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The Impact of Monetary and Fiscal Policy on Economic Growth: A Case Study of Pakistan

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Abstract

The study observes the potency of the policies on the growth of Pakistan's economy in an open economy. The study includes time series analysis and the data from 1994 to 2023 is extracted from WDI. In the empirical study, the test such as Augmented Dickey-Fuller and Philip-Perrons unit root tests were conducted and the results shows stationarity in data. The Johansen integration was analyzed to observe the association between dependent variables, GDP as the economic growth of Pakistan, and independent variables. The observations are made on the fiscal policy for which variables like government expenditure and trade openness and monetary policy is defined by using a measure of money supply. The ARDL technique is analyzed by using EViews. The study suggests that a mitigated planning of policy is required for stability in economic activity. The monetary and fiscal policy is effective for the planning in development for the economic enhancement of Pakistan, but only if the policy-maker authorities utilize stable fiscal policy and monetary techniques while analyzing and implementing these policies. Any of these policies is not effective alone for influencing economic activity in Pakistan.

Keywords: Policies, Government Expenditures, ARDL, Economic Activity

1. Introduction

The Monetary and fiscal policies are two main policies. The institutions responsible for the growth uses set of these two policies to maintain the economy of a nation in different ways. These policies contribute to composing and stabilizing the economy worldwide, including Pakistan. As the economies are progressing worldwide, the need for policy measures is evident it does not only affect the policy-making countries but also has an impact on the interconnected economies. In this paper, monetary and fiscal policy are monitored by their measures and their direct and indirect influence on Pakistan's economy. While considering the analysis globally, regionally, and within the country. The policy adoption by one country will result in influencing trade markets, financial sectors, and integrated economic stability globally. The immense challenges faced by the world, such as climate change, income inequality, and the goal of achieving development, made the determination of fiscal and monetary policy difficult. The policies, also play highly significant role in shaping environmental and social objectives.

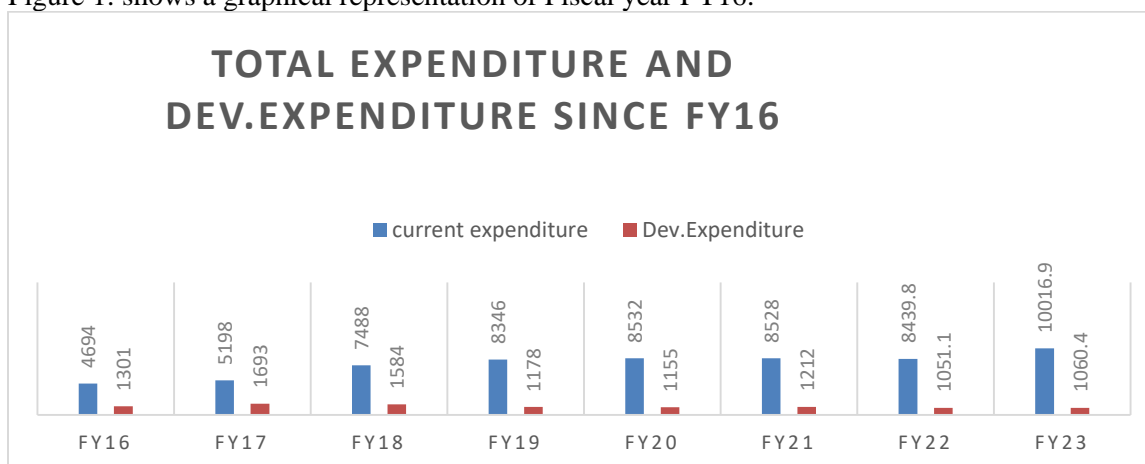
The two main policies that a government or economic institutes used when working on the betterment of a country are monetary and fiscal policies, these are two schools of thought presented by Keynes and before classical reviews by the monetarists. The believe of the monetarist was that monetary policy has a greater influence on economic

