

# The Effect Of Monetary Policy In Driving The Economic Growth Of Pakistan

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## Abstract

*The state bank of Pakistan conducts the monetary policy for minimizing up and down in the economic system. The variables of monetary policy are factor in to impact the country decisions of general public. Because when the monetary policy tools interest rate and money supply are increased or decreased, the perception of people are changed from their saving to investment and demand of products. And through these tools the targets of monetary policy: the price stability of consumer goods, redundancy, trade and industry growth and inflation are achieved. The Ordinary Least square is used in study for concluding the GDP growth rate affection by Monetary Policy and found in our research we have analyzed that the Economic Growth of Pakistan supply of Money M2 (Broad money) by the influence impact of significantly and also Inflation rate''. It is estimated that current supply of money strongly depends previous period of money supply. The timeframe of date collected on monthly base and period of data started from 2011 to 2024. Broad money is depending on effect of monetary policy on the economic growth of country. The empirical results confirm that the economic growth is changes in money supply and inflation.*

**Keywords:** Monetary Policy, Money Supply, Interest Rate, Driving Economic Growth.

## Introduction

### Background Study

Monetary policy involves the state bank of Pakistan instruments are used to manipulate of rate of interest & the supply of money in the economy of Pakistan with motive to have total prices of capital & financial institutes stable to a level. Monetary policy is demand management basically stabilized criteria it cannot be impact potential of the economy to the long-term growth. Preface to State bank of Pakistan Act, nineteen fifty-six visualizes to secured monetary policy stability monetary & achieve complete utilization of economy's productive resources. In SBP's view, the best mode to get these sustainable of objectives based to keep inflation low & stable.

It reduced to doubtful future prices of commodities and facilities of services & helps household customers & making a business are economically significant that decisions such as financing, confidence with more than investments & saving. Facilitates creates more growth the chances of employment over the medium term leading well-being to overall economic in the state. According to (Friedman & Schwartz 1963), money supply able to be high by State bank through open market operations. Commercial banks its increase a funds & credit accessibility to the community & multiples times are higher supply of money. Monetarists & Keynesian, economic activities are affected by transmission various channels through monetary policy.

Monetary policy of Pakistan is strike strives a stability among numerous & regularly challenging reflections. Price stability has most important influence of monetary policy for maintainable growth of a Pakistan. From last few years Monetary Policy of Pakistan two drives which are stability cost and increasing financial growth. These consist of controlling inflation, ensuring payment structure and financial stability, supporting private investment and preserving foreign exchange reserves, to keep the stability of price, Tries to control the supply of money of country are State bank of Pakistan. Then, monetary policy is playing vital role to stabilizing through the number economic growth of channels. Future hopes regarding economic actions like a, inflation, consumption, exchange rate, & investment are monetary policy also by affected. It is found that nonstop increasing in price level is only because of monetary policy phenomena, for keeping the stability of price monetary policy used changed the instruments to affect the supply of money. State Bank of Pakistan chiefly utilizes approach factors money related to complete elaborate objectives. To controlling supply of money & inflation State Bank of Pakistan may apply expansionary or contractionary method. The creation of work & damage of destitution are moreover purpose for significant of fiscal policy. The Strategy is related remarkable money has a relationship with inflation. Gives same financial strategy & crucial hold to nationwide monetary policy an achieving this objective. Main objects of money strategy are quite linked regularly diverse. Definitive aim of monetary methods in same countries is welfare to build of its general public. The Hypothetical & careful research has proved that the arrangements of fiscal can be fundamentally so many course of real monetary achievement for the being a time, in long pull that fact of spite the effect of raise in surplus of supply of money is just arrangement of inflation. (State Bank of Pakistan).

