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The Relative Effectiveness of Monetary and Fiscal Policies on Economic Stability in Pakistan

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Abstract

In this study the role of monetary and fiscal policies in economic stability of Pakistan is studied using time series data for the period 1973-2014. The objective of this study is to discover the ways by which fiscal and monetary policies can be established to boost economic growth and stability of price level in Pakistan. The Augmented Dickey Fuller unit root procedure is used to check the time series properties. The Autoregressive Distributed Lag Model technique is used to find the long-run relationship between fiscal /monetary policy and economic stability. The study concludes that the variable CIR1 is insignificant in the determination of price level in Pakistan and the variable GDE1 and the variable IDT1 are significant in the determination of price level in Pakistan. The increase in the variable GDE1 and the variable IDT1 will increase the price level in Pakistan. The study concludes that fiscal policy plays important role to the steadiness of domestic price level in Pakistan.

Keywords: Fiscal policy, monetary policy, government spending, economic stability.

Introduction

The comparative significance of monetary and fiscal policy is an uncertain subject in economic literature. The advocates of monetary policy argue that expenses are linked with alteration in currency; moreover they advocate that monetary policy is much helpful during trade cycle. The advocates of monetary policy are not in support of the fiscal policy because of its cost of price increases as well as crowd out. The Keynesian school of thought recommends that increase in government expenses otherwise decline in taxes elevate aggregate demand as well as raise output (Snyder & Bruce, 2002).

The monetary policy played important role to the steadiness of domestic price level. The question occurs that is there some rate of inflation which is most favorable. The majority of the economists favor a low and steady inflation rate. Low inflation might diminish economic slump by hiring the labor market to regulate rapidly in a slouch, at the same time as lessening the danger of a liquidity trap that prevents monetary policy from the stable economy (Boon & Zubaidi, 1999).

The desire of monetary and fiscal policies is to assurance that the economy arrive at stable development of its financial system with no high inflation. There exists a close association between monetary and fiscal policies regardless of the truth that the two policies are dissimilar in circumstances of range and time lags in manipulating the financial situations. The inspirations of the relative effectiveness of monetary and fiscal policy are their consistent objects (Nadeem & Farooq, 2003).

Fiscal policy creates orientation to the dynamic utilization of the government budget for achieving the objective of economic growth. The fiscal policy plays a crucial function in macroeconomic stabilization. In emerging economies, where financial markets are comparatively straightforward and superficial, there is no decisive verification to propose that fiscal policy is ineffective. The major macroeconomic objectives which Governments want to achieve through

fiscal and monetary policies are to achieve full employment level, stability of general price level, accelerate economic growth and to maintain balance between exports and imports. The function of fiscal policy to growth and stability is vague in economic literature. On the one hand it is considered that involvement of government in economy is necessary for fiscal expansion, and on the other hand it is believed that administrative involvements are non-beneficial (Amanja & Morrissey, 2005).

With the help of fiscal policy production in the country can be increased by increasing government expenses and also by reduction in tax rate. More government investments strategies are essential in support of economic growth and stability. Fiscal policy considers that the government expenses and taxes influence growth. The reduction in taxes and expansion in money supply leads to stagflation (Agha & Khan, 2006).

Government might choose between the two policies to enhance growth in the economy. The GDP of an economy will increase if the economy is less than full employment level. The economy will lead to stagflation due to increase in money supply if the economy is upper than the full employment level (Reynolds, 2001).

The comparative importance of fiscal and monetary policy has been an unsettled subject in economic literature. Monetary policy was more effective than fiscal policy to boost economic growth in south Asian countries [Ali et at. (2006); Snyder and Bruce (2002); Boon and Zubaidi (1999); Rahman (2005)]. Fiscal policy could give a helpful accompaniment to monetary policy and there were significant restrictions to the worth additional of fiscal policy for the United States and for the European region, Muscatelli and Tirelli (2005). Both monetary and fiscal policies were equally important for economic growth in Nigeria, Ajisafe and Folorunso (2002).

Some studies analyzed the role of fiscal and monetary policies in economic growth of Pakistan based on the time series analysis of macroeconomic variables, whereas some studies analyzed the cross-country data for estimation. Cross-country regression analysis was based on the assumption that the nature and quality of data in different countries was similar. But it is a fact that nature and quality of data varied in different countries; due to which the results became doubtful.

