calculating the Current Inflation Rate

If we compare March 2016's CPI index which was 238.132 with march 2017 with 243.801. We can see a 5.669 point increase in the 12 month period.

$$5.669/238.132 = 0.023806$$

Which when rounded 2 decimal places equals 2.38% annual inflation.

Annual Inflation Rate Chart:



Unemployment

The situation of economy where the labor class, professional, served and serving workforce face problems for career prospects which raise the number of employed workforce towards unemployment due to uncertainty and economic issues (Jamshaid, 2010).

Unemployment rate in India increased to 5.38 percent in the first quarter of Feb 2018 from 1.8 percent in the first quarter of march 2011. This unemployment rate in India is reported by the india Bureau of Statistics. Historically, from 2011 until 2018, India's unemployment rate averaged 4.8 Percent reaching an all-time high rate from 1983 until 2016 and a record low of 3.46 percent in December 2016 from 3.49 percent in 2015. In india, the unemployment rate measures the number of people actively looking for a job as a percentage of the labor force. According to Jan 2018 report economic survey of 2017-2018, 20% graduates of Tripura state is most unemployment comparison than other state of India like as Gujrat (2.9%), Karnataka (1.19%), and Uttarakhand (1.2%) . About 7.3% the rate of unemployment inflation in India occurs from 2010 up to 2015.

India Unemployment Rate Chart

Gross Domestic Product

GDP is the sum of the value of all the products produced in a country during fiscal year. It is found one of the indicators of the production and growth rate of the economy and play a strategic role in development, employment and the balance of payment (Volker, 2005).

The Gross Domestic Product (GDP) in India expanded 6.75 percent in the fiscal year 2017-18 from the previous year and it will remain around 7 to 7.5 in the year of 2018-2019 according to the World Bank report. The GDP growth rate in india is reported by the Indian Bureau of Statistics.

Historically, from 1952 to 2010, India's GDP growth rate averaged 5.0 percent reaching an all-time high rate of 10.2 percent in the fiscal year of 1953-54 and a record low of -1.8 percent in the fiscal year of 1951-52. India is one of the poorest and least developed countries in Asia. India has a growing semi-industrialized economy that relies on manufacturing, agriculture and remittances. Although since 2005 the GDP has been growing with an average of 5 percent a year, it is not enough to keep up with fast growing population. To make things even worst, political instability, widespread corruption and lack of law enforcement hamper private investment and foreign aid. According to IMF and World Economic Outlook (WEK) report Jan 2018, The acceleration in India's growth rate ahead comes after the slowdown last year due to demonetization and the implementation of GST. India is projected to grow at 7.4 percent in 2018 as against China's 6.8 percent. World Economic Outlook latest update in Davos Switzerland on the summit of World Economic forum, the International Monetary Fund has projected a 7.8 percent growth rate for India in 2019.

GDP Rate Chart

Research Hypothesis

H1: Inflation significantly influences the GDP rate of the Indian economy

H2: Inflation significantly influences the GDP rate of the Indian economy on the unemployment of Indian economy.

Research Design

The present study is focused on the experiential relationship between inflation, GDP and unemployment rates of the Indian economy. For this purpose, the data is taken from the national statistic website of the India. The period that has been chosen for the present study is from 2011-2018.

Table 1. Unemployment rate and Inflation rate

Year	Unemployment Rate in percentage	Inflation rate
2011	3.54	6.49
2012	3.63	10
2013	3.57	9.4
2014	3.53	5.8
2015	3.49	4.9
2016	3.46	4.5
2017	4.76	3.8
2018	5.38	4.88

Analysis

On the basis of the quantitative data processed, analysis of the results from secondary data provided us important insight information for the sake of realizing the influential impact on unemployment. Secondary data is collected through books, magazines, newspapers, blogs, websites, research papers etc. The findings are discussed along with critical explanation for the stated hypothesis.

Finally for the significance level, it can also be observed to be highly decreased the required level that is 4.88 in 2018 and from 10 percent in 2012 therefore, the findings are providing statistical grounds for the rejection of proposed hypothesis H1: Inflation significantly influences GDP rate of the indian economy. On the other hand, the regression between inflation and unemployment is found to show a positive unit change from inflation.

The findings are proving the phenomenon in such way that one unit change in inflation brings positive 4.88 unit change in unemployment. therefore, the findings are providing statistical grounds for the rejection of proposed hypothesis H2: Inflation significantly influences GDP rate of the indian economy on the unemployment of Indian economy.

Conclusion

The conclusive outcome of the research study is that inflation is found as insignificantly influential for GDP and unemployment with negative correlation. It is, therefore, concluded that inflation possess a role which is influential but for GDP and unemployment with insignificance levels in macro-economic factors of the India. Inflation is a serious problem for fixed income investors. It’s important to understand the different between nominal interest rates and real interest rates. Unemployment is caused by rapid technological change, business cycle of recessions, seasonal factors in som industries such as change in tastes, and climate condition which affects demand for certain products and services, individual perceptions and willingness to work and search for job.

Recommendations

The research study at quantitative level provided some useful insights, but it also needs to be familiar for the prerequisite objections. The understanding of this phenomenon is important for the financial rationalism and impressive results. Therefore as researcher I am going to recommend some considerable recommendations for the sake of desired quantitative outcomes. These are as under, establishment of valid economic policy for the control of inflation. The central elements of this consensus are that the instrument of monetary policy ought to be the short term interests rate, the policy should be focused on the control of Inflation and the inflation can be reduced by increasing short term interest rates.

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