

# Impact of Inflation and Interest Rate on Economic Growth in Pakistan

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## Abstract

The aim of this paper is to examine the impact of major economic variables includes inflation rate and interest rate on economic growth of Pakistan. The secondary data has been taken for the years from 2008 to 2017. The results from linear regression model describe that inflation rate spread negative impact on Pakistan's economic growth while interest rate is found positively significant on the economy. Therefore, all the variables that have been selected show less impact on economic growth of the country as compared to other factors that put a solid impact on Pakistan's economic conditions. The type of influence of these variables of the economy varies from country to country such as developed economies and developing economies. The developing economies like Pakistan suffering from different problems such as energy & water shortages, political instability, lack of policy implication, continuous increase in inflation, security concerns, burden of foreign debt, and misbalance between import and export payments etc.

## Keywords

Economic growth; Interest rate; Inflation rate.

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## 1. Introduction

The purpose of this study is to examine the impact of inflation and interest rate on economic growth in Pakistan. Economic growth in Pakistan and is calculated as the change in percentage in the GDP from one year to the next. It measures whether production has increased or decreased during the year, and by how much it increased.

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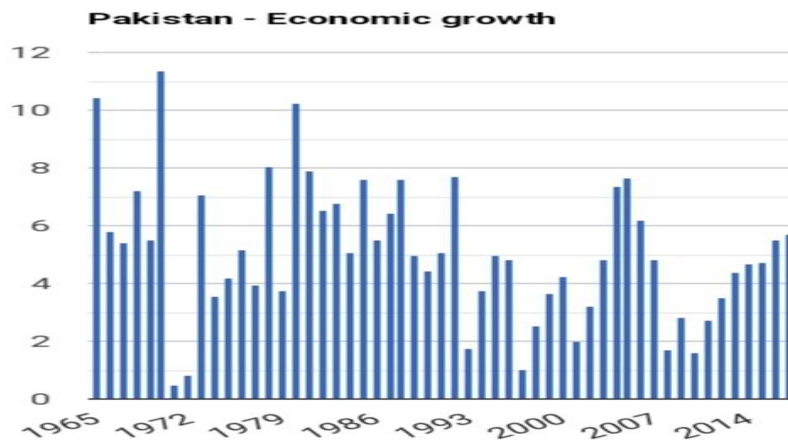
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After the independence in 1947 the rate of economic growth of Pakistan is higher than the South Asian country's economic growth rate. But as the time passed the economy of Pakistan suffered from political instability, burden of foreign debt, poor exports and high imports, lack of implementation of the economic policies for many years (Khalid, 2005).

Economic growth of 7-8 percent is extraordinary. It defines the ability of an economy to boost its productive capacity through which it becomes more capable of producing extra units of goods and services. Pakistan's Economic Growth over the years is like:

**Figure: 1.1 Economic Growth**



Economic growth of any country reflects its capacity to raise production of goods and services. Looking across many countries the average rate of economic growth is about 2-3 percent per year. It alternates from year to year as the economy goes all the way through recessions and expansions. On the other hand, if an economy normally grows at about 5 percent or more per year, this is a substantial rate of economic growth.

Interest rate policy is a key tool of monetary policy with regards to the part it plays in the mobilization of financial resources designed at promoting economic growth and development in Pakistan. "Interest rate is the price rewarded for making use of money. It is the opportunity cost of for the cause of borrowing money from a lender. It can also be seen as the return being paid to the giver of financial resources. It is an important economic price. This is because whether seen from the viewpoint of cost of capital or from the viewpoint of opportunity cost of funds, interest rate has essential implications for the economy of the country either influencing on the cost of capital or influencing the availability of credit, by increasing savings (Acha&Acha 2011)".

Interest rates also have an effect on consumer self-belief in the economy, which honestly affects consumer spending. When the economy is experiencing a downturn, consumer confidence may be near to the ground, affecting people to save more and spend less. Low interest rates may attract consumers to spend more on huge ticket items, such as cars and houses, but only if the job market is safe. Consumers who are hesitant if they can maintain a position long term in a poor economy are less expected to take advantage of low interest rates.

