A CRITICAL ANALYSIS OF INFLUENCE OF INTEREST RATES REVISION ON INFLATION IN INDIA

Mohammad Athar Ali, Saudi Electronic University
Vivek Jangid, Chaudhary Devi Lal University
Rohit Bansal, Vaish College of Engineering
Mohammed Arshad Khan, Saudi Electronic University

ABSTRACT

Inflation is the turn down of purchasing command of a given currency over time or in other words, it is a wide-ranging climb in the price plane in an economy. Sovereign government of any nation tries to curb it by adopting various means in which revision in interest rates through monetary policy are assumed to be effective way. In this study, efforts has been made to analysis whether revision in interest rate prove to be a successful tool available to any sovereign to have control over price level. Secondary data from year 2011 to 2020 has been taken for inflation

(measured by Consumer Price Index and Wholesale price Index) and Interest rates (Cash Reserve Ratio, Statutory Liquidity Ratio, Marginal Standing Facility Rate, Repo Rate, Reverse Repo Rate and Bank Rate). For analytical purpose, Regression analysis, ANOVA and Correlation have been applied. The results of the study show that revision in interest rates does have an influence over prevailing inflation in the country. Revision in interest rates affects liquidity in the market, which in turn influences the purchasing power of people that helps in controlling the level of inflation.

Keywords: Inflation, Sovereign, Interest Rate, Revision, Purchasing Power Etc.

INTRODUCTION

Inflation, by definition, may be a general increase or hike within the costs of products and services inside an economy. Inflation is that the flip down of buying command of a given currency over time or in alternative words, it's a wide-ranging climb within the worth plane in associate in nursing economy. Inflation could also be a key construct of economics. It's caused because of associate in nursing imbalance inside the supply of product and vendee magnitude relation - once the demand for product or services in an economy is higher than the supply, costs go up. Inflation isn't essentially a nasty factor. It's usually associate in nursing indicator of a powerful economy and so the govt. typically takes into consideration a yearly rate of two to three per cent once it involves an increase in inflation. The speed of interest is that the speed at that interest is paid by borrowers for the employment of money that they borrow from creditors. Central banks by manipulating interest rare makes an attempt to limit inflation and avoid deflation, thus on keep the economy running swimmingly.

Lower interest rates translate to more money on the market for borrowing, creating shoppers pay a lot of. As the market expand, the more it is likely that the consumers are able to make extra buying and consequential which leads in a pour in demand for merchandise, whereas there's no amendment in supply. An increase in demand that can't be met by provides results in price rise.

On the alternative hand, higher interest rates build individuals alert and persuade those millions to save lots of a lot and borrow less. As a result, the number of cash current at

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

intervals the market reduces. Fewer money, of course, would mean that patrons notice it tougher to buy for merchandise and services. Demand may be a smaller quantity than the provision, the hike in costs stabilizes, and generally, costs even return down.

REVIEW OF LITERATURE

Thakur et al., (2016) found that inflation on the far side the sting level makes growth pricy and involves an amendment in policy. During this observe, it was aimed to go through the know the impact of changes in financial policy for over six years knowledge and so the ensuing force of a similar on pecuniary resource and therefore the level of inflation within the economy. It had been found that tally authorities attempt laborious to curb the inflation by adopting many financial policy measures, the various amongst that area unit changes in discount rate, CRR & SLR that directly weight the money offer at intervals the market with immediate impact while not making several distortions at intervals the market. Bosupeng, (2017) found that China's economic process further as international influence has been escalating. The exploration was conducted to figure out the bang of Chinese interest rates and price rises on different economies. Data has been taken from 1982 to 2013. The approach of Toda and Yamamoto to farmer relation was applied to analysis the information collected. Victimization information for nineteen countries, the results showed that China has vital influence of interest rates and inflation on dynamics of Costa Rica, Republic of Kenya and African nation. The study any showed that Japan and Republic of South Africa induces China's interest rates further as inflation. It had been anticipated that as China's wealth continues to nurture, its influence in international monetary matters and different economies will exaggerate. Khumalo et al., (2017) stated that the steadiness of economies everyplace the world over is actually a operate of price rise and interest rates. The study discovered that over the past twenty years, Swaziland's economy intimate escalating inflation and interest rates with the guilt leveled against fully the Monarchy's failure to administer the economy. The amount of 2010 to 2014 was found as hardest hit thanks to increasing impoverishment levels. The aim of the study was thus to assess the association between inflation and interest rates at intervals the context of African country with a read to constructing financial and financial policies capable of driving an economical economy going forward. The study used a verificatory and quantitative approach supported a review of secondary knowledge over the amount. The supply and description enclosed quarterly primarily based data at intervals the 2010-2014 amount comprising information on rate of interest, gross domestic product and inflation figures from the financial organization of African country, the national library, and thus the Central applied math Department of African country. An expressive approach, victimization Microsoft stand out, was accustomed analyze the info. It was bring into being that here was optimistic association between interest rates and price rise. Recommendations were that, African country might craft acceptable financial and financial policies towards dominant the existing economic challenges despite the weird socio-political nature wherever fully the autocracy holds government authority and responsible-ness. Dhungana & Pradhan, (2017) examined the result of economic bank disposal on price rise in Nepal. Correlation and multivariate analysis victimization board knowledge of twenty four business banks throughout the amount of 1996-2015. The empirical results showed that bank disposal has positive result on the price rise in Nepal. The research implies that financial organisation willing to manage inflation ought to curtail excessive bank disposal on unproductive and speculative sectors. Behera & Mishra, (2017) verify the presence of the long-term balanced relationship between economic process, inflation, rate and rate of interest. From the long-term analysis, the study found that inflation is absolutely associated with economic process, whereas the opposite variables aren't vital. Ahmed & Abdelsalam, (2018) examined an

