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EFFECTS OF IMF FINANCIAL ASSISTANCE ON ECONOMIC PERFORMANCE OF PAKISTAN

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ABSTRACT

Developing countries like Pakistan seek financial assistance in order to meet their deficits and economic habitual activities. IMF is one of the largest financial institutions for this purpose. This study is designed to assess "the role of IMF in the economic performance of Pakistan" over the time period from 1980 to 2020. The data has been taken from IFS, World Bank, and the State Bank of Pakistan. The Augmented Dickey-Fuller test has been used for unit root. The ARDL estimation technique has been used. Economic Performance Index used as dependent variable, whereas Foreign Direct Investment, Money Supply, Exchange Rate, Gross National Expenditure, and Terms of Trade have been taken as independent variables. IMF is treated as a dummy variable in this study. The result shows that the IMF has an adverse relation with the economic performance of Pakistan in both the short and long run. Foreign Direct Investment has positively influenced the economic performance in the short run but negatively in the long run. The exchange rate has negatively affected the economic performance in the short run but positively in the long run. The result also shows that money supply, gross national expenditure, and terms of trade are positively affected by the economic performance as well.

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INTRODUCTION

Basically, the economies are trying to find and determine the factors of economic growth. There are numerous factors that have a positive and negative relationship with economic growth. Developing countries are struggling economies and have always been under the pressure of inflation, low economic growth, unemployment, budget deficit, low living standard, a bankrupt financial system, and a bad exchange rate. These developing countries do not have the money to carry out their habitual economic activities. Therefore, they always seek help from developed countries and other monetary organizations like the International Monetary Fund (IMF) and the World Bank etc. The Underdeveloped Countries (UDCs) like Pakistan are also trapped in a "Vicious Circle of Poverty" due to a low level of income. The investment level remains low due to low saving ratios. At the same time, due to the reason of low income, the taxable capability remains poorer, i.e., government remuneration also remains low. In such circumstances, the UDCs have to face saving investment and balance of payments (BOP) deficit (Ali, 2016).

Pakistan's economy is a diversified economy which has three (03) major sectors, i.e., services, agriculture, and industry. The contribution of the agriculture sector to the economy is 21%; the industrial portion is 20.9% while the share of the services sector is 57.7% of the total GDP. Due to dependence on imports, the trade balance account remained in deficit during most of the years and is still in the same situation. The unnecessary reliance on imports has also led to anxiety about foreign exchange reserves. The uninterrupted depreciation in the currency has also resulted from such economic problems. Public debt to the economy rose sharply as it reached more than 60% of the GDP (Anwar et al., 2017). Pakistan has also been facing severe economic problems since its inception. There are many reasons that cause damage to the economic activities of Pakistan, i.e., improper government strategy, deregulation of financial institutions, lack of strategic financial policies, lack of education, lack of exports and a great number of imports, terrorism, power crises, and many more crises regarding different economic issues. So, unfortunately, it has been taking financial help from the International Monetary Fund, World Bank, and other advanced states from time to time.

There has also a substantial deliberation and disputes on the IMF financial assistance provided to a country's severe and unmanageable instability in its balance of payments and risk of going into default. The IMF provides financial support to the governments, which consists of two parts. The first part is to set stabilization of policy measures, and the country is willing to reduce aggregate demand to reduce the fiscal and current account deficit to an ecological level. And second, what terms are essential to measure the adjustment, economic & administrative reforms concentrating on recovering the effectiveness and efficiency of the economy, and also to confirm viable progress with macroeconomic stability over the intermediate to long-term span. There are different thoughts prevailing on the IMF financial assistance programs. Some people considered it a curse, and some as a cure. All the studies investigated the impact of IMF lending programs on economic growth and other economic variables individually. To date, no study has constructed the index of economic performance of Pakistan and examined the effects of the IMF on it.

Therefore, the present study aims to construct an index of economic performance and examine the impact of IMF lending programs on Pakistan's economic performance from 1980 to 2020. The Economic Performance Index (EPI) serves as a

comprehensive macroeconomic indicator that effectively measures the performance of the economy's three primary segments: households, firms, and the government. The EPI incorporates variables that simultaneously influence all three sectors, including the inflation rate as an indicator of the economy's monetary stance, the unemployment rate as a measure of the production stance, the budget deficit as a percentage of total GDP representing the fiscal stance, and the change in real GDP reflecting the aggregate performance of the overall economy.

