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Impact of Foreign Aid and IMF Programme on Economic Growth in Pakistan

Naeem Akram[1]; Talat Anwar[2]
1. Assistant Chief, Ministry of Planning Development and Special Initiatives, Islamabad, Pakistan
Email: naeem378@yahoo.com
2. Professor of Economics, I A Hanfi SBP Memorial Chair, School of Economics, Bahauddin Zakariya University, Multan, Pakistan
Email: talat.anwar2016@gmail.com

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Corresponding Author's email:
talat.anwar2016@gmail.com

ABSTRACT

Foreign aid has been recognized as an important source of external financing in developing countries. Considering the significance of foreign aid in Pakistan, present study has attempted to empirically analyse the impact of foreign aid and IMF programme on economic growth in Pakistan. The Autoregressive Distributed Lags (ARDL) technique has been employed to estimate the model using time series data from 1975 to 2020. The study finds that foreign aid exhibits a negative impact on economic growth both in the short run as well in the long run. The study further reveals that loans have a negative, while the grants portray significantly positive impact on economic growth. Similarly, in long run role of IMF is positive for economic growth of the country, however, in the short run, its impact is negative. The major policy implications for the government of Pakistan is to avoid foreign economic assistance and rely on, internal resource generation by increasing its revenue. Foreign aid requires an efficient external debt management and its payment obligations at the lowest possible cost consistent with a prudent degree of risk.

1 Introduction

Since the success of the Marshal Plan-1948, in developing countries foreign aid has become crucial sources of external financing. OECD has defined foreign aid as 'government aid designed to promote the economic development and welfare of developing countries. Furthermore, it should be concessional and grant part should be at least 25 per cent[1].

Aid has helped recipient countries to improve social indicators, bringing structural change, stimulating economic growth and reducing incidence of poverty (Arndt et al., 2015). In developing countries with scarce resources, it helps to transform the economy structurally and enables low-income developing countries to realize self-sustaining economic growth. Evidence shows that foreign aid played vital role in economic development of Israel, South Korea and Taiwan.

However, in many other developing countries, donors used aid as a tool to interfere in domestic and foreign policies of recipient countries. Excessive lending makes them dependent in a way that such an economy is unable to function without further support and financial aid. Hence, they are unable to protect themselves from interference in their internal affairs. Bird and Rowlands (2007) summarised that foreign aid up to a certain extent is essential for economic development but excessive reliance on foreign aid is harmful for developing countries.

[1] http://devinit.org/wp-content/uploads/ODA_loans_discussion_paper_old.pdf accessed on 6th February, 2023

IMF is recognised as world's "financial crisis firefighter," it tried to help the country to deal with debt crisis and prevent global financial system from the consequences of default of a country. However, the country has to adopt reforms suggested by IMF to restore foreign exchange reserves and improve balance of payment.

However, to analyse the performance of IMF programs in different countries during past 70 years is a complex issue because as countries in crisis approach IMF, it is hard to conclude what will happen if they do not avail the IMF facility. However, IMF's interventions in Brazil in 2022 and during the Asian financial crisis in 1997-98 are referred as success stories because it has helped sustained the growth. However, during the European bailout program and financial crisis of 2008, IMF is unable to get significant results.

Since its inception, Pakistan has been a significant recipient of foreign aid. During the 1960s and 1970s, it was among the largest aid recipients in Asia. Likewise, Pakistan received substantial aid due to its pivotal role in the American-Soviet conflict in Afghanistan. The 9/11 attacks marked a turning point in Pakistan's history, as the influx of aid increased more than sevenfold due to its involvement in the "War on Terror." (Khan & Ahmed, 2007). Pakistan is one of the largest aid recipient countries in Asia and is also a frequent user of IMF facilities. Since 1947, Pakistan has entered into 22 agreements with the IMF on various occasions.

Given Pakistan's reliance on foreign aid and IMF programs, analysing the effectiveness of foreign aid and loans in driving economic development becomes highly important. So far, very limited studies have explored the impact of IMF programme and foreign aid in Pakistan. We make an attempt in this study to fill this gap in the literature.