growth, and the Keynesians believe that government spending to taxations in the form of fiscal policy embark an influential relation with the economic growth. (Khosravi and Karimi, 2010) Dahan (1998) spotted the significance of regulating both policies together by analyzing the role of central bank such as implications and the government’s reaction. The aim is to manage prices by controlling inflation, and monetary policy affects income by effecting the interest rate that is administered by the controlling bank of Pakistan. Conversely, fiscal policy deals with the influence of government expenditures and increases in revenue through taxation to enhance economic activity. The monetary and fiscal policies vary across regions. There is a difference in economic activity across regions, resource endowments, and political frameworks as it depends on different institutes and functions accordingly. In Pakistan, as it represents south Asia is said to be with a growing population and a progressing economic framework, the difference made policy implementation and effectiveness complicated. Policy adjustment depends on the budgetary approvals by the government, such as the estimated rate of GDP growth and the expected rate, which determines the turn for policies in an economy. If the Growth of GDP is lower than expected, the government will plan and implement fiscal policies to generate stimulative economic activity. The increase in government spending or tax revenues. Pakistan’s economic expansion is at a rate below its potential based on 10 years of observation. The stability of economic indicators in Pakistan has worsened; currently, the investment rate is low, and inflation and the fiscal deficit are deteriorating the effectiveness of these policies. (M. Shahid et al., 2024). Pakistan’s external debt rose to \$130 billion. It is expected that the fiscal deficit will rise if the current policy of acquiring debt continues. This will eventually increase inflation in Pakistan’s economy. The state bank of Pakistan set tight monetary policy to avoid government intrusion into collecting debt but failed. The fiscal authorities and politicians foiled fiscal adjustments. To monitor these policies, a coordination board was created in 1994, but due to immense negligence, it remained futile.

In Pakistan, with the budget approval in June 2024, GDP for FY 2023-24 is said to be estimated at 3.5%, but the NAC approved it at 2.38% (Yousafzai, 2024), which is half of the 5.9% GDP growth for the fiscal year indicated in FY 2021-22. The ideal rate for developing economies is considered to be between 2% and 3.5%. In a contradictory state, the government should avoid over heating the economy by restraining fiscal policies. In terms of monetary policy, the SBP (State Bank of Pakistan) has decided to slow down the decision to raise the discount rate or tighten monetary policy. The reason is that in FY24, the first 4 months displayed a moderate inflation rate, so the central bank such as SBP has decided to keep the policy rate at 22%. (State Bank of Pakistan, 2024).

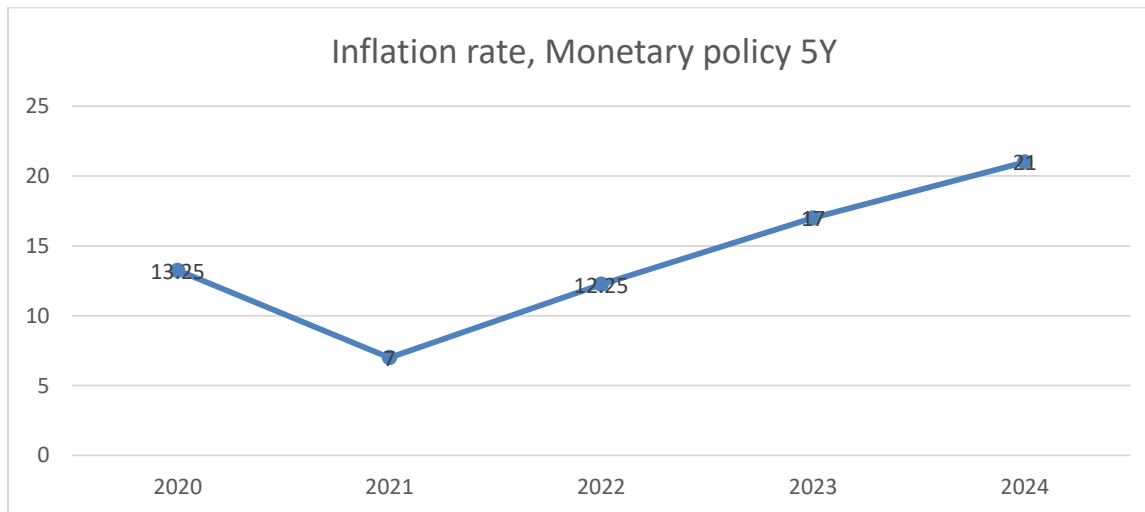
The paper analyzes the interconnection between both policies and their effect on the economic development and GDP of Pakistan. The purpose of this paper is not to defend the debate to sort out policy issues but to examine the significance of both policies centered on money terms and fiscal terms in a developing country such as Pakistan’s economy. It is examined how these policies are helpful in enhancing economic growth in Pakistan. This paper is arranged in such a way that the study is reviewed to indicate the effectiveness of these policies, and the econometric techniques are used for the estimations, containing the results and recommendations at the end.