Cross-country analysis

Khan et al. (1990) have observed the effects of IMF programs in the long term on the variables, i.e., balance of payments, growth & inflation. He used the data from 1973 to 1988 for 69 developing countries. The methodology combines a regression approach, the General Evaluation Estimator method (GEE), a before-and-after approach, and a non-random controlled selection method. The result shows that IMF programs have a positive impact on the current account and balance of payments. Frenkel and Khan (1990) have concluded that economic growth can fade and not be substantiated without macroeconomic stability. Moreover, the basic structural and social transformations that comprise the process of development will not transpire without broad-based economic growth, and the other objectives of development policy are unlikely to be met.

Conway (1994) has analyzed the macroeconomic performance of IMF participating countries from the period 1976 to 1986 and proposed that during the IMF Program, growth and domestic investment fall, but in the long run, there is a positive rise in growth and domestic investment. Other effects, the public investment was let down, the budget surplus increased, and the exchange rate depreciating. In addition, there are many studies that have also proposed the encouraging influence of IMF programs on the current account. Perhaps, Ul Haque and Khan (1998) have experimentally found that IMF loan programs led to betterment in the current balance account and generally the balance of payments. The study recommended that in the short term, IMF programs have negatively affected growth, but in the long run, it rises.

Dreher (2006) obtained panel data of 98 states from the period 1970 to 2000 and analyzed whether IMF participation affects economic development in program states. He applied the matching method, and the study tried to disentangle those effects empirically and concluded that IMF loans/programs reduced the growth ratio when their endogeneity was accounted for. There was only a feeble indication that compliance with conditionality diminishes this negative outcome. The IMF programs have no statistically significant effects. Butkiewicz and Yanikkaya (2005) have obtained data from the period 1975 to 79 and 1995 to 99 of Poor-democracy developing countries, Good-democracy developing nations, Low-income developing nations, and Middle-income developing nations. They have used the time-shifted difference in differences methodology. The results showed that by increasing public investment, Bank lending encourages growth in certain cases. The IMF loan was either neutral or unfavorable to the growth. The IMF lending negatively affected the public investment and private investment.

Ozturk (2008) has taken a sample of 21 Latin American countries from 1975 to 2004, applied the GEE methodology, and found that there were positive results on investment, balance of payments, and current account. However, opposing effects were projected against inflation, per capita GDP, FDI, budget deficit, and consumption.

Biglaiser and McGauvran (2022) got data from the years 1986 to 2016 of the 81 developing countries, and analyzed that IMF loan arrangements containing structural contributions trapped more people in poverty, due to involvement of wide-ranging changes that raised unemployment, decreased government returns, raised the costs of basic services, and reorganized tax collection. On the contrary, the loan activities helping steadiness reforms have less impact on the deprived because borrower states hold more discretion over their macroeconomic targets.

Single Country Analysis

Contrary nature of IMF programs' participation in terms of effects, most of the studies have been based on single-country analyses. Zaki (2001) has observed that during the implementation of IMF programs in the period of 1990s, Egypt succeeded. However, a sharp decline in deficit financing by the government central bank, but the programs had an adverse impact on the growth of Egypt, and the reaction of the private sector had also been unsatisfactory. Kean et al. (2015) have examined the effects of IMF programs' conditionalities on Indonesia's economic growth before, during, and after the Asian financial crisis. The sample period comprised 01-01-1980 to 30-06-1997 and 01-07-1997 to 31-12-2014. Granger causality test, impulse response, and variance decomposition were applied. The empirical result offers two findings. First, before the Asian financial crisis, the conditionality variables were active in influencing economic development. Second, during and after the Asian financial crisis, compliance with conditionality in IMF loans showed slight effects on economic growth. The study suggested that IMF programs neither improved nor worsened the economic growth in Indonesia.

Pakistan

The duration and intensity of the stabilization programs vary across countries, dictated by the macroeconomic disequilibrium that has to be overcome. Khan (1990) has concluded that in the short run, current account and balance of payments have improved during the IMF programs, inflation & growth declined. In the long run, the IMF programs have a positive outcome on foreign balance and inflation, and reduce the effect of negative growth. There is also an indication of a positive relation between macroeconomic stability and economic development.