Highest inflation it is a problem for separate & also for performance of economic. Inflation are Long run as well as moderate inflation both they are its not good for economic growth. SBP the 1% percent point are raise in inflation deducted the 0.0233% annual growth in United State of America (Smyth, 1992). The monetary policy is deference the large deduction in volatility of output, Roberts (2004). Uncertainty Inflation causes & decreases the economic growth. Stability of Price SBP is targeted & policy rules is responsible for attain it. Supply of money is affected the GDP and then high inflation. This is a main reason for moveable structure of monetary policy maintained by SBP.

The possibility of globalization effects on monetary policy have become 1 of the very important issues for policy makers. (Bernanke, 2007), highlights that anyone who participates in financial institutes these days is aware that these institutes excel national borders and are sensitive highly economic and development of political world. Fresh experimental studies advise considerable international spillovers & independence between national money, equity, loans & bonds markets & exchange rates Ehrmann & Fratzscher (2009), (Ehrmann, Fratzscher & Rigobon, 2011). Their results stress the United States financial institutes as the main driver of globalization of financial institutions. Khuram sultan, waseem jalal & kashif farooq (2015) they are explain that's capital structure is a difficult issue of the business industries and no easy to manages with suitable decisions therefore this issues has related with environmental of the computational and there is game of the large amounts with short term debts and long term debt and low amounts or large amounts of the security like bonds shares etc .

The discussion as to the effects of monetary policy continues between the Keynesians and the monetarists. hopelessness during the great (1929-33) increase supply money supply, income level, people and outcome nebula all this provoke situations. The Keynesian views on monetary policy and even certain new Keynesian scholars believe that money is no longer an issue as far as spurring the economy is concerned. To the monetarists (headed by Milton Friedman) money is the way to go in stimulating the economy and therefore money matters. It is still a question of the doubtful monetary policy. Mohr and Fourie (2007).

The Monetarist argument as well as that of Keynes demonstrated that economic growth was prone to follow the straight line forward in this study. The Keynesians consider the monetary approach method as indirect as opposed to the monetarists who feel that the pressure is always

shifted by the subject in question. The midpoint of the study focuses on how the monetary policy could enhance economic growth in a small and exposed economy. In the same way that the Keynesian revolution happened due to the ineffectiveness of the value monetary policy during the depression, the discontent of the commercial portion of the economy to resolve the social economic issue in Latin America, an economic school of thought referred to as the structuralism (Kabob, 2002).

The Monetary policy is the main crucial drivers of economic growth during crash on macroeconomic variables. Economic growth is necessary in any country as it decrease shortage as well as improves livings system. Increase position of monetary policy had made its effective & influence economic growth an importance to the majority governments. although the absence of agreement among economists on how actually work monetary policy & size of its economy is effect, notable agreement is strongest that they have evaluate of effects on the economy, (Ngoro, 2005).

Mixture of measures is monetary policy designed to controlling the values, cost & supply of money economy, in consonance with the estimated level of economic movement, Osinubi & Folawewo, (2006). Most of economies, the purposes of monetary policy take price constancy, maintenance balance of payments equilibrium, encouragement of occupation and output growth, & sustainable progress. Searching of price stability habitually imply the search indirect of other purposes just like economic growth, which can one get place under conditions of price stable & allocate efficiency of the financial institutions. Monetary policy aim ensures money supply is at a level of reliable with the growth goal of profits, such non-inflationary growth will be ensuring. Monetary policy is used increase is generally measured as simply a monetary phenomenon. In South Africa, the monetary policy is conduct by the (South African Reserve Bank). Monetary policy influence through collective spending economic growth. Influence & Changes in supply of money & interest rates, customer spending as well as investment decisions. As adjustment of policy a result, aggregate demand changes in response. Kumah Ababio (2018) He has defined of the capital structure that's key area to establish the business and company performance activity and there is need to focuses on correct manage the decision of the capital structure therefore this is core pillars of the firms.

Assad naim nasimi and Rashed naimi nasimi (2018) he has said that the capital structure explanation is included in the following terms like investment in the new projects, financial palming of the budgeting decision, dividend policy and Repo of the shares and related working capital management in short term and long term policy. And this source searches the key world of the financial decision. The capital structure of the firms is key lock to opens the ability of profits in different ways.