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

increased version of Fisher hypothesis that embody inflation instability. In step with this hypothesis, there was a optimistic relative between interest rates and expected inflation. In distinction, there is a dialogue concerning the impact of inflation indecision on rate of interest. In step with the portfolio conjecture and models of plus evaluation, inflation instability completely affects the speed of interest. The principle was that risk-averse investors should be salaried with superior returns for extra risks. In distinction, the loan-able funds premise implies a off-putting impact of inflation wavering and interest rates since high uncertainty leads customers to defend themselves beside inflation by raising their savings that lowers consumption and interest rates. To reckon inflation volatility they applied completely different Autoregressive Conditional Heteroscedasticity models. The easy and increased versions of Fisher hypothesis was examined exploitation mathematician Switch Model to account for potential regime shift in this relationship. For the initial Fisher hypothesis, there was proof of supporting it within the 1st regime whereas that hypothesis doesn't hold within the other. Within the increased version of Fisher hypothesis, portfolio theory hypothesis is verified within the 1st regime whereas the loan-able funds hypothesis is confirmed within the other. Ogege, (2019) empirically analyzed the influence of inflation, charge per unit and rate on economic development. The property of high economic development in most industrialised and developing countries has been the first objective of political economy policies. Withal, it had been found that there exist sizable competition on the innate feature of the inflation, charge per unit, rate and development association. the main purpose of this work was to assess the inflation, interest and rate result on some economic development indicators in Nigeria which incorporates the life index, human development index, consumption per capita, physical quality of life, and health and education index. The secondary knowledge used were collected from the CBN applied math bulletins from 1981-2017 and were analyzed by adopting descriptive, correlation still as multivariate analysis. The empirical analysis discovered the existent relative result of political economy variables on Nigeria economic maturity indicators. The impacts of the economic attributes mechanisms on performance indicators were distinct. The work inferred that economic characteristics' parts influence diverse indicators of performance in various ways that. It absolutely was but counseled that inflation, charge per unit and rate ought to be wont to produce a positive investment atmosphere on economic development variables, the apex bank has to think about inflation threshold for the country within the method of targeting single digit inflation collectively of its major objectives. AboElsoud et al., (2019) suggested that policy manufacturers and government establishment along with the Bank of European country develop and pursue wise commercial enterprise and financial policies that might aim at helpful each the micro-and economic science indicators like the rate of inflation, rate, charge per unit, and funds, to reinforce the expansion of the economy, particularly for the period when the BREXIT call. Kumari & Jha, (2019) tried to search out out whether or not the movement in National stock market index nifty fifty is that the results of some elect financial policy instruments. The study thought of financial policy instruments as money Reserve magnitude relation and Reverse Repo Rate and NSE's nifty fifty by mistreatment monthly information from Apr 2016 to March 2018. For this, Correlation and multivariate analysis was wont to see the result of financial policy instruments on NSE index. it absolutely was found that there was no relation between nifty fifty and money reserve magnitude relation and conjointly no relation between reverse repo rate and nifty fifty. Bantwa & Bhatt, (2020) inspected the uneven relationship between India VIX, NIFTY, CBOE VIX and CNX low volatility Index. It's found throughout the study that the keen index is reciprocally related to (-0.64) with the India Volatility Index (VIX). The India Volatility Index (VIX) is related to absolutely with the CBOE VIX (0.70), CNX low volatility Index is considerably absolutely related to with keen (0.98) and it's considerably reciprocally related to with the Asian nation

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

Volatility Index (-0.63) and also the CBOE VIX (-0.54). High volatility in market distorts the connection between market and volatility index. Relationship between nifty and VIX is robust once market moving down and relationship is weak once market is moving up. The degree of correlation between nifty and India VIX throughout the study period is -0.64. This means that 2 indices move in wrong way. India VIX is that the smart measuring instrument of capitalist sentiments and volatility. Chowdhury et al., (2020) instituted a powerful positive short and long-run association between price rises and nominal interest rates. The T-bill, the call cash rate is employed as a live of the money market. The analysis indicated that regulators ought to think about call cash rates in short and T-bill and call cash rates within the long-run to manage Bangladesh's nominal rate.