There is a need to use individual country time-series data for undertaking econometric analysis about role of fiscal and monetary policies in economic growth to provide a sound foundation for a policy debate. This study investigates that how the currency in circulation and government expenditures influence economic growth. The aim of this study is to learn the role of fiscal and monetary policies in economic growth by examining the case of a small, open and developing country, Pakistan. The present study evaluates the role of fiscal and monetary policies in economic growth with reference to Pakistan during the period 1973 to 2014.

Techniques of Fiscal Policy:

There are four common techniques of fiscal policy in Pakistan:

(i) Taxation Policy;

(ii) Public Expenditure Policy;

(iii)Deficit Financing Policy;

(iv)Public Debt Policy.

Techniques of Monetary Policy:

Monetary policy is intended the policy followed through the central bank of a state for printing and management of a state's supply of money and supervision of the foreign exchange rates. Monetary policy involves changes in currency in circulation to influence interest rate and demand (Valmont, 2006).

The commercial banks in Pakistan gain Rs. 162 billion profit in aggregate during the year 2013 before tax payment. This profit was increased to Rs. 329 billion during the year 2015. There

are two main reasons of increase in profit of commercial banks. Firstly, the SBP advised the commercial banks to open the savings and term accounts on profit loss share basis and profit will be paid according to the cannons of Shariah. This provides opportunity to commercial banks to exploit the account holders and increase their own profit. Secondly, the commercial banks provided loans to government with the cooperation of SBP to meet the budget deficit instead of providing loans for industry, commerce, agriculture, exports and micro finance where there is no chance of loss but profit of banks increases. The private commercial banks also avoid providing loans to private sector (Siddique 2016).

The methods which central bank can adopt are bank rate policy, open market operation, changes in reserve ratio, credit rationing, moral persuasions, change in margin requirements, direct action, publicity and regulation of consumer's credit.

Data and Methodology

The time series data collected from the hand book of statistics, different financial survey and SBP yearly bulletins for the period 1973-2014 are used. The data in the study is first of all investigated in support of the time series characteristics and then other econometric methods are applied.

Methodology

The co-integration technique in addition to error correction technique is used to establish the short run results for the period 1973 to 2014. This study checks the presence of single co-integrating vector, which leads to long run association amongst the variables.

Unit Root Test

This study use DF and ADF methods to check the unit root. If the mean, variance and auto-covariance are stable then a variable is called stationary. The Dickey Fuller (DF) test is applicable if error terms (U_t) are uncorrelated. The following equation for ADF is estimated:

$$\Delta Y_t = \beta_1 + \beta_2 t + \delta Y_{t-1} + \alpha_i \sum_{i=1}^{m} \Delta Y_{t-1} + \mu_t \ldots\ldots\ldots\ldots\ldots(1)$$

In equation (1)'t' is time period, U_t is the error term and

$\Delta Y_{t-1} = (Y_{t-1} - Y_{t-2})$,

$\Delta Y_{t-2} = (Y_{t-2} - Y_{t-3})$ and so on (Gujarati, 1995).

Auto-regressive Distributed Lags (ARDL) Model

The autoregressive distributed lag model with p lags of Yt and q lags of Xt, denoted ARDL (p,q), is

$Y_t = \beta_0 + \beta_1 Y_{t-1} + \beta_2 Y_{t-2} + \ldots.. + \beta_p Y_{t-p} + \delta_1 X_{t-1} + \delta_2 X_{t-2} \ldots.. + \delta_q X_{t-q} + U_t$

Where:

$\beta_0, \beta_1 \ldots.. \beta_p, \delta_1, \delta_2 \ldots.. \delta_q$ are unknown coefficients and U_t is the error term with

$E(U_t | Y_{t-1}, Y_{t-2}, \ldots.., X_{t-1}, X_{t-2}, \ldots..) = 0$ (Stock & Watson, 2004).