### **Industry Brief of the Research Study**

The (SBP) State Bank of Pakistan was established in Nineteen forty-eight. It is integrated below the Nineteen fifty-six (SBP) Act, under central bank initiate to perform duties as a State bank of the Country. (SBP) Act to control supply of money and system of credit in our economy and promote its growth in the good country interest through a view to monetary stability are secured and maximum productive resource utilized of the country.

There are different policies issued by the government of Pakistan which includes fiscal policy and monetary policy. Fiscal policy is issued annually by the finance minister of Pakistan which has the target to control the budgetary issues of the period; it is the permanent treatment of the country issues and the economic plan. On the other side monetary policy is issued by the state bank after each two months to supply of money control & rate of interest for maintaining it below targeting inflation.

State bank of Pakistan is the monetary policy regarding decisions is issue 6 times a year on their official website. The briefly analysis of Pakistan economic condition. Monetary policy of Pakistan trended the world wide Pakistan accepted generous and market oriented procedure & adopted policies. The targeting GDP and inflation by the Government. Inflation taking placed SBP make apply contractionary policy. Raise the interest rate, create investment most of feasible option for the youth.

To unite the related issues linked to Impact of the monetary policy on USA economy, although (Slok & Ramaswamy, 1998) & Clememts et al. (2001) conduct studies must impact of monetary policy of Europe Country. To conduct any other studies, impact of monetary policy. Defina & Carlino (1998, 1999) & wall & Owyang also have studies same topic. According to (Saarenheimo & Kieler 1998) there is no any new variation of this study Impact of monetary policy around the countries. They are all finding the results that they are significantly till to change a views in the accurate impact of monetary policy.

Scope of the research limitation of the study to examine of the impact of monetary policy to encouragement on the economic growth without any analysis & any seasons. Total Data are collected of the study is from 2011 to 2024.

### **Objectives of the Study**

The main objective of this research is to investigate the effect of monetary policy on the economic growth of Pakistan

The secondary objective of this research is to evaluate impact of macroeconomic variables Labour force, capital formation, Inflation and broad money on the economic growth of Pakistan.

### **Literature Review**

Literature review is simply the foundation of research studies. It assists researchers in knowing what has been already known, what theories were already tested and what gaps remain open. Put simply, it is a roadmap: it provides guidance, relates arguments to evidence, and allows building new ideas. It also preconditions the conclusion and the provision of recommendations. Numerous scientists have added their voices to the debate on monetary policy, economic growth, and other aspects of various spheres of Pakistan and other countries, and their works can be considered a rather accurate depiction when combined.

Indicatively, Sadiq and Fatah (2016) investigated data in the automobile industry and Pakistan in the period between 2004 and 2017. Their findings revealed that monetary policy can be observed to have an effect on the economic development and profitability of the firms. Likewise, Jibrán, Masood, and Khan (2016) studied 15 Pakistani listed banks in the period of 2005-2014. They realized that profitability and capital structure were impacted negatively as the debt liabilities rose. In effect, increased debt increased the risk of banks and decreased their earnings, yet banks could not do without debts to continue their operations.

This is linked to the importance of the State Bank of Pakistan (SBP) that has directed the monetary policy since its inception in 1948. Its goals were first to stabilize the monetary system and see to it that there was proper utilization of resources. Its functions had been increased in 1956 to cover growth and inflation control functions. Between the years 2001 and 2005, the monetary policy was oriented towards economic growth as the rate of inflation was relatively low. Nonetheless, the increased inflation in 2005 compelled SBP to revert to this strategy in 2006, by tightening its policy.