Pakistan practiced high and volatile inflation during FY2009, where in July 2008 it increased to 24.3 percent, and then in August 2008 it reached at 25.3 percent. To some point, it also reflected the extreme public sector borrowing adjustments as well in public utility prices produced by losses in public sector enterprises, particularly electricity.

“To achieve sustainable economic growth tied with price stability continues to be the essential objective of macroeconomic policies for most countries in the world today. Among others the importance given to price stability in manner of monetary policy is with a vision to promoting sustainable economic growth plus strengthening the purchasing power of the domestic currency (Umaru and Zubairu, 2012).”

The relationship between inflation and economic growth has been much broader both theoretically and empirically in macroeconomics. In most of the time mainly before 70's there was debate on inflation and growth relationship the dispute was that there is no relation, or the relationship is positive.

The question on whether or not inflation is dangerous to economic growth has in recent times been a subject of strong debate to policy makers and macro economists. A number of studies have estimated a negative relationship between inflation and economic growth. Particularly the main problem is that whether inflation is essential for economic growth or it is unfavorable to growth.

Studies like Fisher (1993), Barro (1996) and Bruno and Easterly (1998) establish that the relationship between inflation and economic growth is negative. Paul Keaney and Chowdhary (1997) get the sample of 70 countries (from which 48 are developing countries) for the period 1960-1989 found no causal relationship between inflation and economic growth in 40 percent of the countries, The study reported bidirectional causality in about 20 percent of countries and a unidirectional relationship in the rest.

The objectives of the study are:

- To identify the impact of Inflation rate on the Economic growth of Pakistan.
- To identify the impact of Interest rate on the Economic growth of Pakistan.

- To identify the relationship between Interest rate Inflation rate and Economic growth.

In this study the focus is to find out the Impact of inflation and interest rate on economic growth. The study focuses on the consequences of impacts that have been put forward by the selected variables inflation rate and interest rate on economic growth rate of Pakistan.

This study is a source of information and will also clear some existing controversies on the impact of interest rate and inflation rate on the economic growth in Pakistan. This research can also be a tip of reference for undergraduate students. It can also be helpful and provide a guide to other researchers. Problem solving for sustainable economic growth is focused.

## **2. Literature Review:**

The amount of literature on the impact of Inflation and Interest rate on Economic growth is rapidly increasing and much research has been done by the researchers. Leading research studies on the impact of Inflation and Interest rates on Economic growth.

Hussain and Malik, (2011) examined the effect of inflation rate on economic growth of Pakistan. The judgment has been taken through the co-integration and error correction models to examine the long run and short run dynamics of the inflation and economic growth relationship. The study also investigated the interesting policy that what is the threshold level of inflation for the economy. The study suggested that there is a positive relationship between inflation and economic growth and have significant impact.

The result of this study was necessary as the Tobin portfolio-shift effect i.e., high inflation ate leads people to invest more in physical capital and cut their real balance holdings. The Granger test employed to verify the linear causation showed that inflation affects growth at lag three while there is no reverse causation from output growth to inflation.

The experiential findings of this test also established that there is a significant relationship between the two variables in the long-run. The study concluded that the attempts to achieve faster economic growth may overheat the economy to the point that the inflation rate becomes unbalanced. So, the government of Pakistan has to take stepladder for keeping inflation to single digit, or close to single digit.

Ayyoub, Chaudhry and Fatima, (2011) The study has attempted to re-examine the relationship of inflation and economic growth in Pakistan and to analyze empirically the effect of inflation on growth of the economy. Their focus is on the basic question of whether the negative inflation-growth relationship exists in the economy or the situation is something different? The

analysis has been taken on the basis of annual time-series data for the period 1972-73 to 2009-10. This study has taken simple descriptive statistics and regression analysis to perform the task. The study also found the feasible threshold level of inflation which causes to decrease the growth of GDP. During this study the threshold has been found at the level of 7 percent of inflation.