2 Literature Review

2.1 Empirical Literature

Over the years' numerous studies had analysed the effect of foreign aid on economic growth. Although aid may be helpful for growth, the impacts may differ among countries due to variations in economic conditions.

Alvi et al. (2008) found that policies play a crucial role in a country's economic growth. It tends to enhance growth activities in a conducive policy environment. Asterious (2009) found that aid has significant impact on long-run growth. However, magnitude depends on macroeconomic policies. In the absence of sound macroeconomic policies foreign aid fails to yield positive effects on growth (Burnside & Dollar, 2000). Clemens et al. (2012) is of the view that good governance and favourable geography are pre prerequisites for positive impacts of aid on economic growth. Jena and Sethi (2019) also concluded that suitable policy measures are necessary to generate growth momentum with the help of foreign aid inflows. Similarly, Yahyaoui and Bouchoucha (2020) and Abate (2022) were of the view that aid performs better under good institutions. However, Adusei (2020) argued that quality of institutions has insignificant role in aid and economic growth relationship.

Niyonkuru (2016) and Galiani et al. (2017) argued that aid by supplementing available resources of recipient countries enhances investment leading to higher growth and its effectiveness do not depend on good policy environment. It has also been supported by Easterly et al. (2006). Harbab and Hall (2019) emphasised that in order to promote economic growth, aid to middle and low-income countries should be enhanced.

Wagner (2014) and Yiew and Lau (2018) argued that foreign aid enhances growth up to a certain threshold and after that impact of aid turns out to be negative. Sethi et. al (2019) found that in India aid exhibits a significantly positive effect on economic growth but in the case of Sri Lanka impact is insignificant. Nchofoung et al. (2022) found that aid fosters economic growth in developing countries. by providing resources for physical and human capital development. Younsi (2021) found that

foreign aid positively impacts economic growth in African Economies. Golder et al. (2021) also concluded that foreign aid has significantly helped the economic development of Bangladesh.

However, Mitra and Hossain (2013) concluded that foreign aid hurts growth by expanding the size of the public sector leading towards bad governance. An increase in the size of government accompanied by foreign aid results in higher rent-seeking activities. Foreign aid also enriches the elites in developing countries and stimulates corruption (Arellno, et al., 2009). Edward and Karamuriro (2020) found a negative effect of foreign aid on economic growth in Ghana. This is also supported by Rao et al. (2023) for East Asian countries and Babalola and Shittu (2020) for West African countries. Kamguia et al. (2022) argued that aid hinders the economic growth of developing countries by making them 'aid dependent'. Alesina and Dollar (2000) argued that instead of using aid for productive work self-interested people in aid-recipient countries manoeuvre it for their personal gains. Because of that aid has a detrimental relationship with economic growth (Feeny and De Silva, 2012). Nemlioglu and Mallick (2020) found that borrowing from multilateral donors is beneficial for a country if the country utilizes these funds for innovative purposes and concluded that borrowing should be directed to achieve long-term development goals. However, Liew et al. (2012) and Dreher and Langlotz (2020) have also come to conclusions that foreign aid has no significant effect on economic growth.

According to many studies conducted previously, the impact of IMF loans on the economy of developing economies varies from country to country. Biglaiser and DeRouen (2011) argued that policies adopted by IMF are faulty and fail to consider the unique conditions of developing economies. Hence, the one size fits all policies of IMF do more harm than good (Ahmed and Sukar, 2008). However, Balima and Sokolov (2021) and Fidrmuc and Kostagianni (2015) found that IMF loans are effective in helping an economy in crisis and have a positive impact on economic growth. Similarly, Papi et al. (2015), Dreher and Walter (2010) and Bird and Rowlands (2017) show that numerous low- and medium-income countries that take IMF loans are less likely to suffer from banking, financial, and currency crises. However, Muhumed and Gaas (2016) concluded that IMF assistance slowdowns economic growth and results in rising inequality.

Mullick (2004) finds a positive result of US aid on economic growth in Pakistan. Ishfaq (2005) is unable to find any significant influence of foreign aid on economic development. Anwar (2002) maintained that IMF programs in Pakistan during the 1990s have crowded out development expenditure, resulted in lower economic growth rates and increased debt burden. Hakro and Ahmed (2006) found that the majority of macroeconomic indicators like current account, unemployment and inflation have deteriorated despite the fiscal management imposed by the IMF programs. The poor implementation of reforms resulted in a dampening impact on the economy.