Ideally, the issue of the contribution of money to economic growth has been debatable among economists. Keynesians popularly believed that money does not matter, implying that the monetary policy does not produce much impact on the real economy in the long term. According

to the monetarists, on the contrary, money is central, and the monetary policy is the key determinant of economic growth. New Keynesian models were later developed by Clarida, Gali and Gertler (1999) and assisted in incorporating both schools of thought by showing how central banks would be able to manipulate the short run through monetary interventions.

The discussion was also influenced by earlier authors such as Irving Fisher (1932). His theory of money supply was the quantity theory that showed the connection between money supply, prices and the interest rates. He came up with the idea that greater prices would increase the income of the firms that would consequently lead to an increase in money supply, investments and lending though there would be an interest rate change. Keynes (1936) went a step further since he stressed on the fact that any form of investment decision was very sensitive to interest rates-when rates increased then people saved more than invest and then the opposite as well.

As a continuation of these theories, Chaudhry, Qamber, and Farooq (2012) and Rehman et al, (2024), analyzed the Pakistani GDP and monetary variables and found that the monetary policy has a direct impact on the growth. Another factor emphasized by Schumpeter (1954) is to note that money is a supportive element in the transaction but remains crucial in determining economic consequences. Subsequent studies like Islam and Murinde (1997) established that when the currency appreciates it will boost the performance of the stocks, and vice versa. Smyth and Nandha (2003) furthered that economic factors should be researched with the assumption that all other factors remain constant since different results are obtained when other factors are altered.

Other major concerns have been exchange rates and stock prices. Franck and Young (1972) were one of the earliest to test their relationship in a number of countries, with mixed results. Other studies identified a long-term relationship, some had no and others had negative relations. Lazear (2013) and Wooldridge (2006) claimed that the exchange rates are not the most appropriate or ideal guide to the behavior of stock prices due to the presence of too many other variables in between, such as inflation, treasury bills, and government policies.

More involved in the area of Pakistan, Awan (2015, 2016) emphasized that monetary policy is very likely to fail due to political interference, nevertheless, in the long term it influences the macroeconomic variables. Sultan and Shah (2013), Ihsan and Anjum (2013) and Shamshir et al, (2019) among other researchers affirmed that there is a positive impact of money supply on economic growth. Similar findings were achieved by Tabi and Ondoa (2011) in Cameroon and Jayathileke and Rathnayake (2013) in China, India and Sri Lanka, where inflation was lessening short-run growth.

In the case of Nigeria, Umaru and Zubairu (2012) revealed slows in growth due to inflation whereas Muhammad et al. (2009) in Pakistan revealed that government spending and money supply had positive effects on growth in the long run. Nazjmi et al. (2013) also provided some nuance by demonstrating that labor force and price levels had contractions on GDP, and investment and government expenditure were contractions. Agbonlahor (2014) in the UK has indicated that the exchange rate, price level, and money supply were positively associated with GDP. Other similar evidence was able to confirm this, with the money supply and exports in Iran (Nouri and Samimi, 2011), Cameroon (Tabi and Ondoa, 2011), and Sri Lanka (Aslam, 2016) all showing a positive impact on GDP, and the pull of inflation and the intensive importation can destroy it.

To conclude, the literature reviewed indicates that there is a strong interrelation between the monetary policy and economic growth, albeit the type of relationship differs by sector, country, or by time. In the case of Pakistan, the monetary policy has been a mixed result, particularly in the cases where it has facilitated growth and in other cases it has failed because of inflation or political reasons. Evidence across the world indicates that money supply, inflation, debt as well as exchange rates are all critical in the determination of growth. The common factor in all these studies is the awareness that although money does count, it will only have its impact on the quality of policy design, implementation, and shielding against outsourcing.