Figure 1: shows a graphical representation of Fiscal year FY16.



Source: Ministry of Finance, Pakistan

Figure 2: presents a graphical representation of inflationary rate amidst of Monetary policies.



Sources: State Bank of Pakistan

1.2 Objective

- To determine the impact of mitigation of two main policy work on the economic growth of Pakistan.

2. Literature Review

2.1 Conceptual Framework

Musa and Asare, (2013) observe the impact of currency regulation on the economy and budget strategy importance, as well as the impact of its interaction on price and GDP growth. The study analyzes the cause-and-effect relationship while observing Nigeria country. The long-term and short-term implications justify the impact. The analysis is based on data from 1970 to 2010 for which time-series empirical observation is conducted. The data taken for the analysis is based on money supply, the broad money M2 case, and both types of rates such as repo rate and ER. In the case of fiscal policy, government spending on capital purchases and the cost of recurring capital will be used as variables. The independent variables such as GDP, consumer price index, MSP, MPR, REV, and expenditure, are applied for the examination of the Monterey-Fiscal effect on economic growth. Their impulse response will highlight the significance of policies. The VAR model is used by the researcher, and amplifying the IRF's, which is the impulse response function is said to be a useful instrument to examine the interplay of the given seven variables. The observation is that each variable shows changes due to a change in another variable; all variables show responsive behavior. There is a huge retort of the money supply and exchange rate on shock, but the exchange rate stabilized to a new level. Also, there is a positive effect, but the behaviour of variable GDP in terms of real GDP is negative. Shocks responsiveness: government revenue declines the very next year, but monetary policy rates decline but then rise when they approach zero. The study suggests that to achieve sustainability, policies must be stable.

This paper involves the views of the author Havi & Enu (2014) justified the importance of monetary and fiscal policy in influencing economic growth rate of Ghana. He used the ordinary least squares method of econometrics for measuring the comparison of the rise in growth rate. The result is devoid of spurious regression. Observation of data for the period 1980-2012 revealed that the impact of monetary-policy is positive on the growth rate; a rise in the effectiveness of policy will be beneficial for economic stability and for expansion in economic activity. The paper concludes that central Bank of Ghana should promote policies that hold monetary specifications by making policies that may include assurance of interest rates, inflationary rates, and exchange rates to stabilize economic activity and economic development.

Soharwardi et al., (2022) re-evaluated the significance of both policies combined effect on the implementation aggregated influence on reducing inflation and promoting better economic situations. The paper examines the association conducted between monetary and fiscal policy and its influence on the GDP of the Pakistani economy. The study presents a comparative analysis of both policies. The data was taken from the years 1990 to 2020 and the ARDL approach was used by the author. The effect of development expenditure, gross fixed capital, M1 (broad money), tax, and labour force as independent variables on the GDP as a dependent variable. The estimation observed that for the economic growth of Pakistan working on fiscal side policy will be beneficial. To raise

investment, monetary policy must be promoted by the central bank. This will result in a stable rate of interest and development in Pakistan.