Inflation below this level gives positive impact to the economic growth. But after this level it seriously effects the growth of the economy of Pakistan. On the basis of this study, it was recommended that to keep the inflation below the level of 7 percent in the economy the policy makers and the State Bank of Pakistan should focus on those options which keep the inflation rate stable and below the level which has been found supportive for the accomplishment of sustainable economic growth. So that it may exercise its positive effects on the economy.

Yusuph, (2012) The main purpose of the study is to look into the impact of interest rate on the economic growth and under economic growth we come across things like investment, employment rate, inflation rate, export rate and other economic variables whereby the study look on impact resulted due to interest rate and those economic variables mentioned above. In most of the Islamic countries there is absence of interest rate (zero interest rate) and so far the economic growth performed well.

This result implies that the impact of interest rate on economic variables in Islamic countries assuming zero interest rate may be unlike from other countries. Economic growth may influence the interest rate level directly or indirectly. A higher GDP growth more than the expected sum is measured to be inflationary, causing the central bank to lift the interest rate in order to slow down the growth.

In the current literature, there are few studies dealing with the causality relations between economic growth, investment, and interest rates. So the paper aims to investigate the impact of interest rate on Tanzania economy so as to observe how the country is affected by the increase or decrease of interest rate.

Saymeh and Orabi, (2013) The main purpose of this study is to explore the effect of interest rate, inflation rate, and GDP on real economic growth in Jordan over the period 2000-2010. Many macroeconomic theories tried to discover the interrelationship between interest rate, GDP, inflation, and real economic growth. Unit root test (Augmented Dickey-Fuller test) has been exploited to check the combination order of the variables.

A co-integration analysis with four variables (economic growth, interest rate, GDP, and inflation level) is employed. This study adopted the same four variables to discuss Granger

Causality relationship; findings showed that inflation causes interest rates. Also, regression was used to test growth rate with inflation rate; it indicates that inflation rate has influence power on growth rate.

It is well known that regional economy is not yet out of the woods and since the global recovery from last recession seems to have encountered more delays; economic growth outlook for Jordan is more and more challenging. Although adverse external environment continues to put in domestic doubts linked with the regional socio-political unrests.

Although Jordan's economy has achieved strong growth in current years after a number of key reforms were introduced by the government; yet, the kingdom's economy still faces a major threat from high inflation; the kingdom's economic growth is being make up for by increasing inflation which has hit all-time highs Group Research Dept. (2012). Finally, regression was used to test GDP, interest rate, and inflation rate jointly; consequences have shown that current GDP and one interval GDP have influence power to growth rate.

Behera, (2014) judged the impact of inflation on economic growth in six South Asian countries based on the annual data for the period 1980-2013. The correlation outcome of the study originated that there is high positive correlation exist between inflation and economic growth for all the countries. The co-integration results implied that there is long run relationship exist for Malaysia. Though, the rest of the countries have no long run relationship between inflation and economic growth.

The study also engaged in unidirectional VAR investigation to identify the short run dynamics among inflation and economic growth. The Granger causality result examines that there is a unidirectional causality runs from GDP to CPI for Bangladesh, Bhutan, and India. The study also indicates that there is short run and as well as long run shock takes place in the circumstance of Nepal in the ten-period interval. However, the study found that there is no major constant short run relationship between inflation and economic growth over the ten period of interval in the circumstance of Bangladesh.

Anochiwa and Maduka, (2015) studied the relationship between Inflation and economic growth in Nigeria. The range of the study spanned from 1970 to 2012. The methodology engaged in this study was the Augmented Dickey-Fuller techniques to observe the unit root property of the series after which co integration test was conducted through the request of Johansen co integration technique to inspect the long-run relationship between the two phenomena also Granger causality test was conducted to determine causation between economic growth and inflation.