A long run relationship means that the variables under consideration move together over time so that short-term instability is corrected from the long-term trend. To find out the co-integration relationship between independent variables and dependent variable the unrestricted error correction version of the ARDL model is used as given below:

$$\Delta P_t = \beta_0 + \sum_{i=1}^{p} \beta_{1i} \Delta CIR1_{t-i} + \sum_{i=1}^{p} \beta_{2i} \Delta GDE1_{t-i} + \sum_{i=1}^{p} \beta_{3i} \Delta BD_{t-i} + \sum_{i=1}^{p} \beta_{4i} \Delta IDT1_{t-i}$$
$$+ \lambda_1 P_{t-1} + \lambda_2 CIR1_{t-1} + \lambda_3 GDE1_{t-1} + \lambda_4 BD_{t-1} + \lambda_5 IDT1_{t-1} + \mu_t \ldots\ldots\ldots\ldots\ldots(2)$$

When the long run relationship exists i.e. the variables are co-integrated; then there is an error correction representation. So the following error correction model is estimated.

$$\Delta P_t = \beta_0 + \sum_{i=1}^{p} \beta_{1i} \Delta P_{t-i} + \sum_{i=1}^{p} \beta_{2i} \Delta CIR1_{t-i} + \sum_{i=1}^{p} \beta_{3i} \Delta GDE1_{t-i}$$

$$+ \sum_{i=1}^{p} \beta_{4i} \Delta BD_{t-i} + \sum_{i=1}^{p} \beta_{5i} \Delta IDT1_{t-i} + \alpha ECM_{t-1} + \mu_t \ldots\ldots\ldots(3)$$

Where:

P the inflation rate,
β_0 the intercept term,
LCIR the log of Currency in Circulation,
GDE1 the Government Development expenditure divided by GDP,
BD the budget deficit
IDT1 the indirect taxes divided by GDP,
U_t the error term.

The Stability Test

The tests of CUSUM and CUSUMSQ are also applied to check the stability of the model. These two tests of stability were established by Brown et al. (1975) to verify the stationarity of the regression model. This technique utilized the straight line the same as restrictions. If CUSUM and CUSUMSQ goes out of the straight line once or more than once, in that case it is assumed that the regression model is unbalanced.

Results and Discussion

Time Series Characteristics of the Data

The co-integration tests are performed on both policy variables using the DF and ADF unit root test on the residuals of the long term equations. Co-integration tests point out that is there a long term association between the dependent and independent variables. If variables are co-integrated, then the regressions on levels of variables considered important or else bogus.

Unit Root Tests

The results of the DF and ADF for level are given in the following Table 1. The results of the unit root tests in table 1 shows that the variable P is found stationary at level and all other variables are non-stationary. The t-value of coefficient of the variable P is −4.80, and this value in absolute terms is greater than the critical value of −2.93, suggesting that the variable P is found stationary at level.

Table 1 Unit Root Test at Level

Variables	With an intercept but not a trend		Critical value 5%	With an intercept and a linear trend		Critical value 5%
	DF	ADF		DF	ADF	
P	-4.57*	-4.80*	-2.93	-3.87	-4.09	-3.52
CIR1	-0.54	-1.22	-2.93	-1.94	-2.68	-3.52
GDE1	-3.07	-2.97	-2.93	-2.63	-2.40	-3.52
IDT1	-0.54	-1.22	-2.93	-1.94	-2.68	-3.52
BD	-2.94	-1.98	-2.93	-3.02	-2.08	-3.52

*Note. * indicate the stationarity of the variables at 0.05 probability level of significance.*

Table 2 Unit Root Test at First Difference

Variables	With an intercept but not a trend		Critical value 5%	With an intercept and a linear trend		Critical value 5%
	DF	ADF		DF	ADF	
DP	-4.57*	-4.80*	-2.93	-3.87*	-4.09*	-3.52
DCIR1	-5.22*	-8.18*	-2.93	-5.37*	-8.29*	-3.52
DGDE1	-6.15*	-4.38*	-2.93	-6.52*	-4.87*	-3.52
DIDT1	-4.21*	-3.95*	-2.93	-4.18*	-3.93*	-3.52
DBD	-4.35*	-4.02*	-2.93	-4.51*	-4.32*	-3.52

*Note. * indicate the stationarity of the variables at 0.05 probability level of significance.*
The results of the tests show that all the variables are stationary at first difference.