2.2 The role of fiscal policy on economic growth

Easterly and Rebelo, (1993) conducted an empirical study to analyze the patterns of fiscal policies and monitor their effect on development and the economy. It includes the examination of fiscal policy as an endogenous variable and correctional corroboration with GDP per capita influence. The cross-sectional data is obtained by engaging historical data to study the enforced public investments from 1970-1988. The data is taken from five different sources, and one of them is the world bank. The evaluation of independent variables such as GDP per capita, primary enrollments, secondary enrollment, assassination per million, revolution, and war casualties per capita impact on the dependent variable of growth rate per capita. The inter-relation between fiscal variables and the growth is used as an economic method. The negative effect of per capita GDP on the growth rate and a positive impact of primary and secondary enrollments is observed. The growth rate decreases by one unit assassination per million. The revolutions and war casualties per capita have also not a significant effect on the dependent variable GDP. The paper analyzed that scale is crucial in the interpretation of population, income, and fiscal policies. It recommends a need for further examination in the field of empirical estimations.

Osuala and Jones, (2014) evaluated the inflationary situation of fiscal policy that generate a significant influence on the economy of Nigeria by conducting empirical studies. In fiscal policy evaluation, policy variables such as government recurrent Taxes, government debt, and capital expenditure are monitored. They used time series data from the period 1986-2010, the data is taken from the central bank in Nigeria. They analyze the impact of federal government tax allocation, spending by government, and government total debt policies on the real GDP. The econometric multiple regression method is used, and the ARDL technique is used for the estimation of the LR and SR effect on the equilibrium. Policy variables each have an association with economic growth. In Nigeria, it is observed that its relationship is positive but not significant is aggregated as tax implications by the government on the economy. The researcher assumes the role of government is to be responsible while implementing policies, and they should consider developing policies in such a way that investment is encouraged and corruption is discouraged.

Zagler and Durnecker, (2003) explored the fiscal policy inferences, such as government spending and revenue in the long run. They identified the measure that directly affects economic growth. Income tax and government spending are noteworthy. The study analyzed twelve variables for fiscal and monetary policy. By using the Solow growth model, the author observed long-run implications of these policies. The investigation of non-normative questions. They divided government expenditures in two ways: one productive and the other unproductive. The findings conclude that fiscal policy effectiveness can help the economy grow. They suggested that there is a significant requirement to analyze the tax on the entire economy of a nation, not the current position that only observes individual spending.

Mughal and Khan, (2011) study the pattern of inflation due to changes in fiscal policy, specifically in Pakistan. The Fiscal deficit in Pakistan is the major reason for the hindrance to economic growth and stability. The paper suggests that inflation is an unfeasible concern for economic growth. They used secondary data for the analysis, from the years 1960 to 2010. The examination observed the significant impact that showed the effect of inflation is prominent on GDP growth (the dependent variable) due to changes in budget deficits. The empirical study examines the Granger casualty test to assess the long-term inflation presence due to the fiscal deficit. The paper suggests that there is a relationship between fiscal deficits; this is because the government borrows from the central bank. The presence of inflation in the nation made it worse off. The findings conclude the inflation behavior and pattern in Pakistan's economy. In the future, the government must take into account the budget deficit risk due to inflation while implementing policies. For this, the central bank should be independent.

Neanidis & Varvarigos, (2009) focus on the empirical analysis of implementing fiscal policies to measure the rate of economic growth and development. Historic cross-sectional data analyzed level of development dependency on policies. They suggested that the relationship between development and fiscal implementation is high. It disclosed that the pattern of economic growth in developing countries is highly dependent on trade duties, whereas in developed countries, the main focus is on charging taxes on income. Secondly, the population influences the structure of fiscal policy. Thirdly, the study suggests that transportation investment can lead to economic growth, and lastly, it recommends that encountering taxation is a hard and demanding task.

Nikos Benos, (2009) studies show the investigation on how modification of fiscal policy tools can enhance

economic activity. The data for the period 1990-2006 is a time series analysis of 14 EU countries. They employed the method of endogenous growth specified the classification of policy.