The result of the test showed that there is a nonlinear relationship between economic growth and inflation and coefficient of inflation is negatively signed and statistically unimportant both in the current period and interval three and this result seems to put forward that inflation is averse to growth.

Sultan and Shah, (2015) explored the relationship between inflation and economic growth in Pakistan. Further, it examined whether it holds or hurts the economic growth in a consistent way or it acts in a different way in unusual levels. Panel time-series data for the period 2005-15 had been used and analysis is prepared by applying the method of Co-relation and Linear Regression. A reasonable and noteworthy inflation rate and economic growth relationship has been found to be present in the economy of Pakistan.

This paper explored the impact of inflation rate on economic growth in Pakistan with Co-efficient Correlation method and Linear Regression method over the period of 2005-2014. The results fail to refuse the first two null-hypothesis of this research while last two null hypothesis of this research is discarded because of this result it is found that there is a fair and important relationship between inflation rate and economic growth in Pakistan.

The result of this study showed that the present inflation rate is dangerous to the growth of the economy after a firm threshold position. On the root of the analysis, it is recommended to the strategy makers and the State Bank of Pakistan to confine the inflation below the 8 percent point and to keep it stable. Thus, that it may put forward its helpful impacts on economy growth of the economy.

Majumder, (2016) investigated the main important targets for any developing country like Bangladesh, which were to accomplish high economic growth. Although there are many factors that influence economic growth, the concern of this research was only on inflation. The relationship between economic growth and inflation is arguable. To analyze unit root or stationery, Augmented Dickey Fuller Test is used.

This study used Granger causality and then error correction model to examine the relationship among economic growth and inflation in Bangladesh for the period of 1975 –2013. To evaluate the data the model is created by taking economic growth of gross domestic product as dependent variable and three variables (i.e., inflation, money supply and remittance) as independent variables.

Results of the unit root test point out that only inflation rate has stationary and other three variables have unit root problem or non-stationary at point. However, when these three variables are tested at first difference then the problem of unit root has gone and hence, they

have become stationary at first difference. The VECM presents that there exists a statistically major long run positive relationship between inflation rate and economic growth of gross domestic product.

The results are same with the findings of those Mallik and Chowdhury (2001), Hussain (2011), Behera (2014), and Mahmoud (2015) who said that there is positive relationship between inflation and economic growth in long run.

Gylych, (2016) explored the impact of interest rate on economic growth in Nigeria from 1990 to 2013. The Nigerian economy faced many challenges which impacted the overall economic activity and has witnessed crises with shocking consequences on the world commodity prices as an effect of global economic. This subsequently created structural imbalances occasioned by the fall in oil prices which unfavorably affected the Nation's revenue.

The result establishes that the interest rate has a minor impact on growth; however, the growth can be enhanced by lowering the interest rate which will increase the investment. The study concludes that in Nigeria the interest rate has major impact on the economic growth. The statistical analysis result reveals that a unit change in the investment will go ahead to growth.

Madurapperuma (2016) provided that modest and constant inflation rate stimulates economic growth of a country. Modest inflation motivates savers, enhances investment and thus speeds up the economic growth of the country. The objective of this study was to explore the impact of inflation on economic growth in Sri Lanka for the phase of 1988 – 2015 using the frame of Johansen co-integration test and Error Correction model.

The consequences showed that there was a long run negative and significant relationship between economic growth and inflation in Sri Lanka. These results hold with the model of utility functions in consumption and real money balances, as uncovered by Fischer (1979); De Gregorio (1993); Bruno & Easterly (1998) and differ with the result of Sidrauski (1967) super neutrality of money in the long run. The results are more probably to support the utility functions in real money balances and consumption.

Maiga (2017) explored the impact of interest rate on economic growth in Nigeria. The statistical analysis result reveals that a unit change in the investment will go ahead to growth. This study came out with empirical evidence that will help in accepting the relationship between variables used in the model drawing from the Nigerian economy from 1990 to 2013. It was found that the interest rate has a minor impact on growth; but the growth can be improved by lowering the interest rate, which will raise investment.