Iqbal et al. (2000) have used data from 1970 to 1993 as a period of observations for the Pakistan economy and concluded that a reduction in the real exchange rate has a negative effect on imports of goods and a positive effect on exports of goods. When an important instrument, i.e., domestic real interest rate, increased, private consumption was discouraged, and the private savings and investments were enhanced as well. The results further showed that the upper internal real interest rate has a significant impact on the performance of all basic macroeconomic variables. The effects of the reduction in the current government spending appear to have an optimistic effect on all the nominated objective variables.

Hakro and Ahmed (2006) studied the impact of the IMF program on major macroeconomic indicators, i.e., growth of GDP, current account balance, rate of inflation, fiscal balance, and rate of unemployment. They used the Generalized Evaluation Estimator (GEE) technique on yearly data from 1973 to 2000 in Pakistan. The results revealed that during periods of support from the IMF, the current account balance of the Pakistan economy declined along with the deployment rate and price increases. A partial progress in the fiscal balance had been seen. On the other hand,

during the program period, insufficient sequencing of reforms has contributed to further falling in the economic situation.

Akram (2011) has studied the effect of public debt and investment on Pakistan's economic growth. He concluded that the public external loan has an adverse and significant relation with investment and per capita GDP, in both the short and long run. On the other hand, the debt servicing has an adverse and significant relationship with per capita GDP in the short term. Domestic debt also has an adverse and significant relation with investment, although domestic debt does not have a significant relation with per capita GDP. Investment has an encouraging and significant relationship with per capita GDP. The study suggests that massive trust in external and domestic debt must be discouraged. Atique and Malik (2012) have scrutinized the effects of internal and external loans on Pakistan's economic growth from 1980 to 2010. The study used the Ordinary Least Squares (OLS) method of co-integration. The results indicated negative relationships between internal and external debt with economic growth. The study also suggested that the external loan slows down economic growth more compared to the domestic loan. The adverse effects of external loans are stronger on economic growth compared to internal loans.

Rais and Anwar (2012) took data sets from 1972 to 2010, applied the simple OLS technique, and concluded that due to the reasons of low tax base and duplicate deficits, Pakistan had to depend on internal & external capital flows. Under these circumstances, exterior financing is significantly more lavish than internal financing. Both external and internal loans had an adverse role in the real per capita income growth rate. The loans should be used only for required purposes and should keep away from corrupt people. The IMF loan should also be avoided because the IMF has imposed harsh conditions on the debtor nations.

Isran and Isran (2014) have analyzed the economic impact of IMF programs for the period from 1988 - 2002 in the context of Pakistan and adopted a qualitative & quantitative research methodology. It has been concluded from the data that the reduction in educational expenditures had negative consequences on educational quality, which also resulted in deterioration in real education expenses per student. On the other hand, the area that negatively affected the economy was the privatization; hence, the IMF program failed to achieve the targeted results.

Umer et al. (2015) have concluded that at first sight, IMF loans were very attractive, but later on, there was no free lunch. To get loans from the IMF, Pakistan had fulfilled many demands and conditions. The IMF funds were more curse than its blessing. It should take corrective measures for the proper usage of the IMF funds, and proper strategies should be adopted for checks and balances. Ahmad et al. (2016) had collected data from 1974 to 2013 and applied the ARDL model. The study took Government borrowing as the dependent variable and Population, IMF charges, GDP, exchange rate & political instability taken as independent variables. He concluded that in the long run, the variables of GDP and political instability have adverse and insignificant relations with the government borrowings. There is also an adverse and significant relationship between government borrowings and IMF loans. The exchange rate has a progressive and significant relationship with the government borrowings.

Nasir (2020) obtained data from 1976 to 2018 and applied the ARDL estimation technique. He took the IMF loan as the dependent variable and GDP Per Capita, Foreign Reserves, and Exchange Rate as independent variables. He concluded that the IMF is working for the developed countries and its aim of helping the developing countries is only left in the books. The behavior of the IMF towards developing countries is not appropriate. The results also showed that the relationship between IMF loans and GDP is negative. If we want to increase GDP Per Capita, we must decrease IMF loans. These IMF loans are nothing but just burden on the economy.