2.3 The role of Monetary Policy on Economic growth

Hassan et al., (2021) evaluated an association between price level, money supply, and GDP and the formation of monetary policy. The research is limited to a developing country, Pakistan. For the period 1972-2005, time series data is engaged by the quarterly time period (I)-(II) for the country of Pakistan. The relationship among real GDP per capita, price level, and money supply is analyzed by applying the co-integration test was used named as Johansen test and the vector error correction term structure. The ARDL econometric method suggested supremacy and showed a stable association between money supply, GDP, and CPI in Pakistan over a long period of time. The paper suggests that changes in monetary policy, such as an increase or decrease the stock of money, will have a significant influence on the nominal income, which will have implications for Pakistan's economy. But if the money supply rises and that eventually increase money demand, which will bring the economy to a higher level as the increase in demand will be controlled by an increasing interest rate, which will affect the economic growth of Pakistan.

Ali et al.,(2021) estimated the association among inflation and economic activity to analyze suitable monetary policy. Price level is monitored as price and other variables are tools to apply effective monetary policy. The empirical studies were estimated for the time period 1989-2020; The time-series analysis was conducted and the data is observed from the WDI. The effect of GDP, IR, MS, and ER as independent variables on INF (inflation) was chosen for the research paper. The estimation technique for the unit root test used augmented dickey-fuller to depict the unit root for the stationarity relationship between variables, the time series analysis techniques are used for the examination. ARDL method showed that there is a unstable relationship between GDP and INF and IR and a stable relationship between INF and MS, as well as a positive relationship between INF and ER. The paper concluded that it is highly needed to activate government action so that it should make policies to improve taxes and control inflation. Government policymaker must include policies to control the money supply.

Twinoburyo & Odhiambo, (2018) observe the existing study about the connection among economic growth and monetary measures. They surveyed the literature in both ways, empirically and theoretically. The year from 1997-2010 data was obtained to analyze the monetary policy relation with the economy of Kenya. The author analyzed the impact of stock of MS and interest rates. To obtain the results, the VAR model on time series data is estimated. The paper signifies that the measure of monetary, for promoting economic stability and suggests the required development in finance for developing countries.

Mehar, (2022) observed how funding the private sector effects on terms as commercial activities as the analysis of monetary policy is conducted. This paper studies the impact of COVID-19 impact of government monetary implementation on public and private sector expansion after COVID-19. The panel data is used for examination. The data is taken from 186 countries. The least squares estimation is performed. He observed how net FDI inflows and infrastructure investments impact GDP growth. He analyzed that funds from the private sector and debt may have an impact on the GDP as investments increase. The paper introduces a unique concept about credit money.

Islam et al., (2021) study focuses on monetary policy implications on the economic advancement and prosperity of the country. They examined two countries, differentiating between by developing and developed country, such as Bangladesh (a developing country) and the United Kingdom (a developed country) as observed the dynamics of these countries in short as well as over period of time. The data from 1980 to 2019 is used, which is considered secondary data. Stationarity is examined by the conduct of the test. The econometric approach, ARDL, and VECM are used to study the casualties. The paper analyzes the (GDP), which is economic growth and its dependency, and how it can be influenced by change in stock of money and rate set by the bank, The rate of interest and ER as independent variables. The results drawn from the analysis reveal that monetary effect in the long period and its relationship with the growth of economic in both countries. MS has a positively effect, and the exchange rate negatively effect on both countries economy, but the rate of exchange shows an implicational effect on the performance of Bangladesh's economy but not on the UK economy. The author suggests that countries in developing states must focus on a rising money supply; in this way, the rate of inflation will be stable and there will be more employment opportunities. The researcher must consider developing and developed countries while analyzing.