As a result of the study, it was found out that Nigerian authorities should lay down interest rate policies that will improve the economic growth. From the findings, the study concludes that in Nigeria the interest rate has considerable impact on the economic growth. In order to have a speedier economic growth, the Nigerian authorities should lower the interest rate so that the investment will increase and the policy direction of interest rate, investment must be seen, not only in the perspective of price and financial stability but also in boosting development in Nigeria.

By ex-post facto research design, it is a quasi-experimental study investigating how an independent variable, present prior to the study in the participants influence a dependent variable. On the normal, the result exhibits that interest rates have a negative yet huge significance with GDP (economic growth). This is shown by the negative relationship of (DIR and EXR) two out of three logical factors in this study to the GDP.

Number of studies based on the impact of interest rate, inflation rate on the economy such as Julia (2007) whereby she argued that many economies are affected by conditions in foreign countries. Then according to Nicholas (2009) tried to come across the interest rate liberalization and economic growth and examines the dynamic impact of interest rate reforms on economic growth and its empirical results give you an idea about that there is strong hold for the positive impact of interest rate liberalization on financial deepening. So, Nicholas (2009) and Julia (2007) did not clarify the impacts of interest rate on economic growth.

The current study, therefore, attempts to fill this gap by examining the impact of interest rate on the economic growth in Pakistan. Barro (1995) empirically investigates growth-inflation relationship. He reached the result that there exists a negative relationship between these two variables. However, he also added that it is high enough and long-term inflation which causes economic growth to reduce.

Interest rate and inflation rate is among the intimately watched variable in the economy, their movements are reported almost daily by news media because they are openly influence our day by day lives and have significant effect on the health of the economy and they are essential macroeconomic variables for economic growth.

### **3. Research Methodology**

Data used in this study is secondary data and is collected from the State Bank's monetary policies and Economic trading and from some other websites. Numerical values are taken from

the State Bank under Historical SBP Policy and reserve rate. Descriptive statics and Regression analysis are helpful to find the relationship of Inflation, Interest rate and Economic growth.

The sample size of all the variables is collected from Pakistan for the ten years, and their data is studied from the period 2008-2017. The data used is the latest data available for this period.

Relationships between the variables are taken by Regression and Descriptive statics.

Data collection is the process of assembling and measuring information on variables of interest, in an established systematic fashion that enables one to answer stated research objectives, test hypotheses and evaluate outcomes.

The data for the research purpose is collected from secondary sources. Regardless of the field of study or preference for defining data (quantitative, qualitative), accurate data collection is important for maintaining the integrity of research. The data is collected from the website of State Bank of Pakistan and some other websites.

### **Variables:**

A characteristic, number or amount that increases or decreases over time or takes dissimilar values in different situations.

The dependent variables are those that depend on other factors that are measured. The dependent variable in this project is Economic growth. It is the annual percentage growth rate of GDP at market prices based on constant local currency. GDP is the sum of gross value added by all resident producers in the economy plus any product taxes and minus any subsidies not included in the value of the products. It is calculated by not including deductions for depreciation of fabricated assets or for depletion and degradation of natural resources.

There is number of variables which put effect on the economic growth of Pakistan in a variety of ways. Different variables have been taken by many researchers to observe the relation between those variables and economic growth. But this paper includes two independent variables. The independent variables are those that is stable and unaffected by the other variables you are trying to measure. The Independent variables in this project are the Inflation rate and Interest rate.

Inflation is the rate of increase in the prices of goods and services of a country. This does not essentially indicate that all prices increased. Inflation therefore explains a persistent general increase in prices. Inflation is usually given as the percentage increase in general prices over a year. The most often quoted and most extensively used is Consumer Price Index (CPI). Pakistan practiced high and unstable inflation.