EXTENT OF THE STUDY

The present study was restricted to analyzing the impact of interest rates on inflation in India for the period 2011-2020. Six Interest Rates are taken into consideration i.e., CRR, SLR, MSF, Repo rate, Reverse Repo rate and Bank rate. CPI and WPI of the complete country and not state wise are taken as the measures of Inflation for the period 2011-2020. The study is related to analyzing the influence of these rates on inflation in India.

OBJECTIVES AND HYPOTHESIS

The present study tries to achieve the following objectives:

1. To analyze the influence of Interest Rates Revision on Inflation measured by Consumer Price Index (CPI) in India.
2. To analyze the influence of Interest Rates Revision on Inflation measured by Wholesale Price Index (WPI) in India.

In order to achieve the aforesaid objectives, the following null hypotheses are formulated:

H_{01}: *There is no Significant Influence of Interest Rates Revision on Inflation measured by Consumer Price Index (CPI) in India.*

H_{02}: *There is no Significant Influence of Interest Rates Revision on Inflation measured by Wholesale Price Index (WPI) in India.*

RESEARCH METHODOLOGY

The research design was analytical, causal and empirical in nature. The research design is characterized by inflexibility as the data used is secondary in nature. In this study, complete enumeration is done with month wise data from 2011-2020 regarding CPI, WPI and the various Interest Rates. The secondary data is collected from various authenticated internet websites, journals, books etc. For analyzing the collected data, statistical tools such as Regression analysis, ANOVA and Correlation have been applied by the use of IBM SPSS software.

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

RESULTS AND DISCUSSIONS

Table 1
INFLUENCE OF REPO RATE REVISION ON INFLATION MEASURED BY CONSUMER PRICE INDEX (CPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Repo Rate and CPI	0.625	69.117	0.000	-6.317	1.795	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 1 shows the influence of Repo rate revision on inflation deliberated by Consumer Price Index (CPI). In the table, the value of three tests i.e. Correlation analysis, ANOVA and Regression analysis are shown to test the hypothesis that there is any considerable influence of Repo rate revision on controlling inflation which is shown by Consumer Price Index (CPI). In other words, it is tried to measure that how much variations in Consumer Price Index is explained by change in Repo rate. Is the influence of revision on Consumer Price Index is significant or is just by chance or by some unexplained variables which are outside the purview of present study. It is to be noted here again that Repo Rate is considered as independent variable, whereas Consumer Price Index is taken as dependent variable for the purpose of testing the influence.

As far as the value of Correlation (r = 0.625) is concerned, it shows that the revision in Repo rate do have an influence on inflation (measured by CPI). Positive relationship is found between Repo rate and Consumer Price Index (as the value is more than zero and is approaching towards one). It may also be stated by analyzing the r value that 62.5 per cent variations in the Consumer Price Index has happened due to Repo rate revision and the rest part of change in CPI which is arising may be due to some unexplained variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.000), the value is found to be quite less than stated five per cent alpha level. Therefore, the stated hypothesis (H01) is failed to be accepted at stated significance level, which found that there is a considerable weight of Repo rate on Consumer Price Index (CPI).

In case of Regression analysis, the constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -6.317. The Exercise b (= 1.795) value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 1.795 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

CPI = constant b + exercise b (Repo rate)

CPI = -6.317 + 1.795(Repo Rate)

Here, CPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Repo rate is independent variable.

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

Table 2
INFLUENCE OF REVERSE REPO RATE REVISION ON INFLATION MEASURED BY CONSUMER PRICE INDEX (CPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Reverse Repo Rate and CPI	0.508	37.557	0.000	-6.718	2.061	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 2 shows the influence of Reverse Repo rate revision on inflation explained by Consumer Price Index (CPI). In the table, the value of three tests i.e. Correlation analysis, ANOVA and Regression analysis are used to test the hypothesis that is there any noteworthy influence of Reverse Repo rate revision on controlling inflation which is shown by Consumer Price Index (CPI). In other words, it is tried to measure that how much variation in Consumer Price Index is explained by revision in Reverse Repo rate. Is the influence on Consumer Price Index is significant or is just by chance or by some unexplained variables which are outside the purview of present study. It is to be noted here again that Reverse Repo Rate is considered as independent variable, whereas Consumer Price Index is taken as dependent variable for the purpose of testing the influence.