Co-integration Tests

The results of unit root tests show that every one variable incorporated in the model are integrated at level or first difference. In the study, the ARDL method is used. The H_0 that there is no long term association among the dependent and independent variables is investigated and the H_1 is that there exists a long term association. If the value of F-statistic is bigger than the greater limit, then the H_0 is not accepted and accomplished that there exist a long term association. The results are discussed as under.

$$\Delta P_t = \beta_0 + \sum_{i=1}^{5} \beta_{1i} \Delta CIR1_{t-i} + \sum_{i=1}^{5} \beta_{2i} \Delta GDE1_{t-i} + \sum_{i=1}^{5} \beta_{3i} \Delta IDT1_{t-i} \sum_{i=1}^{5} \beta_{3i} \Delta BD_{t-i}$$

$$+\lambda_1 P_{t-1} + \lambda_2 CIR1_{t-1} + \lambda_3 GDE1_{t-1} + \lambda_4 IDT1_{t-1} + \lambda_5 BD_{t-1} + \mu_t \text{.....(4)}$$

In equation (4), the expressions with the summation signs stand for the short term and the λ sign stand for the long term association. Where βo is the intercept term and μ_t is error term.

Variable Addition Test

Dependent variable is dP (Inflation Rate).

F-Statistic = 4.976

The outcomes of variable addition test show that there exists a long term association amongst the variables. The ARDL method is applicable to test the H_0 of no co-integration.

The F-statistic is 4.976 and the F-table critical value with an intercept and no trend at 0.05 percent probability level is 2.649 to 3.805. It is clear that F-statistic exceeds the upper limit of critical value. Hence, H_0 of no long term association amongst the dependent along with independent variables is not accepted it means there is long term association.

The subsequent step is the estimation of long term coefficients with the help of ARDL technique. The test statistic of the Table 3 ARDL (4,4,5,4,3) selected based on R-BAR squared criterion indicates that the variable CIR is insignificant in the determination of price level in Pakistan and the variable GDE1 and the variable BD are significant at 0.01 percent probability level. The variable LFER is significant at 0.05 percent probability level. The coefficient of LFER explains that one percent increase in LFER increases 179 percent price level.

The variable LFER is significant at 0.05 percent probability level. The symbols of the coefficient of all the variables are according to the economic theory. The increase in the variable GDE1, the variable BD and the variable LFER will increase the price level in Pakistan.

Table 3 Estimated Long Run Coefficients Using the ARDL Approach

Regressor	Coefficient	T-Ratio	Probability
CIR1	1.58	1.05	[0.30]
GDE1	122.16***	3.61	[0.00]
BD	573.65***	3.03	[0.01]
LFER	179.37**	2.22	[0.04]
INPT	-54.56**	-2.02	[0.05]

Note. Dependent variable is P (Inflation Rate)
*** indicate the co-efficient is significantly different from zero at 0.05 probability level.*
**** indicate the co-efficient is significantly different from zero at 0.01 probability level.*

Error Correction Model

The ECM shows the rate of correction to restore stability of the model. The coefficient of ECM shows that how quickly a variable come back to stability. The following equation is estimated.

$$\Delta P_t = \beta_0 + \sum_{i=1}^{5} \beta_{1i} \Delta P_{t-i} + \sum_{i=1}^{5} \beta_{2i} \Delta CIR1_{t-i} + \sum_{i=1}^{5} \beta_{3i} \Delta GDE1_{t-i} + \sum_{i=1}^{5} \beta_{4i} \Delta BD_{t-i}$$

$$+ \sum_{i=1}^{5} \beta_{4i} \Delta LFER_{t-i} + \alpha ECM_{t-1} + \mu_t \quad \text{.....(5)}$$

Table 4 shows the error correction model of ARDL (4,4,5,4,3) selected based on R-BAR Squared Criterion. The value of ECM is -0.53 and it is statistically significant at 0.05 percent probability level. The result confirms a elevated momentum of amendment back to long term equilibrium. The adjusted R-squared of the ECM is 0.51, showing that 51 percent of the variation in the variable P is explained by the explanatory variables. The error correction term, which measures the speed of adjustment to reinstate stability in the model, show a negative sign and is statistically significant at 0.05 percent probability, confirming that long-term stability can be achieved.

Table 4 Error Correction Representation for the Selected ARDL Model

Regressor	Coefficient	T-Ratio	[Probability]
dCIR1	21.76***	3.77	[0.00]
dGDE1	79.58***	2.94	[0.01]
dBD	-5.31***	-4.14	[0.00]
dLFER	7.09***	2.85	[0.01]
dINPT	-59.52***	-3.24	[0.01]
ECM(-1)	-0.53**	-2.11	[0.05]
R-Squared			0.84
R-Bar-Squared			0.51
DW-statistic			1.98

Note. Dependent variable is dP (Inflation Rate)
*** indicate the co-efficient is significantly different from zero at 0.05 probability level.*
**** show that co-efficient is significantly different from zero at 0.01 probability level.*

The results of error correction model indicate that the variable GDE1 and the variable CIR1 has positive effect on inflation rate in Pakistan. The variable GDE1 affects inflation rate positively in the short-term and in the long term. The variable LFER is presented in logarithmic form so, the

coefficient of the variable LFER is explaining directly elasticity. The above table shows that the variable LFER affects inflation rate in the short-run with an elasticity of 7.09. The variable BD has a negative relationship with price level and the variable LFER has a positive relationship with the price level in Pakistan.