An interest rate is the rate at which interest is paid by a borrower (debtor) to make use of money that they borrow from a lender (creditor). Interest rates are normally noted on an annual basis. The interest rate per year has been taken as an independent variable in the project.

This study is quantitative in nature and examines the causal relationship between interest rate, inflation rate and economic growth in Pakistan for last ten years from 2007-2017. This chapter consists of data used (sample), the main model, variable specification and techniques which are applied. The models we use to investigate the impact or relationship between interest rate, inflation and economic growth are Descriptive statistics and Regression method is used to analyze the data via the statistical package for the social sciences (SPSS) version 20. The data used in this project is secondary and the sources of data collection for this study are internet. And the exact sources that are used for collecting data are State Bank of Pakistan (online) and Economic Trading (online). The study adopted explanatory research design.

To examine the impact of Inflation and Interest rate on Economic growth of Pakistan, a linear regression equation is constructed. By taking all individual independent variables in relation with their dependent variable as:

$$GDP = \alpha + \beta_1 (INF) + \beta_2 (IN) + \mu \dots\dots\dots (1)$$

Where:

A is constant

$\beta$  is Regression Coefficient

GDP=Gross Domestic Product (Economic Growth)

INF=Inflation Rate

IN=Interest Rate

The statistical package for social science (SPSS version 20) will be used for summarizing and analyzing the given data. From the result which will be obtained from where we reach to the conclusions on what are the impact of interest rate and inflation rate on Economic growth.

Basically Descriptive statistics are used to portray the core features of a collection of data in quantitative terms. The elucidating measurements in this portion of examination portrays and investigations the information utilizing the mean, median, Maximum, Minimum the standard deviation in order to quantitatively sum up the data for its soundness and suitable findings.

Regression is an influential statistical tool that allows you to examine the relative strength of relationships between dependent and independent variables. Regression provides great insides

of the relationship which is under discussion. Some regression shows a combined effect of variables on dependency of other one.

**Statement of Hypotheses:**

To attain the research objectives, the study would make certain assumptions as follows:

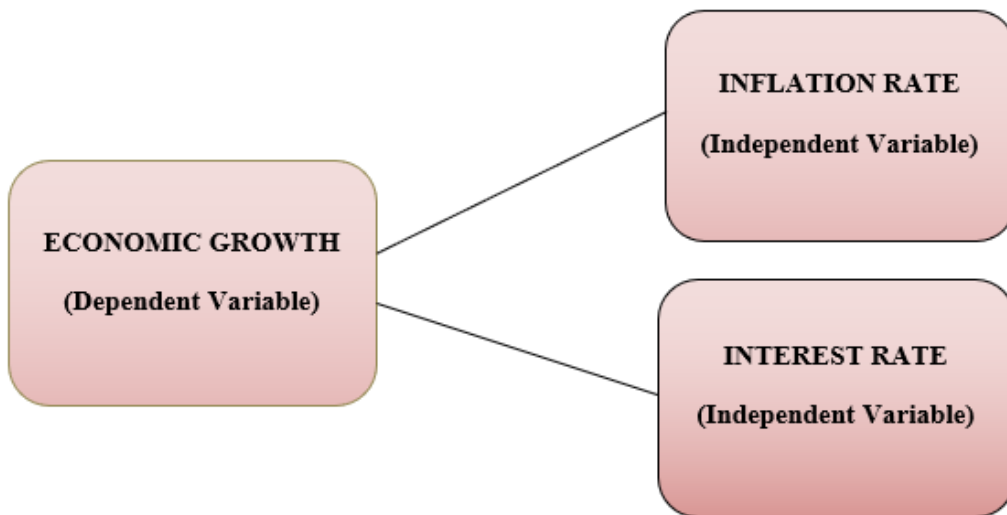
Ho: Interest rate has no significant impact on the economic growth in Pakistan

H1: Interest rate has significant impact on the economic growth in Pakistan.