It can be concluded that there are mixed impacts of foreign aid on economic growth. On the on hand, aid positively has boosted GDP growth by funding different projects. But on other hand, aid seemed to have negatively impacted and increased the debt burden of the country.

2.2 Trend of Foreign Economic Assistance[2]

Pakistan receives foreign aid in grants, concessional loans and technical assistance from different bilateral (China, Japan, USA etc.) and multilateral donors (ADB, World Bank and UN etc.).

The foreign aid trend is shown in Figure 1. The continuous line represents foreign aid over the years and broken line is its trend. It suggests that over the years there is an increasing trend of aid. Historically, Pakistan received a sizeable amount of foreign aid during the war periods being a participant as a frontline ally to the international community. During the period of 1985 -1996 (period

[2] It is pertinent to clarify that most of the analysis is limited to foreign aid defined by OECD.

of Afghan War) Pakistan obtained a total of US$ 18 billion. During the period of 'US War on Terror' 2001-09, the aid kept on increasing until 2018. The total aid obtained in this period was US$ 26 billion.

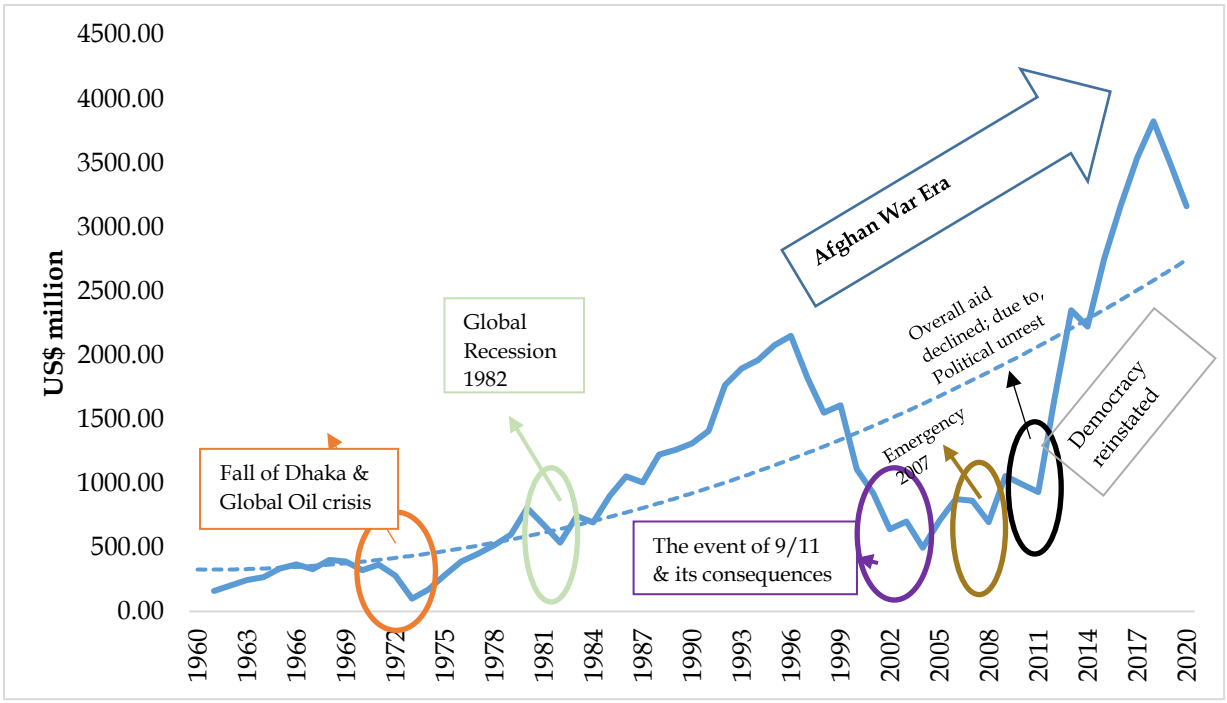


Figure 1
Trend of Foreign Aid
Data Source: Handbook of Statistics on Pakistan Economy 2020, SBP

Figure 2 demonstrates the sectoral composition of aid for the period 2001-20. It suggests that infrastructure sector received the highest share followed by social sector and production sector. It indicates that both donor and Government of Pakistan jointly agreed to prioritise infrastructure projects.