As far as the value of Correlation (r = 0.508) is concerned, it shows that the Reverse Repo rate do have an influence on inflation (measured by CPI). A moderate uphill (Positive) relationship is found between Reverse Repo rate and Consumer Price Index (as the value is Near to +0.508). It may also be stated by analyzing the r value that 50.8 per cent variations in the Consumer Price Index has happened due to revision in Reverse Repo rate and the rest part of change in CPI may be due to some unexplained/Extraneous variables.

As far as ANOVA value is concerned, (Sig. value = 0.000), the significance value is found to be quite less than 0.05. Therefore, the null hypothesis (H01) is failed to be accepted at given significance level, which means that there is a considerable influence of Reverse Repo rate on Consumer Price Index (CPI).

In case of Regression analysis, the Constant b value shows the intercept value. This is found to be in this case as Constant b = -6.718. The Exercise b (= 2.061) value shows the slope of regression line. In other words, if there is one-unit revision in independent variable, 2.061 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

CPI = constant b + exercise b (Reverse Repo rate)

CPI = -6.718 + 2.061(Reverse Repo Rate)

Here, CPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Reverse Repo rate is independent variable.

Table 3
INFLUENCE OF CASH RESERVE RATIO REVISION ON INFLATION MEASURED BY CONSUMER PRICE INDEX (CPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Cash Reserve Ratio and CPI	0.472	30.924	0.000	-2.066	1.922	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

Table 3 shows the influence of Cash Reserve Ratio (CRR) revision on inflation measured by Consumer Price Index (CPI). In the table, the value of three tests i.e. Correlation analysis, ANOVA and Regression analysis are used to test the hypothesis that is there any significant influence of Cash Reserve Ratio revision on controlling inflation which is shown by Consumer Price Index (CPI). In other words, it is tried to measure that how much variation in Consumer Price Index is explained by revision in Cash Reserve Ratio. Is the influence on Consumer Price Index is significant or is just by chance or by some unexplained variables which are outside the purview of present study. It is to be noted here that Cash Reserve Ratio is considered as independent variable, whereas Consumer Price Index is taken as dependent variable for the purpose of testing the influence.

As far as the value of Correlation (r = 0.472) is concerned, it shows that the Cash Reserve Ratio do have an influence on inflation (measured by CPI). A moderate tough (Positive) relationship is found between Cash Reserve Ratio and Consumer Price Index (as the value is more than zero and is approaching towards +0.50). It may also be stated by analyzing the r value that 47.2 per cent variations in the Consumer Price Index has happened due to revision in Cash Reserve Ratio and the rest part of change in CPI may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned, (Sig. value = 0.000), the significance value is found to be quite less than 0.05. Therefore, the invalid speculation, that is, stated hypothesis (H01) is failed to be accepted at stated five per cent alpha level, which means that there is found a noteworthy influence of Cash Reserve Ratio on Consumer Price Index (CPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -2.066. The Exercise b (= 1.922) value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 1.922 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

CPI = constant b + exercise b (Cash Reserve Ratio)

CPI = -2.066 + 1.922(Cash Reserve Ratio)

Here, CPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Cash reserve Ratio is independent variable.

Table 4
INFLUENCE OF STATUTORY LIQUIDITY RATIO REVISION ON INFLATION MEASURED BY CONSUMER PRICE INDEX (CPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of statutory Liquidity Ratio and CPI	0.806	198.355	0.000	-19.873	1.210	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 4 shows the influence of Statutory Liquidity Ratio (SLR) revision on inflation measured by Consumer Price Index (CPI). As far as the value of Correlation (r = 0.806) is concerned, it shows that the Statutory Liquidity Ratio do have an influence on inflation (measured by CPI). A strong tough (Positive) relationship is found between Statutory

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

Liquidity Ratio and Consumer Price Index (as the value is more than zero and is approaching towards one). It may also be stated by analyzing the r value that 80.6 per cent variations in the Consumer Price Index has happened due to revision in Statutory Liquidity Ratio and the rest part of change in CPI may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.000), the significance value is found to be quite less than 0.05 (level of noteworthiness or significance). Therefore, the stated hypothesis (H01) is failed to be accepted at stated five per cent alpha level, which means that there is found a momentous influence of Statutory Liquidity Ratio on Consumer Price Index (CPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -19.873. The Exercise b = 1.210 value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 1.210 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

CPI = constant b + exercise b (Statutory Liquidity Ratio)

CPI = -19.873 + 1.210(Statutory Liquidity Ratio)

Here, CPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Statutory Liquidity Ratio is independent variable.