### **Conceptual Framework**

Define monetary policy by process in the monetary policy & controlling authority of a country supply of money, regularly targeted an interest rate & inflation rate to confirm stable of price general trust the Monetary policy is maintaining through activities such as increase rate of interest, & change the amount of money need to keeping in vault. (Abeng, 2006) described that highly monetized economy of monetary policy is only valid. (Jhingan, 2002) monetary policy refers the credit methods accepted by country central bank. According to (Okwo et al; 2012), monetary policy only of the macroeconomic tools with which monetary policy of a country employed in the management of their economy to achieve desired objectives monetary policy consists of a government proper effort to achieve the money of economy in order to appreciate detailed economic goals. (Wrightman, 1976), discoursed that monetary policy involves those activities initiated by the state bank which influence the aim availability & cost of credits. According to Ogunjimi (1997) 3 basic types decision of monetary policy can be through the quantity of money in transmission, Interest rate level, & functions of credit marketplaces & the financial institution system. Combination of these designed to measures regular the values, cost & supply of money in an economy.

### Theoretical Framework

Theories of money, interest and growth have been or continue to be used to influence how economists establish economic systems. A number of models provide answers to the connections between money supply, demand, and technology development on prices, the interest rate and growth in the long-term.

The Quantity Theory of Money by Irving Fisher states that the price levels and value of the money depend on the money supply as the key determining factor. According to Fisher (1911/2006), an increase in the amount of money increases the prices in a proportional way that the value of money fall and the opposite is true whenever the amount of money in the market reduces. This is the relationship that is formulated in his well-known equation of exchange:

$$PT=M \cdot V+M^* \cdot V^* \quad PT = M \cdot V + M^* \cdot V^* \quad PT=M \cdot V+M^* \cdot V^*$$

In this case, P is the price level, T is the total transactions, M is the supply of legal tender, V is the velocity of circulation and M and V\* are the amount and velocity of the credit money respectively (Humphrey, 2019). Basically, doubling of money doubles prices but the actual value of money is reduced by half. The recent research confirms the applicability of Fisher, particularly when there is inflation and monetary stability (Dabus et al., 2022).

On the contrary, Keynes focused on the Liquidity Preference Theory of Interest Rates. Keynes (1936) considered interest as a purely monetary phenomenon that was dictated by the demand and supply of money instead of believing that it was determined by real savings and investment. The ideal response to the unpredictable assets is to save them in liquid form instead of investing them, and the tendency to go with liquidity is what makes interest the cost of sacrificing money. The increased demand to access liquidity drives up interest, whereas the excess of money supply causes it to go down (Davidson, 2020).

### Based on this, Keynes described three motives to the Demand of Money:

Transactions motive - the necessity of cash flow to fill in the holes between receipts of incomes and spending.

Precautionary motive - the wish to have possession of money in case of unexpected events including sickness or joblessness.

Speculative motive - the possession of money in order to exploit changes in interest rates or in the prices of assets (Keynes, 1936).

In a symbolic way, transaction demand depends on an income ( $T_{dm} = f[Y]$ ), precautionary demand increases with an income too ( $P_{dm} = f[Y]$ ) and speculative demand also with a negative dependence on interest rates ( $S_{dm} = f[r]$ ). These comprise the aggregate demand of money ( $D_m = T_{dm} + P_{dm} + S_{dm}$ ). Notably, even in the context of monetary expansion, individuals will keep money in their hands even at extremely low interest rates, the situation known as the liquidity trap (Keynes, 2011) (Carlin and Soskice, 2015).

The Neo-Classical Model of Solow and Swan, which turns to the growth theory, puts the key roles on labor, capital, and technology. Whereas the labour and capital contribution face a limit due to diminishing returns, the technological advancements make it possible to continue increasing (Solow, 1956; Swan, 1956). According to this model, the economies that have access to corresponding technologies come to equalize in the standard of living in the long term. However, critics observe that it has poor empirical support on the emergence of technological change although current literature continues to use its model (Jones, 2022).

Wages, profits and accumulation of capital: Earlier work, by Ricardo and others, had addressed these issues. Despite critics who criticize his models on the basis of errors and inconsistencies, the models by Ricardo have had far-reaching influence on the economics of the nineteenth century (Blaug, 1996). In his analyses he predicted dynamic equilibrium, disequilibrium of variable wages and profit-wage tradeoffs that would be perfected by subsequent economists.