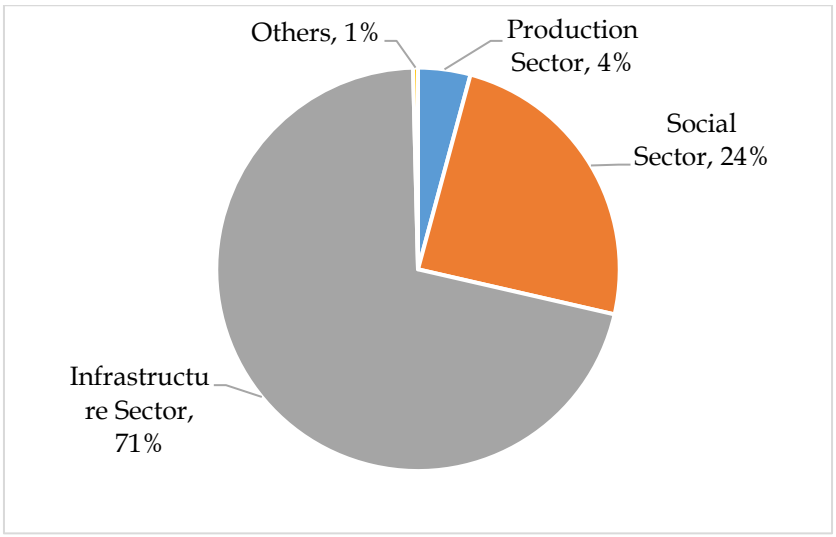


Figure 2
Composition of Project Aid (2001 to 2020)
Data Source: Debt Reporting and Recording Centre, EAD

It is noteworthy here that since 2011, Pakistan has been facing increasingly high debt servicing and continued fiscal and current account deficits. Pakistan's payment of external debt servicing was US$3 billion in 2011 which rose rapidly to more than tripled to US$ 14.8 billion in 2019 and reached at US$

15.5 billion in 2023[3]. This is mainly because, besides the utilization of aid for development purposes, current expenditure (including debt servicing) was also financed through loans. Consequently, primary and revenue balances remained negative over the years and different loans were utilized to finance current expenditures and non-revenue-generating social projects. It resulted in the creation of recurrent liabilities and debt burden while revenue generation remained limited. After 2013 Pakistan obtained considerable loans from commercial banks and the issuance of bonds. The heavy reliance on and use of commercial financing and issuance of bonds have significant importance for the cost of borrowing. Country is required to pay a high-interest rate on the bonds (7.2%) and Commercial borrowing (5.6%) whereas multilateral borrowing remained the cheapest form of loans with an interest rate of only 1.9%. The summarized position of terms and conditions of different loans are presented in Table 1.

Table 1

Loan's Term and Conditions

Sources of loans	Nature of loans	Average Interest Rate (%)	Average Maturity (Years)
Bilateral Donors	Foreign aid	2.3	18-22
Multilateral (ADB, World Bank etc.) Donors	Foreign aid	1.9	15-18
IMF	Balance of payment support	2.4	04-10
Commercial Banks	Market based loans	5.6	01-03
Eurobond / Sukuk	Market based loans	7.2	05-10

Source: Calculations are based on data available in Economic Survey of Pakistan

Pakistan is a frequent user of IMF facilities. Since 1947 it signed 22 agreements with IMF on different occasions. In 1958, for the first time, Pakistan went to IMF and some minor financial assistance was acquired from IMF till the 1980's (IMF Evaluation Report, 20024). However, after 1988 excessive reliance on borrowing and use of IMF programs started. Pakistan's relationship with IMF was not so productive and the programme completion rate has been low, as only two programs have been able to meet the targets (Ahmad and Mohammed 2012). The two successful programmes were Stand-By Arrangement, 2000 and Poverty Reduction Growth Facility, 2001.