Abdin, (2021) study the impact of monetary policy and stable economic activity. He observed the influence on equilibrium market as inflation rate is affected due to policy implementations. It also effects the investment and

production sector of the economy. The data is obtained from WDI of the year 1981-2014. The study analyzes the dependency of inflation rate on the monetary policy in terms of broad money supply M2, liquidity ratio and reserve ratio. The ARDL econometric technique assessed that the monetary measures leave a positive impact in relationship with the inflation rate and increase in reserves increases inflation. The author suggests that monetary policy is suitable for raising investment but it is required to monitor the influence of interest rate and liquidity on the economic activity.

2.4 Literature Gap

The literature examines many studies that have observed the role of policymaking, as it holds significant importance for stable economic growth. The Fiscal and monetary policymaking requires a profound understanding of how these policies impact variables like inflation. It was observed that monetary policy implementations through interest rate and money supply adjustments led to an influence on inflation (Hussain and Malik 2011). Even investment is affected as monetary policy influences credit availability for business. (Qayyum, 2006). Conversely, fiscal policy involves government spending and taxation; increasing government spending is beneficial if it is on infrastructure and human capital in the long-run, but taxation sometimes leads to a high burden that can affect investment and consumption negatively. Khalid (2007) emphasizes that fiscal policy expansion in association with tight monetary policy influences high interest rate, which will induce investment. There are various studies that explain the impact of these policies, but there is no comprehensive analysis of the combined influence for the betterment of Pakistan in terms of its economic activity.

3. Data and Methodology

Data sources: The methodology analyzes the impact of fiscal-monetary policy on the growth of Pakistan’s economy. The time series analysis is used, the data is observed from 1994 to 2023. The data is taken from the WDI (World Development Indicator).

Table 1: Description of variables

Variable	Definition	Quantification	Sources
GDP	The GDP represents the overall wellbeing of the country.	GDP growth annual %	WDI
M2	M2 is defined as the tool of measuring money supply.	Broad money % of GDP	WDI
EXP	EXP refers to government spending. Such as the expenditure utilized by the public investment to finance its activities.	Gross national expenditure (current US\$)	WDI

Trade openness	Trade openness is a factor that leads to increasing economic growth.	Trade openness (% of WDI GDP)
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The study involves the empirical analysis of preceding literature. The examination involves the model of ARDL, that estimate the association between variables. It shows the dependency of GDP as economic growth on the independent variables like broad money M and government expenditure. The framework is defined as:

$$Y_t = f(M2_t, EXP, T)$$

This represents the variables, such as dependent and independent variables, GDP represents the % of annual growth as an economic growth, M2 is the broad money specification, EXP is the current government expenditure.

The regression equation is represented by:

$$GDP_t = \beta_0 + \beta_1 M2_t + \beta_2 EXP_t + \beta_3 T_t + \epsilon$$

Here GDP is annual growth % t represents the unit at t period of time represents the time period and independent variable like M2, EXP and T.

The Time series data analysis requires a unit root test to determine if there is stationarity $X_t \sim I(d)$ among the data, which specify the avoidance of spurious result in relationship or connection between the observation over different time period. At first verifying that the time series analysis is generated by AR(1) i.e represented by:

$$y_t = y_{t-1} + \epsilon_t$$

This is checked by the ADF test and another test is used that is the Philip Perron (PP) test to analyze the stationarity over time period. A Johansen cointegration test was conducted to determine if the variables moved together over a period of time or if fluctuations were present or not. The ECM model justifies the dynamic of SR and LR implications are examined.

$$\Delta Y_t = \alpha_0 \Delta Z_t + \alpha_2 (Y - Z)_{t-1} + \epsilon_t$$

4. Results, estimations, and discussions

Table 2: Descriptive Statistics

Variables / Measures	IGDP	IM2	IEXP	IT
Mean	1.350643	3.784509	25.84756	3.391261
Median	1.444319	3.834336	26.02491	3.428781
Maximum	2.058123	3.939788	26.76232	3.428781
Minimum	0.014293	3.356531	24.70697	3.066189
Std deviation	0.470911	0.160696	0.676873	0.155319
Skew.	-0.919337	-1.442239	-0.310699	-0.371796
Kurtosis	3.828256	4.024693	1.693816	2.120222
Jarque-Bera	4.744520	10.93191	2.440960	1.548097
Probability	0.093270	0.004228	0.295088	0.461142

The descriptive statistics that include the measures of dispersions of all the variables in equation is examined in the above table. The normally distributed series are evaluated by Jarque-Bera. As value is above 0.1. The series has zero means and constant variance that shows normality in the distribution.