Naeem et al. (2023) observed that there are both positive and negative impacts of the IMF program on the economy of Pakistan. Khan et al. (2024) examined the data of the Pakistan economy from 1992 to 2021 and applied the ARDL model to determine the economic factors persuasive to persistent depending on IMF, which has been statistically significant impact on the Pakistan economy. The study finds that policy makers required to increase tax revenue, cut the government expenditures, decrease imports, the exports ratio and adjust the exchange rate are essential consideration.

METHODOLOGY

The construction of the study comprises two key segments. Firstly, we constructed the Index of Economic Performance, and secondly, we matched and distinguished the macroeconomic effect of the IMF loan programs on the economic performance of Pakistan.

Data

The data set comprises 41 years of data from Pakistan. The said data has been taken from 1980 to 2020. There are 9 variables used in this study. 4 variables (i.e., Inflation Rate, Unemployment Rate, Fiscal Balance and Real GDP Growth) for the construction of the Economic Performance Index (EPI), which is the objective variable and taken as the dependent variable. Foreign Direct Investment (FDI), Money Supply (M2), Exchange Rate (EXR), Gross National Expenditure (GNE), and Terms of Trade (TOT) are policy variables and taken as independent variables. IMF is taken as a dummy variable in this study. Basically, we will examine the effects of these policy variables on the target variable during the IMF lending years.

Construction of the Index of Economic Performance (EPI)

Khramov and Lee (2013) have introduced the Economic Performance Index (EPI). The economic performance index score may be measured yearly, trimonthly, or monthly by fetching a total score of 100% and deducting the inflation rate, unemployment rate, the fiscal deficit as a percentage of GDP, and lastly accumulating the %age change in real GDP, all weighted and measured as deviations from their chosen values. This methodology is helpful for computing the economic performance for economies at a countrywide or international level. We supposedly describe the chosen values for each of the indicators as follows:

The chosen inflation rate (I*) is 0.0%;

The chosen unemployment rate (U*) is 4.75%;

The chosen value for government deficit as a share of GDP (Def/GDP*) is 0.0%;

The chosen change in GDP (ΔGDP*) is a healthy real growth rate of 4.75%.

EPI construction formula

$$EPI = 100\% - |Inf(\%) - I^*| - (Unemp(\%) - U^*) - (Def/GDP(\%) - Def/GDP^*) + (\Delta GDP(\%) - \Delta GDP^*) \quad (1)$$

$$= 100\% - |Inf(\%)| - Unem(\%) - Def/GDP(\%) + \Delta GDP(\%) \quad (2)$$

Econometric Model

In this modernistic age of applied econometrics, implementing the econometric instruments on theoretical economic models is a significant aspect of economic analysis. Normally, the data of macroeconomic variables has the envelopment of a time trend, which makes the data non-stationary, and OLS results become spurious. Nelson and Plosser (1982) have investigated that time series data of indicators of the macroeconomic variables have a unit root problem. Though the presence or non-presence of a unit root helps to check the validity of the data. There are some dissimilarities between the stationary and the non-stationary data. The stationary time series data have provisional shocks that evaporate over time, and the series return to their long-run mean values. To find out the correlation amongst the endogenous and exogenous variables, the study has applied the Auto-Regressive Distributed Lagged model (ARDL) bounds test, which was built up by Pesaran et al. (2001). In case of any structural interruption, this approach gives suitable results. The said econometric approach has also been used due to its diversified benefits.

The ARDL method also has the dimensions to detention the effects of the structural breakdown. Hence, the other cointegration tests cannot be applicable to this mixed-order of cointegration. To measure the IMF programs are classified as IMF participation, a dummy variable is used with a value of 1 if the country participated in an IMF program, which takes into account loans disbursed by the IMF to Pakistan, or otherwise zero.