Table 5
INFLUENCE OF BANK RATE REVISION ON INFLATION MEASURED BY CONSUMER PRICE INDEX (CPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Bank Rate and CPI	0.460	28.468	0.000	-0.727	0.928	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 5 shows the influence of Bank Rate revision on inflation measured by Consumer Price Index (CPI). As far as the value of Correlation (r = 0.460) is concerned, it shows that the Bank Rate do have an influence on inflation (measured by CPI). A moderate uphill (Positive) relationship is found between Bank Rate and Consumer Price Index (as the value is more than zero and is approaching towards +0.50). It may also be stated by analyzing the r value that 46.0 per cent variations in the Consumer Price Index has happened due to revision in Bank Rate and the rest part of change in CPI which is arising may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.000), the significance value is found to be quite less than 0.05 (level of essentialness or significance). Therefore, the invalid theory or null hypothesis (H01) is failed to be accepted at stated five per cent alpha level, which means that there is found a considerable influence of Bank Rate on Consumer Price Index (CPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -0.727. The Exercise b = 0.928 value shows the slope of

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 0.928 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

CPI = constant b + exercise b (Bank Rate)

CPI = -0.727 + 0.928(Bank Rate)

Here, CPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Bank Rate is independent variable.

Table 6
INFLUENCE OF MARGINAL STANDING FACILITY RATE REVISION ON INFLATION MEASURED BY CONSUMER PRICE INDEX (CPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Marginal Standing Facility Rate and CPI	0.720	114.126	0.000	-5.386	1.487	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 6 shows the influence of Marginal Standing Facility Rate revision on inflation measured by Consumer Price Index (CPI). As far as the value of Correlation (r = 0.720) is concerned, it shows that the Marginal Standing Facility rate do have an influence on inflation (measured by CPI). A strong uphill (Positive) relationship is found between Marginal Standing Facility rate and Consumer Price Index (as the value is more than zero and is approaching towards one). It may also be stated by analyzing the r value that 72.0 per cent variations in the Consumer Price Index has happened due to revision in Marginal Standing Facility rate and the rest part of change in CPI which is arising may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.000), the significance value is found to be quite less than 0.05 (level of significance). Therefore, the stated hypothesis (H01) is failed to be accepted at stated five per cent alpha level, which means that there is found a considerable influence of Marginal Standing Facility rate on Consumer Price Index (CPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -5.386. The Exercise b = 1.487 value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 1.487 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

CPI = constant b + exercise b (Marginal Standing Facility rate)

CPI = -5.386 + 1.487(Marginal Standing Facility rate)

Here, CPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Marginal Standing Facility rate is independent variable.

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

Table 7
INFLUENCE OF REPO RATE REVISION ON INFLATION MEASURED BY WHOLESALE PRICE INDEX (WPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Repo Rate and CPI	0.333	13.501	0.000	-6.359	1.408	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 7 shows the influence of Repo Rate revision on inflation measured by Wholesale Price Index (WPI). In the table, the value of three tests i.e. Correlation analysis, ANOVA and Regression analysis are shown to test the hypothesis that there is any noteworthy influence of Repo rate revision on controlling inflation which is shown by Wholesale Price Index (WPI). In other words, it is tried to measure that how much variations in Consumer Price Index is explained by revision in Repo rate. Is the influence on Wholesale Price Index is significant or is just by chance or by some unexplained variables which are outside the purview of present study. It is to be noted here again that Repo Rate is considered as independent variable, whereas Wholesale Price Index is taken as dependent variable for the purpose of testing the influence.

As far as the value of Correlation (r = 0.333) is concerned, it shows that the Repo Rate do have an influence on inflation (measured by WPI). A weak uphill (Positive) relationship is found between Repo Rate and Wholesale Price Index (as the value is more than zero and is near to +.30). It may also be stated by analyzing the r value that 33.30 per cent variations in the Wholesale Price Index has happened due to revision in Repo rate and the rest part of change in WPI which is arising may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.000), the significance value is found to be quite less than stated alpha level of 0.05. Therefore, H02 is failed to be accepted at five per cent alpha level, which means that there is found a considerable influence of Repo Rate on Wholesale Price Index (WPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -6.359. The Exercise b = 1.408 value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 1.408 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

WPI = constant b + exercise b (Repo Rate)

WPI = -6.359 + 1.408(Repo Rate)

Here, WPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Repo Rate is independent variable.