The time series analysis requires a test to determine if there is stationarity in the data. In order to analyze the unit root tool for ensuring the assumptions in the time series model two stationarity test are used.

Table 3: ADF and Phillip perron unit root test

Augmented Dickey-Fuller Test						
Variables	Methods	level		1 st difference		conclusions
		Zt-value	Prob.	Zt-value	Prob.	

GDP	ADF	-3.812	0.030	-6.7400	0.0000	I(0)
M2	ADF	-8.368	0.000	-4.3166	0.002	I(0)
EXP	ADF	-4.101	0.0169	-5.391	0.000	I(0)
T	ADF	-1.749	0.7017	-4.4006	0.0018	I(1)
Phillip Perron Test						
GDP	PP	-3.874	0.0064	-8.3827	0.000	I(0)
M1	PP	-2.269	0.435	-4.2807	0.0024	I(1)
EXP	PP	-3.230	0.099	-4.6380	0.0010	I(1)
T	PP	-1.8476	0.6542	-4.392	0.0019	I(1)

The results of the test, ADF unit root, represent that some variables are stationary at level and some at difference. As in the ADF test, variable T shows stationarity at level, and GDP, M1, and EXP shows stationarity at first difference. But only the GDP variable show stationarity at level, and all other variables, such as M1, T, and EXP, are stationary at the first difference in the Philip Perrons test.

Table 4: Johansen cointegration rank test

Hypothesized	Eigenvalue	Max-Eigen Stats	0.05 CV	Trace stats	0.05 CV
None*	0.742267	36.60743*	27.58434	53.26261*	47.85613
At most 1	0.355512	11.86109	21.13162	16.65518	29.79707
At most 2	0.161321	4.750042	14.26460	4.794093	15.49471
At most 3	0.001630	0.044051	3.841465	3.841465	3.841465

The statistics tests indicate 1 coint- equations(s) at 5% level of significance.

The test that is Johansen co-integration is specifically used for statistical analysis, and it determines whether there is a dynamic relationship between variables in a time series dataset. Thus, it measures the co-integration between variables. In this analysis, co-integration is measured. Both the maximum eigenvalue test and the trace statistics test indicate evidence of a co-integration. The relationship among variables at the 5% significance level. This means that there exists a long-term equilibrium relationship between the variables. Taking this into consideration,

Table 5: ADRL Bounds Test

Test	Critical-Value
f-statistic	6.253495

Significance	I(0)	I(1)
10%	2.72	3.77
5%	3.23	4.35
1%	4.29	5.61

The ARDL lower bound and upper bound test is used. The estimates are obtained through the ARDL model. f-statistic is greater than the upper bound at value 5% level. Thus, the results shows that there is long run relationship between the dependent and dependent variables. As in the table f-value is 6.253495 which is significantly much greater than value of upper bound I (1) at 5% significance level. Thus, there is long-run relationship between LGDP, LM2, LEXP, and LT.

Table 6: Short Run Analysis

Variable	Co-efficient	t-Statistics
D(LM2)	2.252034	3.257907
D(LEXP)	1.962317	2.481527
D(LT)	-1.516799	-2.003555
D(LM2(-1))	1.828260	2.711844
CointEq(-1)	-3.088218	-7.073101