Hence, our model is:

$$\text{EPI} = f[IMF, FDI, M2, EXR, GNE, TOT, EPI(-1)] \quad (3)$$

After taking the natural logarithm of the model:

$$\Delta lnEPI_t = \alpha_1 + \alpha_T T + \alpha_{EPI} lnEPI_{t-i} + \alpha_{IMF} lnIMF_{t-i} + \alpha_{FDI} lnFDI_{t-i} + \alpha_{M2} lnM2_{t-i} + \alpha_{EXR} lnEXR_{t-i} + \alpha_{GNE} lnGNE_{t-i} + \alpha_{TOT} lnTOT_{t-i} + \sum_{q=1}^{p} \alpha_i \Delta \text{EPI}_{2_{t-i}} + \sum_{v=0}^{u} \alpha_n \Delta lnFDI_{t-i} + \sum_{v=0}^{u} \alpha_n \Delta lnM2_{t-i} + \sum_{v=0}^{u} \alpha_n \Delta lnEXR_{t-i} + \sum_{w=0}^{V} \alpha_n \Delta lnGNE_{t-i} + \sum_{v=0}^{u} \alpha_n \Delta lnTOT_{t-i} + \theta ECT + \varepsilon_t \quad (4)$$

Where ln is the natural logarithm and ε_t is the error term of the model.

RESULTS AND DISCUSSIONS

The descriptive statistics table illustrates the mean and standard deviation of the variables used in this study. It also represents the minimum and maximum values of the variables, which helps to create a picture of the extreme and lowest values of the variables. Table 1 shows the values of Mean, Median, Maximum, Minimum, and Standard Deviation, etc. of the variables, namely Economic Performance Index, Foreign Direct Investment, Money Supply, Exchange Rate, Gross National Expenditure, and Terms of Trade for a period of forty-one years from 1980 to 2020.

Empirical Analysis

The first step before applying the ARDL Model is to test the stationarity properties of the variables under consideration. Table 2 represents the Augmented Dickey Fuller test results. The lag length is based on the Akaike Info Criterion (AIC). The results are given in Table 2.

Table 1. Descriptive statistics.

Variables	EPI	FDI	M2	EXR	GNE	TOT
Mean	98.79910	0.868049	15.17962	56.54349	105.9053	89.18805
Median	99.45800	0.680000	14.74655	53.64819	106.2778	102.2727
Maximum	107.1150	3.370000	42.90887	161.8385	112.0384	150.0000
Minimum	90.51500	0.120000	4.314225	9.900000	99.06016	46.27625
Std. Dev.	4.210810	0.751469	6.673954	39.61084	3.561843	33.09146
Skewness	-0.038767	1.988838	1.712264	0.800630	-0.160586	-0.004438
Kurtosis	2.414345	6.577493	8.779597	2.936542	2.102417	1.437135
Jarque-Bera	0.596214	48.89312	77.09903	4.387098	1.552545	4.071043
Probability	0.742222	0.000000	0.000000	0.111520	0.460118	0.130612

Table 2. ADF unit root results.

Variables	Level				1st difference	
	Intercept		Trend & Intercept		Intercept	
	t. St.	Prob.	t. St.	Prob.	t. St.	Prob.
EPI	-	-	-	-	-7.477074	0.0000
FDI	-	-	-	-	-4.411330	0.0011
M2	-5.035832	0.0002	-	-	-	-
Exchange Rate	-	-	-	-	-4.043486	0.0032
GNE	-	-	-	-	-5.275784	0.0001
Terms of Trade	-	-	-	-	-6.075811	0.0000

Table 3 (F-Bound Test Results)

Test Statistics	Value	Signif.	I(0)	I(1)
F-statistics	19.18283	10%	2.12	3.23
		5%	2.45	3.61
		2.5%	2.75	3.99
		1%	3.15	4.43

Each indicator has been examined for a unit root, and at the level, all the indicators are found to be stationary. To make these variables stationary, they are also checked at the first difference. So the result shows that some variables have been found stationary at the level and some variables at first difference.

For investigating the cointegration among the Economic Performance Index, IMF, FDI, M2, Exchange Rate, Gross National Expenditure, and Terms of Trade, the ARDL Bounds test has been used. The results of the ARDL Bounds test approach are presented in Table 3. The calculated F-statistic (19.18283) is higher than the upper bound value of Pesaran, Shin, and Smith (2001) at 5% and 10%. The calculated F-statistics have verified the existence of Cointegration among the variables. Hence, we reject the null hypothesis. The Breusch-Godfrey LM test for autocorrelation has been used and found that the F-Statistics value is 0.217418 with a chi-squared probability value of 0.5237. The results in Table 4 show that there is an absence of serial correlation between the variables. Hence, the null hypothesis of no autocorrelation has been accepted.