Table 8
INFLUENCE OF REVERSE REPO RATE REVISION ON INFLATION MEASURED BY WHOLESALE PRICE INDEX (WPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Reverse Repo	0.393	19.767	0.000	-11.246	2.347	0.000

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

Rate and CPI						

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 8 shows the influence of Reverse Repo Rate revision on inflation measured by Wholesale Price Index (WPI). As far as the value of Correlation (r = 0.393) is concerned, it shows that the Reverse Repo Rate do have an influence on inflation (measured by WPI). A moderate uphill (Positive) relationship is found between Reverse Repo Rate and Wholesale Price Index (as the value is more than zero and is approaching towards +0.50). It may also be stated by analyzing the r value that 39.30 per cent variations in the Wholesale Price Index has happened due to revision in Reverse Repo rate and the rest part of change in WPI may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.000), the significance value is found to be quite less than 0.05 alpha level. Therefore, the invalid speculation, that is, stated hypothesis (H02) is failed to be accepted at stated five per cent alpha level, which means that there is found a considerable influence of Reverse Repo Rate on Wholesale Price Index (WPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -11.246. The Exercise b = 2.347 value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 2.347 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

WPI = constant b + exercise b (Reverse Repo Rate)

WPI = -11.246 + 2.347(Repo Rate)

Here, WPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Reverse Repo Rate is independent variable.

Table 9
INFLUENCE OF CASH RESERVE RATIO REVISION ON INFLATION MEASURED BY WHOLESALE PRICE INDEX (WPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Cash Reserve Ratio and CPI	0.649	78.567	0.000	-13.256	3.886	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 9 shows the influence of Cash Reserve Ratio revision on inflation measured by Wholesale Price Index (WPI). As far as the value of Correlation (r = 0.649) is concerned, it shows that the Cash Reserve Ratio do have an influence on inflation (measured by WPI). A strong uphill (Positive) relationship is found between Cash Reserve Ratio and Wholesale Price Index (as the value is more than zero and is approaching towards one). It may also be stated by analyzing the r value that 64.90 per cent variations in the Wholesale Price Index has happened due to revision in Cash Reserve Ratio and the rest part of change in WPI may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.000), the significance value is found to be quite less than 0.05 (level of significance). Therefore, the invalid assumption, that is, stated hypothesis (H02) is failed to be accepted at stated five per cent alpha level, which means that there

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

is found a significant influence of Cash Reserve Ratio on Wholesale Price Index (WPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -13.256. The Exercise b = 3.886 value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 3.886 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

WPI = constant b + exercise b (Cash Reserve Ratio)

WPI = -13.256 + 3.886(Cash Reserve Ratio)

Here, WPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Cash Reserve Ratio is independent variable.

Table 10
INFLUENCE OF STATUTORY LIQUIDITY RATIO REVISION ON INFLATION MEASURED BY WHOLESALE PRICE INDEX (WPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Statutory Liquidity Ratio and CPI	0.484	32.806	0.000	-19.558	1.069	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 10 shows the influence of Statutory Liquidity Ratio revision on inflation measured by Wholesale Price Index (WPI). As far as the value of Correlation (r = 0.484) is concerned, it shows that the Statutory Liquidity Ratio do have an influence on inflation (measured by WPI). A moderate uphill (Positive) relationship is found between Statutory Liquidity Ratio and Wholesale Price Index (as the value is more than zero and is approaching towards +0.50). It may also be stated by analyzing the r value that 48.40 per cent variations in the Wholesale Price Index has happened due to revision in Statutory Liquidity Ratio and the rest part of change in WPI may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.000), the significance value is found to be quite less than 0.05 (level of significance). Therefore the invalid speculation, that is, stated hypothesis (H02) is failed to be accepted at stated five per cent alpha level, which means that there is found a significant influence of Statutory Liquidity Ratio on Wholesale Price Index (WPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -19.558. The Exercise b = 1.069 value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 1.069 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

WPI = constant b + exercise b (Statutory Liquidity Ratio)

WPI = -19.558 + 1.069(Statutory Liquidity Ratio)

Here, WPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Statutory Liquidity Ratio is independent variable.

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

Table 11
INFLUENCE OF BANK RATE REVISION ON INFLATION MEASURED BY WHOLESALE PRICE INDEX (WPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Bank Rate and CPI	0.076	0.621	0.433	5.141	-0.229	0.000

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 11 shows the influence of Bank Rate revision on inflation measured by Wholesale Price Index (WPI). As far as the value of Correlation (r = 0.076) is concerned, it shows that the Bank Rate do not have an influence on inflation (measured by WPI). No linear relationship is found between Bank Rate and Wholesale Price Index (as the value is approximately equal to zero). It may also be stated by analyzing the r value that 0.760 per cent variations in the Wholesale Price Index has happened due to revision in Bank Rate and the rest part of change in WPI which is arising may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.433), the significance value is found to be quite more than 0.05 (level of significance). Therefore, the invalid assumption, that is, stated hypothesis (H02) is failed to be accepted at stated five per cent alpha level, which means that there is found no significant influence of Bank Rate on Wholesale Price Index (WPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = 5.141. The Exercise b = -0.229 value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, -0.229 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

WPI = constant b + exercise b (Bank Rate)

WPI = 5.141 + (-0.229)(Bank Rate)

Here, WPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Bank Rate is independent variable.