The Stability Test

The tests of CUSUM and CUSUMSQ are also applied to check the stability of the model. These two tests of stability were established by Brown et al. (1975) to verify the stationarity of the regression model. This technique utilized the straight line the same as restrictions. If CUSUM and CUSUMSQ goes out of the straight line once or more than once, in that case it is assumed that the regression model is unbalanced. These two tests check the serial correlation, functional form, normality and heteroscedasticity related by the model. Therefore, the model is secure because straight lines are not crossed in figures 1 and 2 below.

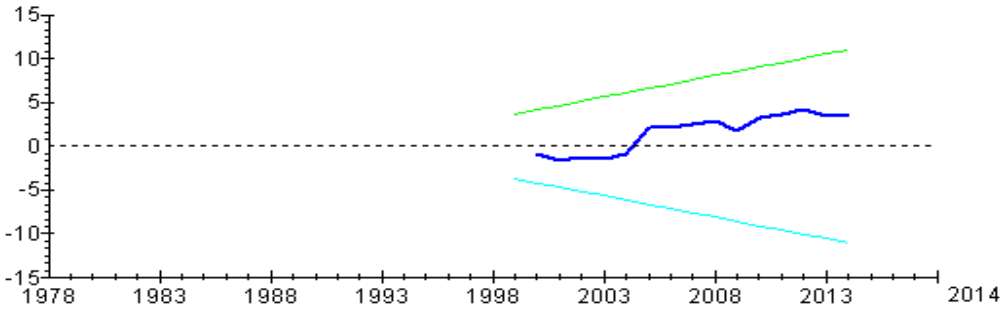

Figure 1 CUSUM Test for Stability

In figure 1 the model is found to be stable because CUSUM does not crosses the linear limits, then it is believed that the regression equation is stable.

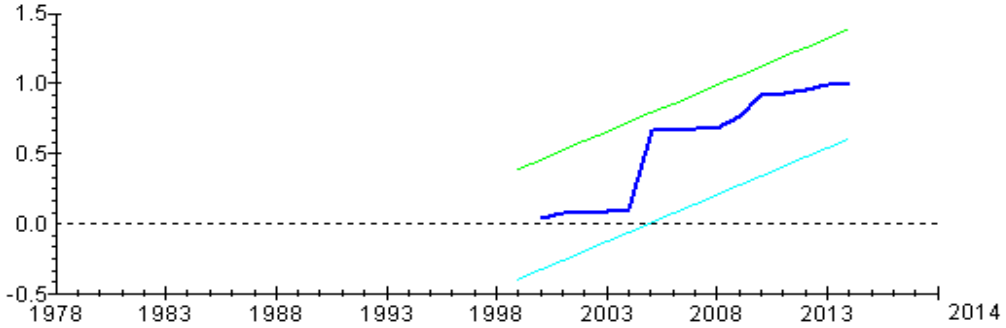

Figure 2 CUSUMSQ Test for Stability

In figure 2 the model is found to be stable because CUSUMSQ does not crosses the linear limits, then it is believed that the regression equation is stable.

Vector Autoregression Estimates

The vector autocorrelation technique apparently looks like simultaneous equation technique because we take into consideration a number of endogenous variables simultaneously. But every endogenous variable is given explanation by its last period values and there exist no exogenous variables into the model. The word autoregressive is because of the existence of the lagged value of the dependent variable on the right hand part and the word vector is because of the reality that we are dealing with a vector of more than one variable.

To estimate a VAR model, we suppose that every equation includes k lag values. Hence we can estimate every equation by Ordinary Least Squares (OLS). In such equations the u's are the error terms, named impulses in the language of VAR. Before estimation of equations we have to choose the maximum lag length by using the principles of Akaike or Schwarz and select that model which provides the minimum values of these criteria.