In the meantime, Knut Wicksell incorporated money, credit and interest into his theory of cumulative processes. He separated the natural rate of interest (the rate of real capital) and the money rate of banks. Prices go up when the money rate is lower than the natural rate and go down when it is higher than the natural rate (Wicksell, 1898/1901). This observation continues to form the basis of contemporary central bank and monetary policy (Woodford, 2003). Combined, these theories offer a deep theoretical framework. Fisher and Wicksell concentrated on money and prices, Keynes concentrated on liquidity and interest rates and Solow-Swan put technology at the centre of growth.

## Research Methodology

The technique of regression least Square (NLS and ARMA) is used in the analyzing of study for the accuracy of Keynesian & monetarist views on impact of monetary policy on the economic growth of Pakistan. Determination of  $R^2$  is a Coefficient used to find that how exactly our model was being fixed for the accurate data. For the essential of its useful features the technique of Least Square is used. To execute the hypothesis of normal dispersed error term in data, above using data of time series necessity be fixed. And for the other testing F-test and t-test & Standard Error Test, are testing the hypothesis.

Analysis of Null hypothesis that there occurs a time series data in unit root that shows there is nonstop varying from data its average value. Considered the Time series data as fixed if null hypothesis well be rejected. In this research study values of the variables are taking in the place real to nominal values. Otherwise data of all the variables are taking an annual rate. In the depersonalised by are properly end quarterly data with changed statistical methods to problems rise above for the non-stationary of data. Regression analysis method results are checked by consistency of time-series data, to avoid spurious results about recognized connections.

Durbin Watson statistic is used here for the auto correction of dependent variable with other variables where the akaike information criterion is used for estimating the quality of models relative with each other.

To relative importance of the standardized variables coefficient technique is using. Later estimate a regression coefficient by used Least Square method, there are following appearance is using for comparative significance of explanatory variables. GDP c Labor force, Capital Formation, Exchange Rate, Inflation, Broad Money, and Interest Rate.

### **Philosophy of the Research Study**

This designed of the researches sounder launch in (2007) and give name of the onion there of the ontology this mean to see the realty of the study find out and which martial facts of the research and used the in quantitative methods contrast about other research locoinguba(1994) and epistemology refer to the knowledge the what is knowledge about the study of the natural and real data and how relationship both knowledge apology depend and refer the questions that ow fact and natural with realty and defined to the value of hum according to heron resean page 287 and year (1997).

### **Research Paradigm of the Study**

This study shown Epistemology in the specific which is the theory information of knowledge. The research Paradigm for this research is Post-Positivism as variables are testing under the theoretical framework and given hypothesis.

Two approaches of research 1<sup>st</sup> is Deductive approach, & 2<sup>nd</sup> is Inductive approach. Bell & Bryman,(2011). The deductive approach of research has been since focused on deductive approach relationship to be express variables based on theory. There is applied before the detective approach to find out facts about the result of the problems by the old research studies. We will be using the "deductive approach".

### **Sample and Sampling Method**

In this study the population related to research is too broad therefore take a sample of selected variables from the period of 2011 to 2024 Inflation in Percentage (%), Interest rate in percentage (%), GDP Growth (annual %), Broad money (% of GDP), (Percentage of GDP). The population data of Labor force contribution rate, (% percentage of total ages of population 15-64) time period of year 2011 to 2024.

### **Hypothesis of the Study**

H<sub>A</sub>: Monetary policy significantly effects on Economic growth.

H<sub>1</sub>: Inflation significantly effects on on the GDP.

H<sub>2</sub>: Interest rate significantly effects on the GDP.

H<sub>3</sub>: Money Supply M2 significantly effects on the GDP.

H<sub>4</sub>: Exchange rate significantly effects on the GDP.