Ho: Inflation rate has no significant impact on economic growth in Pakistan.

H1: Inflation rate has significant impact on economic growth in Pakistan.

**Figure: 3.1 Theoretical Frameworks**



**4. Findings and Discussions:**

For the purpose of finding the quantitative predictions concerning dependent and independent variables, regression analysis method has been adopted that shows the individual significance of each independent variable and overall significance of the model. Following are the results of regression analysis:

**4.1.1 Reliability Analysis:**

Here we check the reliability of the data:

**Table 4.1: Case Processing Summary**

		N	%
Cases	Valid	10	100.0
	Excluded <sup>a</sup>	0	.0

Total	10	100.0
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Listwise deletion based on all variables in the procedure a.

**Table 4.2: Reliability Statistics**

Cronbach's Alpha	N of Items
.565	3

The reliability statistics show that the model is 56% reliable.

**Descriptive Analysis:**

**Table 4.3: Descriptive Statistics**

	N	Minimum	Maximum	Mean	Std. Deviation
GDP	10	2.36	5.99	4.3850	1.30531
INFLATION	10	2.86	17.63	9.7700	5.05348
INTEREST	10	6.25	13.50	10.2610	2.87417
VALID N (listwise)	10				

The mean value of GDP is 4.3850. The maximum value of GDP is 5.99 and the minimum value of GDP is 2.36, the standard deviation of GDP is 1.30531. The mean value of Inflation rate is 9.7700. The maximum value of Inflation is 17.63 and the minimum value of Inflation is 2.86, the standard deviation of Inflation is 5.05348. The mean value of the Interest rate is 10.2610. The maximum value Interest is 13.50 and the minimum value of Interest rate is 6.25, the standard deviation of Interest rate is 2.87417.

**5 Regression Analysis:**

Here is the regression analysis.

**Table 4.4: Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.636 <sup>a</sup>	.404	.234	1.14228

Predictors: (Constant), INTEREST, INFLATION a

In the above model summary table the capital "R" indicating the coefficient of correlation. The coefficient of correlation "R" is establishing the degree and direction of the variables which

are connected with each other from the sample data. There is a series of coefficients of correlation which express the strength and direction of the correlation between the variables. R square is used in the context of statistical models whose main purpose is a prediction of future outcomes on the basis of other related information.

The model summary table shows the value of R Square is found 0.40 that means 40% of economic growth of Pakistan is explained by the independent variables includes inflation rate and interest rate. The value of “R” is little because the economic growth is also dependent on many other factors like political stability, government policies, government consumption, exports and imports of the country etc.

**Table 4.5: Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients			Standardized Coefficients	t	Sig.
		B	Std. Error		Beta		
1	(Constant)	1.888	2.989			.632	.548
	INFLATION	-.563	.338		-2.181	-	.139
	INTEREST	.780	.593		1.717	1.669	.230
						1.314	

Dependent Variable: GDP<sub>a</sub>

The value of constant is found 1.888 which explains that if all independent variables remain zero the economy of Pakistan will remain affected by other variables that have not considered. The t-value of inflation rate is found - 1.669 which describes that inflation rate has significant impact on Gross Domestic Product growth of Pakistan. Therefore, H1 is accepted, and Ho is rejected.

Coefficient of inflation rate is presenting negative impact on economic growth. The value of coefficient of inflation rate is presenting that if inflation rate would increase by 1% and the growth rate would be declined by 56.3%. This result describes the importance of the inflation in the Pakistan’s economy that only 1% increase brings about 56.3% declines in the overall economic growth.

The t-value of Interest rate is found 1.314 which states the significant impact of Interest rate on economic growth of Pakistan. The result also discovered that Interest rate and economic

growth is positively related with each other because 1% changes in exchange rate brings 78% changes in economy of Pakistan. Hence H2 is accepted, and Ho is again rejected.