Table 5 The Vector Autoregression (VAR) Estimates at lag 1

	P	GDE1	CIR1	BD	LFER
P(-1)	0.38	0.001	-0.005	-0.001	-0.007
	(0.16)	(0.001)	(0.009)	(0.04)	(0.005)
	(2.35)	(1.69)	(-0.51)	(-0.04)	(-1.38)
GDE1(-1)	33.46	0.71	0.43	-5.41	-0.82
	(23.81)	(0.11)	(1.44)	(6.79)	(0.82)
	(1.40)	(6.11)	(0.29)	(-0.79)	(-0.99)
CIR1(-1)	2.66	0.02	0.74	-1.21	-0.21
	(6.46)	(0.03)	(0.39)	(1.84)	(0.22)
	(0.41)	(0.86)	(1.89)	(-0.66)	(-0.96)
BD(-1)	0.05	0.004	0.01	0.35	-0.08
	(1.44)	(0.007)	(0.08)	(0.41)	(0.05)
	(0.03)	(0.69)	(0.15)	(0.86)	(-1.65)
LFER(-1)	-1.16	-0.002	0.05	-0.01	0.97
	(1.28)	(0.006)	(0.07)	(0.36)	(0.04)
	(-0.89)	(-0.349)	(0.72)	(-0.02)	(21.79)
C	6.88	-0.05	-0.02	5.41	1.02
	(12.78)	(0.06)	(0.77)	(3.64)	(0.44)
	(0.53)	(-0.86)	(-0.03)	(1.48)	(2.30)
R-squared	0.44	0.74	0.59	0.48	0.97
Adj. R-squared	0.36	0.71	0.53	0.41	0.96
Sum sq. resids	627.34	0.01	2.29	51.04	0.75
S.E. equation	4.23	0.02	0.25	1.21	0.14
F-statistic	5.54	20.23	10.19	6.67	235.41
Log likelihood	-114.09	104.02	0.90	-62.66	23.70
Akaike AIC	5.85	-4.78	0.24	3.35	-0.86
Schwarz SC	6.11	-4.53	0.49	3.60	-0.61
Mean dependent	9.54	0.03	1.15	5.78	4.89
S.D. dependent	5.30	0.04	0.37	1.57	0.80
Determinant Residual		Covariance		5.95E-07	
Log Likelihood				2.99	
Akaike Information Criteria				1.31	
Schwarz Criteria				2.57	

Note. Standard Errors and t-statistics in parentheses

Let us study the outcomes obtained in Table 5. Separately, the variable inflation rate; the variable GDE1; at lag one, and the variable LFER at lag one are statistically significant. However, the F-value is therefore high so that we cannot reject the assumption that jointly each and every one the lagged terms will also be statistically significant. For the model in Table 5 the AIC value is 1.31 and SIC is 2.57. These values are very lower, as a proof that the model is best.

Now we study the VAR technique at lag two as shown in Table 6 and compare it with results of the VAR at lag one. In the Table 5 sample is adjusted from 1975 to 2014 and included observations are 40 after adjusting the endpoints.