H<sub>5</sub>: Capital formation significantly effects on the GDP

H<sub>6</sub>: Labor force significantly effects on the GDP.

### **Model of the study**

Analyzed the results for time series data from 2011 to 2024 for evaluating results. The model for the research is regression model:

$$Y = \beta_1 LF + \beta_2 CF + \beta_3 Exr + \beta_4 Inf + \beta_5 M2 + \beta_6 I$$

In the above model, GDP is dependent variable while the independent variables are others. LF stands for Labor Force, Capital formation, exchange rate, Inflation, Broad money and Interest rate represent by CF, Exr, Inf, M2 and I respectively.

## Data Analysis

### Descriptive Analysis

Descriptive analysis is numerous statistics methods like a, Median, Mean, Maximum & Minimum, Standard Deviation, Skewness, Probability value, JarqueBera and Kurtosis, were used. Total observation is 168. Its show and notice a high maximum value for Gross domestic product, Labor force, Capital formation, Inflation, Exchange rate, Broad money & Interest rate, which was period of 2011 to 2024.

**Table 1 : Descriptive Statistics- Common Sample:**

	<b>GDP</b>	<b>EXR</b>	<b>CF</b>	<b>I</b>	<b>LF</b>	<b>INF</b>	<b>M2</b>
Mean	4.533650	83.68272	16.61535	1.862893	54.77343	9.050231	53.17258
Median	4.702928	85.76860	15.94946	3.450133	54.61200	7.806620	52.37665
Maximum	7.667304	105.4552	19.33200	8.321457	56.71200	20.28612	58.86769
Minimum	1.606692	58.25786	14.12063	-6.774088	53.20800	2.529328	48.10007
Std. Dev.	1.833829	17.97653	1.770868	4.487465	1.010976	4.530999	3.126083
Skewness	0.012908	-0.237669	0.386267	-0.565611	0.501859	0.842443	0.270828
Kurtosis	2.100083	1.472653	1.680974	2.198025	2.434145	3.468050	2.032136
Jarque-Bera	5.673619	17.91114	16.35645	13.45978	9.293507	21.40538	8.611060
Probability	0.058612	0.000129	0.000281	0.001195	0.009593	0.000022	0.013494
Sum	761.6532	14058.70	2791.379	312.9661	9201.936	1520.439	8932.993
Sum Sq. Dev.	561.6088	53967.01	523.7077	3362.935	170.6861	3428.501	1631.990
Observations	168	168	168	168	168	168	168

In the above table GDP has taking a dependent variable whereas the other variables of monetary policy are taken as independent variables this table shows a positive correlation between them which results are constructed from the software of E view. Table 3 shows the relationship between the variables. It shows that correlation between the variable is expect of no any stronger with Labor force and Broad money correlation is 74%.

**Table 2: Correlation matrix of Gross Domestic Product, Labor Force, Capital formation, Exchange Rate, Inflation (CPI), Broad Money M2 and Interest Rate**

	GDP	EXR	CF	I	LF	INF	M2
GDP	1						
EXR	-0.264277	1					
CF	0.231346	-0.775658	1				
I	0.089398	0.562647	-0.390623	1			
LF	0.129900	0.393185	0.173355	0.183376	1		
INF	-0.681125	-0.386123	0.309763	-0.472104	-0.379653	1	
M2	0.076880	0.077346	0.376425	0.276697	0.740799	-0.281439	1

Table 3 Shows the regression statistic result of negative and positive significant and insignificant independent variables with dependent of the probability. Tables 1 also shows & see that regression model is acceptable at five percentages (5%) level of significance, all the independent variable are significant. Also show that table 1 multicollinearity is negligible in the model. R-squared 88%, Coefficient of GDP is -9.176097, coefficient of exchange rate is -0.066300, coefficient of capital formation is 0.237628, coefficient of interest rate is 0.077201, coefficient of labor force is 0.644607, coefficient of inflation is -0.376417, coefficient of Broad money is -0.314727.