Heteroscedasticity among the variables has also been tested. The result in Table 5 shows that there is no heteroscedasticity in the variables. Hence, the study accepts the null hypothesis.

Table 6 shows the long-run results. In the long run, the value of the coefficient of the IMF dummy is -8.2042, and the t-statistic is -6.9456 (Prob. = 0.0000). The result shows that there is an adverse and significant relationship between Economic Performance and IMF financial assistance. It shows that a 1 percent increase in IMF loan will decrease economic performance by 8.2042 percent, regardless of changes in other independent variables. This finding is in line with the studies of Butkiewicz & Yanikkaya (2005), Hakro & Ahmed (2006), Malik et al. (2010), and Atique & Malik (2012).

Other policy variables: FDI negatively and insignificantly influenced the economic performance. It means if we increase one percent in FDI, the economic performance will decrease by -0.5126 percent. The result is in line with the studies of Saqib et al. (2013) and Falki (2009). The defense for the negative value of FDI can be clarified, as pointed out by Nunnenkamp (2004). According to this study, to achieve the international development goals, reducing absolute poverty and raising the average level of income, FDI has helped to increase economic growth as well. There are two situations that have to be encountered. First, the emerging nations need to be attractive to the external financiers. Second and most important is that the host nation atmosphere in which external financers work must be helpful to satisfactory FDI effects the overall investment, income growth and economic spillovers. Without development of the internal markets, institutions, investment pleasant policy and governmental framework as well as the accessibility of complementary factors of productions. The host state's conditions prevailing in most of the emergent states, including feeble organizations.

The Money Supply has a positive effect on the economic performance. It means, if we increase one percent in M2, the economic performance will also increase by 0.3292 percent. This result is in line with the study of Kausar et al. (2020). The Exchange Rate positively and significantly affected the economic performance. This result shows that if we increase one percent in exchange rate the economic performance will increase by 0.2006 percent. This finding is in line with the study of Awan et al. (2011). The Gross National Expenditure has a positive and significant effect on the economic performance. It means, if we increase one percent in GNE, the economic performance will also increase by 1.0311 percent. The Terms of Trade have also positively and significantly affected the economic performance. A one percent increase in TOT will increase the economic performance by 0.2020 percent. This result is in line with the study of Jawaid and Raza (2013).

Table 4. LM Test.

F-statistics	Chi-Squared
0.217418	0.5237

Table 5. Heteroscedasticity.

F-statistics	2.476177	Prob. F	0.0420
Obs*R-Squared	29.43529	Prob. Chi-Square	0.1320

Table 6. ARDL long run results.

Variables	Coefficient	Std. Error	t-Statistics	Prob.
IMF	-8.204277	1.181208	-6.945665	0.0000
FDI	-0.512623	0.468527	-1.094115	0.2924
M2	0.329294	0.145391	2.264889	0.0399
EXR	0.200633	0.032935	6.091777	0.0000
GNE	1.031146	1.112680	9.151071	0.0000
TOT	0.202085	0.031756	6.363705	0.0000

Table 7. ADRL short run results.

Variables	Coefficient	Std. Error	t-Statistics	Prob.
D(IMF)	-2.335984	0.543325	-4.299420	0.0007
D(FDI)	4.151831	0.641900	6.468032	0.0000
D(M2)	0.079063	0.030016	2.634029	0.0196
D(EXR)	-0.220193	0.054811	-4.017336	0.0013
D(GNE(-1)	-0.862925	0.128108	-6.735941	0.0000
D(TOT(-1)	-0.214751	0.031790	-6.755348	0.0000
CointEq(-1)	-1.275217	0.092072	-13.85021	0.0000
R-squared	0.952454			
F-statistics	25.04020			
Prob(F-statistics)	0.000000			