Table 6 The Vector Autoregression (VAR) Estimates at lag 2

	P	GDE1	CIR1	BD	LFER
P(-1)	0.59	0.001	-0.01	0.02	-0.003
	(0.12)	(0.001)	(0.01)	(0.05)	(0.006)
	(4.75)	(1.846)	(-0.95)	(0.43)	(-0.54)
P(-2)	-0.09	0.002	0.005	-0.01	0.0004
	(0.13)	(0.001)	(0.01)	(0.05)	(0.006)
	(-0.72)	(1.69)	(0.41)	(-0.26)	(0.071)
GDE1(-1)	-0.12	0.52	0.01	-1.66	-2.17
	(26.85)	(0.18)	(2.47)	(11.38)	(1.36)
	(-0.004)	(2.83)	(0.006)	(-0.14)	(-1.59)
GDE1(-2)	9.11	0.04	0.06	-1.33	1.04
	(27.45)	(0.19)	(2.53)	(11.63)	(1.39)
	(0.33)	(0.19)	(0.02)	(-0.11)	(0.75)
CIR1(-1)	-8.05	0.04	0.71	-0.61	-0.28
	(5.74)	(0.04)	(0.53)	(2.43)	(0.29)
	(-1.40)	(1.001)	(1.35)	(-0.25)	(-0.97)
CIR1(-2)	9.33	-0.006	-0.03	-0.14	0.11
	(5.50)	(0.037)	(0.51)	(2.33)	(0.27)
	(1.69)	(-0.164)	(-0.05)	(-0.06)	(0.40)
BD(-1)	-1.95	0.007	0.05	0.22	-0.10
	(1.20)	(0.008)	(0.11)	(0.51)	(0.06)
	(-1.61)	(0.841)	(0.46)	(0.43)	(-1.73)
BD(-2)	2.40	0.001	-0.06	0.34	0.04
	(1.17)	(0.008)	(0.11)	(0.49)	(0.06)
	(2.04)	(0.096)	(-0.61)	(0.69)	(0.67)
LFER(-1)	6.95	0.002	0.27	-0.57	0.78
	(3.65)	(0.025)	(0.33)	(1.55)	(0.18)
	(1.90)	(0.073)	(0.81)	(-0.37)	(4.22)
LFER(-2)	-6.85	-0.0004	-0.21	0.51	0.21
	(3.63)	(0.025)	(0.33)	(1.54)	(0.18)
	(-1.88)	(-0.016)	(-0.64)	(0.33)	(1.15)
C	-1.05	-0.108	0.19	3.78	0.74
	(11.36)	(0.078)	(1.05)	(4.81)	(0.57)
	(-0.09)	(-1.38)	(0.18)	(0.78)	(1.29)
R-squared	0.65	0.76	0.63	0.54	0.97
Adj. R-squared	0.53	0.67	0.51	0.39	0.96
Sum sq. resids	239.45	0.01	2.04	43.01	0.61
S.E. equation	2.87	0.02	0.26	1.21	0.14
F-statistic	5.51	9.266	5.06	3.52	113.37
Determinant Residual		Covariance		1.23E-07	
Log Likelihood				34.44	
Akaike Information Criteria				1.03	
Schwarz Criteria				3.35	

Note. Standard Errors and t-statistics in parentheses

. Because several lags of same variables are included in this VAR estimation, it is difficult that each estimated coefficient will be statistically significant due to the problem of multicolinearity. However, jointly, these variables might be considerable on the foundation of the usual F-test.

Separately, only inflation rate at lag one, the variable CIR at lag two, the variable GDE1 at lag two, the variable LFER at lag two and the variable BD at lag two are statistically significant. However, the F-value is therefore high so that we cannot reject the assumption that jointly each and every one the lagged terms will also be statistically significant.

For the model in Table 6 the AIC value is 1.03 and SIC value is 3.35. These values are very lower, as a proof that the model is best.

If we have to make a choice between the models specified in Table 5 and that specified in Table 6, the AIC and SIC values help us in this regard. For the model in Table 5 the AIC and SIC values are 1.31 and 2.57 correspondingly. However, the AIC and SIC values for Table 6 are 1.03 and 3.35 respectively.

The model given in Table 5 is the best model in view of the fact that the values of Akaike and Schwarz statistics are lower as compare to the Table 6. We also estimate the VAR up to six lags of every endogenous variable and establish that the values of Akaike and Schwarz statistics were greater than the values given in Table 5. Hence, the selection seems to be the model with one lagged term of every endogenous variable, that is, the model given in Table 5

Conclusions and Recommendations

Conclusions

The fiscal policy plays a significant role in the economic stability of Pakistan. The objective of this study is to establish some important instruments for monetary and fiscal policy in Pakistan. The study uses annual time series data for the period 1973 to 2014. The two economic policies are adapted to assurance that the country arrive at stable development with no rapid inflation. There exists a close association between monetary and fiscal policies regardless of the truth that the two policies are dissimilar in conditions of range, communication system and time lags in manipulating the economic conditions.

This study also concludes that the variable CIR1 is insignificant in the determination of price level in Pakistan and the variable GDE1 and the variable IDT1 are significant in the determination of price level in Pakistan. The increase in the variable GDE1 and the variable IDT1 will increase the price level in Pakistan. It means that fiscal policy plays important role to the steadiness of domestic price level in Pakistan.

Recommendations

There is need to increase currency in circulation through monetary policy by providing opportunities of investment and provide incentives to investors to invest their savings into the market.

Both policies need to be originated and accomplished in coordinated approach. Therefore it might be accomplished that there is small coordination amongst the policy makers.

The government of Pakistan depends upon direct taxes which is a failed model. Government of Pakistan should adopt the system of indirect taxes which is successfully implemented in advanced countries.

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