These coefficients represent the short-run variance in the dependent variable due to a one-unit change in the independent variable. It shows that the LM2 variable is marginally significant at the 5% significance level, and LEXP and LT are also statistically significant. The model explains that 0.95 that is 95% independent variables justify the impact on dependent variable. It shows if M2 increase by a unit economic growth will increase by 2.25% and if EXP increase by a unit economic growth will be effected by 1.96% It represents that the main variables, such as LEXP, represents the fiscal policy, and M2 broad money represents the monetary policy. The significant variable LM2 represents the monetary policy. fiscal policy represented by government expenditures leaves an impact on the economic growth of Pakistan in short-run and stock of money M2 also shows a positive relationship over a period of time. Increase in LT has negative association with GDP but is statistically significant in the short run, that simply specify that a change of unit in trade openness will bring about change in growth but decrease it eventually, if T increases by one unit as it has negative effect. The VECM cointegrating equation represents the long-run relationship between the variables. The term helps in capturing the short-term adjustments back to long-run equilibrium. The coefficients of differential variables like of D (LGDP), D (LM2), D (EXP) and D (LT) is representation of short period of time.

Table 7: Long Run Analysis

Variable	Co-efficient	t-Statistics
LnM2	2.520492	1.696551
LnEXP	1.962317	0.960634
LnLT	-1.516799	-1.220102

The estimations conclude that the long-run implications of monetary policy in terms of money supply and fiscal policy in the case of government expenditures and shows a positive relationship with the GDP growth of Pakistan. This is because in a long-period of time, an increase in the broad money supply has a negative impact on economic growth due to inflationary pressure when monetary policy changes rapidly, it will be settled in long-run. But LT as a fiscal variable has no positive relationship with GDP growth. Meanwhile, in the long run, LM (2) broad money supply contributes positively to economic growth, but fiscal policy variables show a positive as well as negative relationship with GDP growth. Adefeso and Mobolaji, (2010) emphasized that a broader specification of money (M2) represents the elasticity of money supply for GDP in the long run in comparison to fiscal policy.

5. Conclusion

The paper is conducted in way that observes the monetary and fiscal policy relation and specifically the rate at which these policies influence on the economic growth of Pakistan in an open economy. The study includes time series data, extracted from World Development Indicator from 1994 to 2023 of Pakistan. In the empirical study, To test the stationarity, two test were applied the Augmented Dickey-Fuller (ADF) and Philip-Perrons (PP) unit root tests. The Johansen integration test was analyzed to observe the long-run relationship among dependent variables, GDP as the economic growth of Pakistan, and independent variables. The Government spending and trade

openness are tools used by fiscal sector and broad money supply M2 as a tool of monetary sector are used by the economic institutions. It suggests a positive long-run relationship between variables. The ARDL technique is analyzed by using EViews, and ARDL method is observed, and it shows a complex relationship between GDP, MS and EXP and T in Pakistan. The high speed of adjustment to equilibrium is positive indicator. Monetary policy in terms of money supply is significantly effective for economic activity due to the rapid change in money supply, which will cause the inflation rate to rise, but it will show significant influence in the long run. Fiscal policy variables show a positive relationship with GDP growth. The empirical evidence recommends that monetary policy is a necessary condition. Fiscal policy has an immediate effect on the economic activity but it must be analyzed cautiously. It means monetary and fiscal Policy combination is highly required for the economic stability of Pakistan. As currently, Pakistan's economic institution is taking measure to deal with fiscal deficit by collecting tax to increase revenue. Public and social spending is promoted. The monetary policy rate is 22% to control the inflation and tight monetary policy is followed. The study suggests that economic institution must utilize the tools of both policy to maintain the stable economic growth. Monetary and fiscal policy are effective for the economic growth of Pakistan, but only if the policymaker utilizes stable monetary and fiscal policy techniques while analyzing and implementing them. The economist and policy-makers in Pakistan face the challenge of dealing with the domestic and international economic environments. It is recommended to stabilize monetary side policy as it has more immediate impact on the economic growth of Pakistan and a careful analyzation in planning and implementing such policies will be helpful in promoting sustainable economic growth in Pakistan. Effective policymaking requires not only technical expertise but the need to ensure the accountability and economic development. There is still a need to assess the tools impact on the economic trends, so that better policy is developed.

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