## **6 Discussion**

The result revealed that Interest rate and economic growth are positively associated with each other, but Inflation rate and Economic growth are negatively associated with each other. Hence the significant relationship is accepted. The controversial issue about economic growth and inflation is the relationship between them.

Theories and previous studies about the relationship stuck between inflation and economic growth have exposed that there might be no relationship (Sidrauski, 1967), negative relationship (Fisher, 1993 and Barro, 1995) or positive relationship (Mallik and Chowdhury, 2001) among these two variables. Today the problem is not just the simple relationship but also the level of inflation that can affect economic growth.

The structuralists view that inflation has a positive effect on economic growth, whereas monetarists see inflation as harmful to economic growth. Both views have their own account for why inflation has a positive or a negative impact on economic growth. Therefore, this study shows a significant impact of Inflation on economic growth. Negative and positive both facts are available in literature between inflation and economic growth.

Malik and Chowdhury (2001) estimated that inflation and economic growth are positively associated with each other in India, Pakistan, Bangladesh, and Sri Lanka. However, there are loads of other studies which pointed out the negative relation between inflation and economic growth. Levine and Zervos (1993) concluded that reasonable inflation would not influence the growth rate negatively. They argued that if the inflation rate is over 80 percent, the growth rate is affected negatively.

The earlier studies about relationship between inflation and economic growth have shown that: Obamuyi and Olorunfemi (2011) examined the implications of financial reform and interest rate behavior on the economic growth in Nigeria. Study results discovered that financial reform and interest rates have significant impact on economic growth in Nigeria; also, results implied that the interest rate performance is important for economic growth. Bader and Malawi (2010) showed a positive effect of real interest rate on both national income and on (GDP).

## **Conclusion:**

In this study, it was analyzed the impact of Inflation rate and Interest rate on Economic growth of Pakistan. The models were used to investigate the impact or relationship between interest rates, inflation, and economic growth.

The study focuses on the consequences of impacts that have been exerted by the elected variables inflation rate and interest rate on economic growth rate of Pakistan. There are a number of macroeconomic variables that influence the growth performance of any country.

The kind of influence of these economic variables varies from country to country such as developed economies and developing economies. The developing economies like Pakistan suffering from a variety of issues such as energy & water shortages, political instability, lack of policy implication, continuous increase in inflation, security concerns, burden of foreign debt, and misbalance among import and exports payments etc.

The empirical results describe about the selected independent variable include inflation rate is negatively associated with the GDP growth of the Pakistan and at the high values this variable putting awful impact on the growth rate of the economy of Pakistan. On the other hand, coefficient of Interest rate showing positive impact on the growth rate of Pakistan. In this span the influence of inflation rate and interest rate are lesser as compared to other factors that put impact on Pakistan's economy these factors include political instability, security concerns, energy shortages, burden of foreign debts. From the results it is establish that there is a moderate and significant relationship between inflation rate, interest rate and economic growth in Pakistan.

Future researchers can make research on other variables differences with this study did that would be examined to assemble the different interest rate factor and inflation rate impacting on economic development in Pakistan.

The study suggests that the policy maker must take tense policies next to reduction of inflation growth in the country by implementing the tools such as controlling money supply in the market during open market operation, setting up interest rate and setting of bank reserve requirement.

The Pakistan's Government should take severe steps to manage the inflation rate such as reducing imports & increasing exports, dipping government expenditures, give main concern to agriculture sector, take severe concern to food prices, increase & utilize energy resources with low production cost and eliminate security threats.

In the perspective of interest rate that includes very important instrument used by the State Bank of Pakistan. Interest rates play a key role in controlling inflation rate in the economy by



increasing or decreasing the level of interest rate. Continuous fluctuations in interest rates may decrease the confidence of investors due to doubt about return on investment.

Therefore, policy makers should take serious concern about altering the rate of interest rate at the same time as controlling inflation rate. Interest rates should be stable to turn out deposits in the banks; therefore, people have the change to save money in the bank despite of investing somewhere else.

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