**Table 3: Regression Line (Least Squares)**

Variable	Coefficient	Std. Error	t-Statistic	Prob.
Y	-9.176097	5.488791	-1.671789	0.0965
EXR	-0.066300	0.011101	-5.972524	0.0000
CF	0.237628	0.099121	2.397362	0.0177
I	0.077201	0.018459	4.182323	0.0000
LF	0.644607	0.148980	4.326815	0.0000
INF	-0.376417	0.016329	-23.05197	0.0000
M2	-0.314727	0.029655	-10.61313	0.0000
R-squared	0.880127	Mean dependent var		4.533650
Adjusted R-squared	0.875660	S.D. dependent var		1.833829
S.E. of regression	0.646643	Akaike info criterion		2.006728
Sum squared resid	67.32162	Schwarz criterion		2.136893
Log likelihood	-161.5651	Hannan-Quinn criter.		2.059555
F-statistic	197.0151	Durbin-Watson stat		0.184169
Prob(F-statistic)	0.000000			

## Conclusion

From the experiential evaluation to analyzed that the study, it is concluded this Descriptive investigate and shows gross domestic product that mean values are 4.533650, Labor force 54.77343, Capital formation 16.61535, Exchange rate 83.68272, Inflation 9.050231, Broad money 53.17258, Interest rate 1.862893, Gross domestic product, Labor force, Capital force, Inflation, and Broad money are positively skewed but Interest rate & Exchange rate is negatively variables

of skewed. It is concluded that growth GDP of Pakistan, is not significantly influenced by exchange rate, broad money supply (M2) & Interest rate, but only significantly influence by the inflation. It is also concluded here that this analysis monetary policy is received in the Pakistan depends on instruments of economic approach Money supply (M2), Interest rate Exchange rate and many more. It is cleared from the study that the secondary function of Central bank of Pakistan is to sustain this targeted of inflation rate because as this study we have found the inflation - (CPI) Consumer price index significantly influence to that GDP growth rate of Pakistan and through this targeted work the economy of Pakistan can be improved. This study result of correlation analysis illustrates that there survives level of high association between numerous sets of variables i.e. A Gross domestic product and Labor force; Gross domestic product and Exchange rate; Gross domestic product and Capital formation; Gross domestic product and Broad money; Gross domestic product and Interest rate; Gross domestic product and Inflation. Though debt a major issue to still be a solved a generous foreign reserve has decrease a risk of defaulting. Characteristics are that given by the country it is possibly the time to extremely reflect the best selective superior choice of monetary policy of a state bank.

### **Recommendation**

The model is good and with all variables is significant. This Monetary policy used of State bank of Pakistan. Economy growth can be increased by increasing the expenditure of consumption and the saving of effectiveness is more related to expenditure of consumption. Government of Pakistan should be use this policy which is supportive is in increase the countries saving policies.

### **Areas of Future Vision of the Study:**

Based on our study, it is highly recommended to overhaul the current model used in research. This could benefit the future researchers as by overhauling they can build a strong model. Secondly, several other researches can be conducted by adding additional variables. The scope of this research (IMP) on the economic growth of Pakistan. Only purpose of these study monetary policy macroeconomic variables is used to see that impact of rate of exchange, Inflation rate interest rate and broad money of Pakistan. Further study is using to econometrics prediction methods; further explore the obtained empirical results the recently policy of monetary is built on setting the targeting inflation and connected the change the supply of money.

### **Research Implication**

This research paper investigated the empirical findings and this study recommended that take a good policy. Policies beside the decreased inflation in the country growth by implement the instruments control of money supply. Pakistan Government should be take serious action to controlling the inflation rate of Pakistan, increase exports and decrease imports, Interest rate stable should be generated deposits in the financial institute, people are change to saving money in the bank. Interest rate the main instrument used by the state bank of Pakistan. Play very important role rate of interest control inflation rate in the Pakistan economy raise & reduce the level of interest rate.

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