Table 12
INFLUENCE OF MARGINAL STANDING FACILITY RATE REVISION ON INFLATION MEASURED BY WHOLESALE PRICE INDEX (WPI)

Variables	Correlation	ANOVA		Regression		
	r Value	F value	Significance value	Constant B	Exercise B	Significance value
Relationship of Marginal Standing Facility Rate and CPI	0.319	11.997	0.001	-4.151	0.978	0.001

Source: Secondary Data (Data Processed through SPSS)
Significant Level: 5 per cent

Table 12 shows the influence of Marginal Standing Facility Rate revision on inflation measured by Wholesale Price Index (WPI). As far as the value of Correlation (r = 0.319) is concerned, it shows that the Marginal Standing Facility Rate do have an influence on inflation (measured by WPI).A weak uphill (Positive) relationship is found between Marginal Standing Facility Rate and Wholesale Price Index (as the value is more than zero and near to +0.30). It may

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

also be stated by analyzing the r value that 31.90 per cent variations in the Wholesale Price Index has happened due to revision in Marginal Standing Facility Rate and the rest part of change in WPI which is arising may be due to some unexplained/Extraneous variables which are outside the purview of the present study.

As far as ANOVA value is concerned (Sig. value = 0.001), the significance value is found to be quite less than 0.05 (level of significance). Therefore, the invalid assumption, that is, stated hypothesis (H01) is failed to be accepted at stated five per cent alpha level, which means that there is found a significant influence of Marginal Standing Facility Rate on Wholesale Price Index (WPI).

In case of Regression analysis, the Constant b value shows the intercept value, which means that this is the value which do exist even when no independent value or variable is there. This is found to be in this case as Constant b = -4.151. The Exercise b = 0.978 value shows the slope of regression line or it can be said that it is the value which actually shows the influence of independent variable on dependent variable. In other words, if there is one-unit revision in independent variable, 0.978 per cent change will be there on dependent variable.

If we draw regression equation of testing the influence, it will be created as:

WPI = constant b + exercise b (Marginal Standing Facility Rate)

WPI = -4.151 + 0.978 (Marginal Standing Facility Rate)

Here, WPI is dependent variable, Constant b is intercept, Exercise b is slope of regression line and Marginal Standing Facility Rate is independent variable.

CONCLUSION

After critically analyzing the date of inflation (as measured by CPI and WPI) and interest rates, it is found that revision in interest rates do have an influence over inflation level. Significant influence (at five per cent critical level) has been found of interest rates over level of inflation in India. Significant portion of variation in inflation level is found as happened due to revision in interest rates, while left over part of variation may be due to some extraneous variables outside the scope of the present study such as increasing supply of goods and services in the market, favorable environmental conditions like timely rainfall etc. In last, it may conclude that appropriate revision in interest rates is prove to be effective step adopted by government in controlling the level of inflation in the country.

Institutional Review Board Statement: Not applicable.

Informed Consent Statement: Informed consent was obtained from the respondents of the survey.

Conflict of Interest: There is no conflict of interest between the authors.

Funding Acknowledgement: This research received no external funding.

Data Availability: The data used to support the findings of this study are available from the corresponding author upon request.

REFERENCES

Aboelsoud, M. E., paparas, D., zouaoui, A., & kasim, M. K. (2019). The dynamic interrelationship between interest rate and macroeconomic policy objectives: Case of the United Kingdom. *Journal of Economics and Political Economy, 6*(4), 304-322.

Ahmed, D. A., & Abdelsalam, M. A. M. (2017). Inflation instability impact on interest rate in Egypt: augmented Fisher hypothesis test. *Applied Economics and Finance, 5*(1), 1-13.

Alvarez, L., & Weber. (2001), Interest Rates and Inflation. Federal Reserve Bank of Minneapolis, Research Department, 609, 1-18.

Ayub, G., Rehman, N., Iqbal, M., Zaman, Q., & Atif, M. (2014). Relationship between inflation and interest rate:

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.

evidence from Pakistan. *Research Journal of Recent Sciences, 3*(4), 51-55.