The short-run dynamics are represented in Table 7. The study used Error Correction Model Regression (ECM) for considering the short-run dynamics among Economic Performance and IMF, Foreign Direct Investment, Money Supply, Exchange Rate, Terms of Trade, and Gross National Expenditure. The value of the coefficient of the IMF dummy is -2.3359, and the t-statistic is -4.2994 (Prob.=0.0007). The result shows a negative and significant relationship between the IMF and economic performance. If we increase one percent in IMF loan the economic performance will decrease by -2.3359 percent. This finding is in line with the study of Hakro & Ahmed (2006). The adverse and significant coefficient (-1.2752) of CointEq(-1) is hypothetically correct. The adverse and significant value of ECM illustrates the speed of adjustment for equilibrium from the short run to the long run. The estimation of ECM further shows that the short run requires almost 8 months to reach the equilibrium in the long run. Other policy variables: FDI has positively and significantly influenced the economic performance. It means if we increase one percent in FDI, the economic performance will increase by 4.1518 percent. The result is in line with the study by Gudaro et al. (2012). The Money Supply has positively affected the economic performance. It means if we increase one percent in M2, the economic performance increases by 0.0790 percent. The Exchange Rate has negatively and significantly affected economic performance. The result reveals that if we increase one percent in exchange rate, economic performance will decrease by 0.2201 percent. This finding is in line with the study of Hakro & Ahmed (2006) and Ahmad et al. (2013). The exchange rate devaluation has made imports more expensive, and since major imports are used as an input in the domestic industry, hence devaluation has slowed down the productive activities of the economy. It has worsened the situation in both ways, one by reducing the productive activities and the second by increasing the cost of production for the domestic industries, which further caused to increase the domestic prices.

The Gross National Expenditure has negatively and significantly affected the economic performance. It means, if we increase one percent in GNE, the economic performance will decrease by -0.8629 percent. The result is in line with the study of Nworji et al. (2012). The Terms of Trade have also negatively and significantly affected the economic performance. It means, a one percent increase in TOT will decrease the economic performance by -0.2147 percent. This result is in line with the studies of Fatima (2010) and Jebran et al. (2018). The contrary effect of Terms of Trade (TOT) may be described by the phenomena that the import prices of the goods are relatively greater than the export prices, or the rate of increase in the import prices is relatively greater than the export prices.

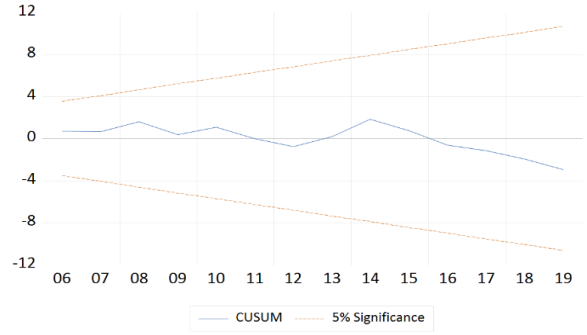

Figure 1. CUSUM test.

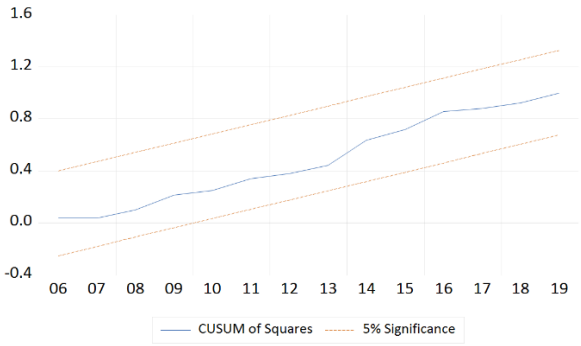

Figure 2. CUSUM square test.

The model stability has also been checked by the CUSUM and CUSUM of Squares Test, and Figures and 2 clearly show that the model is stable.

CONCLUSIONS

The result shows that the coefficient of EPI points out that there is an adverse and significant relationship between IMF and economic performance in both the short and long run. There is a positive and significant relation between FDI and economic performance in the short run, but in the long run, there is an adverse and insignificant relation. The money supply has positively and significantly affected the economic performance in both the short and long run. The Exchange Rate has positively and significantly influenced the economic performance index in the long run, but has an adverse relation in the short run. The Gross National expenditure has a positive relationship with the economic performance index in the long run but a negative one in the short run. The Terms of Trade have also positively affected the economic performance in the long run, but adversely affected it in the short run as well.

The IMF Programs did not remain favorable for the economic performance of Pakistan. The Government should take necessary measures such as fiscal austerity, public expenditure management, and export diversification. If we want to increase economic performance, the Government should use financial assistance/support honestly in all public sector infrastructure projects, promote the industrial & agriculture sectors, formulate tax incentive policies to attract FDI, and also expand the tax net base to ease reliance on the IMF.

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