Bantwa., & Bhatt. (2020). Volatility Models and Their Performance in Indian Capital Market with Special Focus on Indian Volatility Index (VIX). *NICM Bulletin*, 8-21, 2249-2275.

Behera, J., & Mishra, A. K. (2017). The recent inflation crisis and long-run economic growth in India: An empirical survey of threshold level of inflation. *South Asian Journal of Macroeconomics and Public Finance, 6*(1), 105-132.

Bosupeng, M. (2016). The Effects of Chinese Interest Rates and Inflation: A Decomposition of The Fisher Effect. *Munich Personal RePEc Archive (MPRA), 06.*

Chakraborty, L. (2012). Interest rate determination in India: Empirical evidence on fiscal deficit–interest rate linkages and financial crowding out. *Levy Economics Institute*, 744, 1-24.

Chowdhury, S. A., Yousuf, M., Uddin, M. N., & Uddin, M. J. (2020). Nominal Interest Rate, Inflation and Money Market Link in Bangladesh: An Econometric Analysis. *Asian Journal of Humanity, Art and Literature, 7*(1), 59-68.

Cioran, Z. (2014). Monetary policy, inflation and the causal relation between the inflation rate and some of the macroeconomic variables. *Procedia Economics and Finance, 16*, 391-401.

Dhungana, N. T., & Pradhan, R. S. (2017). Effect of Bank Lending on Inflation in Nepal. *Journal of Advanced Academic Research, 4(*2), 27-43.

Egilsson, J. H. (2020). How raising interest rates can cause inflation and currency depreciation. *Journal of Applied Economics, 23*(1), 450-468.

Abou El-Seoud, M. S. (2014). The Effect of Interest Rate, Inflation Rate and GDP on National Savings Rate. *Global Journal of Commerce & Management Perspective, 3*(3), 1-7.

Fakher, H. A. (2016). The empirical relationship between fiscal deficits and inflation (Case study: Selected Asian economies). *Iranian Economic Review, 20*(4), 551-579.

Khumalo, L. C., Mutambara, E., & Assensoh-Kodua, A. (2017). Relationship between Inflation and Interest Rates in Swaziland Revisited. *Banks and Bank Systems, 12*(4), 218-226.

Khurshid, A. (2015). The effect of interest rate on investment; Empirical evidence of Jiangsu Province, *China. Journal of International Studies, 8* (1), 81-90.

Kumari, L., & Jha, N. K, (2019). The Effect of Cash Reserve Ratio and Reverse Repo Rate on Stock Market Performance - Empirical Evidence from India. *IOSR Journal of Economics and Finance (IOSR-JEF), 10*(1), 47-51.

Ogege, S. (2019). Analysis of the Impact of Inflation, Interest Rate and Exchange Rate on Economic Development. *International Journal of Commerce and Finance, 5*(1), 121-132.

Pill, H. (1997). Real interest rates and growth: Improving on some deflating experiences. *The Journal of Development Studies, 34*(1), 85-110.

Sargent, T. J. (1976). Interest rates and expected inflation: A selective summary of recent research. *Explorations in Economic Research, 3*(3), 1-23.

Saymeh, A. A. F., & Orabi, M. M. A. (2013). The effect of interest rate, inflation rate, GDP, on real economic growth rate in Jordan. *Asian Economic and financial review, 3*(3), 341-354.

Shahid, A., Ahmad, H. K., & Liaqat, S. (2020). Inflation, Globalization and Interest Rate Nexus to Curb Price volatility: An Empirical Cross-Country Analysis. *Global Economics Review, 5*(1), 153-165.

Sriyana, J. (2018). Inflationary effects of fiscal and monetary policies in Indonesia. *Business and Economic Horizons, 14*(3), 674-688.

Sriyana, J. (2019). Price stabilization policy in an emerging economy: An asymmetric approach. *Journal of International Studies, 12*(2), 165-181.

Thakur, V. U., & Sharma, M. (2016). RBI's monetary policy: Its impact and implications on money supply and inflation. *International Journal of Multidisciplinary Research and Development, 3*(2), 161-163.

Uddin, G., Alam, M., & Alam, K. (2008). An empirical evidence of Fisher Effect in Bangladesh: A time-series approach. *ASA University Review,(ISSN: 1997-6925), 2*(1), 1-8.

Viren, M. (1987). Inflation and interest rates: Some time series evidence from 6 OECD countries. *Empirical Economics, 12*(1), 51-66.

Citation Information: Ali, M.A., Jangid, V., Bansal, R., Khan, M.A. (2022). A critical analysis of influence of interest rates revision on inflation in india. *Academy of Accounting and Financial Studies Journal, 26*(3), 1-15.