IMF programmes, primarily attempt to fix the balance of payment issues (Polak, 1957). The Polk model suggests achieving the balance of payment by targeting monetary aggregates. Killick (1995) is of the view that due to more focus on monetary targeting, the programmes are unable to pay adequate attention to qualitative aspects of the reform agenda. Although IMF has tried to overcome this criticism and try to broaden its scope yet the IMF remained unable to get out of the neo-classical/monetarist assumptions, therefore, IMF is still unable to achieve the targets of institutional reforms (Groenewegen et al. 2010).

The IMF resources are also available even in the case of incomplete programmes. Incumbent governments try to follow the programme conditions in the early phases and get the first few financial instalments and then abandon the programme and after a few years start another programme (Javed, 2015). This phenomenon hinders governments to execute hard economic reforms.

Furthermore, due to weak institutions in recipient countries, expecting the high implementation of the program conditionalities is over ambitious target of IMF. Design flaws within IMF programs and

[3] IMF (2022a), Pakistan Seventh and Eighth Reviews under EFF Country Report No. 22/288, Washington D.C.

[4] IMF (2002)

the weak political governments are two main factors that cause the failure of the IMF programs in Pakistan (IMF, 2002). The design flaw includes ambitious targets of exports, growth and savings. These targets can be achieved in the long run, but in contrast IMF gives a very short time to achieve these targets. Furthermore, there exists no mechanism to deal with any external shocks like security issues or natural disasters. Above all political governments in Pakistan always attempted to avoid those decisions that will result in losing their vote banks like imposing taxes to raise revenue or abolishing subsidies (Hussain,2005).

3 Theoretical Framework and Estimation Methodology

The Harrod (1939) and Domar (1946) model sets the foundations for the role of foreign aid in economic development. It has been illustrated that saving in the economy enhances economic growth. It can be described in the equation 1

$g = sk$ -------(1)

In equation 1, g represents economic growth s represents saving as a percentage of GDP and k represents the capital-output ratio. It asserts that developing countries can attain economic development if they increase their savings and utilize these savings for investment. However, as developing countries are facing various socio-economic issues like low income, poverty, unemployment and rising population, therefore, saving is low. Resultantly, investment remains low which slows economic growth. Hence there is a shortfall of savings to meet the desired level of investment, this shortfall is referred to as the saving-investment gap.

However, if foreign aid (b per cent of GDP) is received from a donor then equation 1 will take the following form:

$g = (s + b)k$ -------(2)

We assume that a country attempts to achieve the growth target of g* with a certain level of investment (k). To achieve growth of g*, the rate of capital accumulation (c) will be g*/k. So the saving gap i.e. the difference between capital accumulation (c) and actual saving (s) may be financed by foreign aid (b). Chenery and Strout (1966), pointed out that besides the saving gap most of developing countries face another issue called as the foreign exchange gap. It is the difference between the foreign currency received in the shape of exports (primary goods having low prices) and foreign currency paid in the shape of imports (machinery etc having high prices). Foreign aid also covers foreign exchange shortfall.

3.1 Data and Estimation Methodology

The present study has used time series data that covers the period of 1975-2020. A brief overview of the variables is summarised in Table 2:

Table 2

Details of Variables and Data

1.	Per Capita GDP (Y)	**SBP**	Per capita GDP as an indicator of economic growth.
2.	**Investment (K)**	SBP	Gross capital formation as % of GDP has been defined as proxy for investment.
3.	**Population growth rate (pop)**	SBP	The growth rate of population has been defined as proxy for labour.
4.	**Openness (OP)**	SBP	Trade as % of GDP has been defined as proxy for openness.
5.	**School Enrolment (SE)**	Economic Survey	Scholl enrolment up to Secondary level is adopted as a proxy for human capital.

6.	**Foreign Assistance (FA)**	SBP+EAD	Disbursement of foreign economic assistance and loans and grants as the percentage to GDP has been used as the main independent variables of the analysis.
7.	**Loans (LN)**		
8.	**Grants (GR)**		
9	**IMF**	Ministry of Finance	The IMF loans are not aid but emergency measures, so role of IMF is analysed by using a dummy variable of the presence of the IMF. In this regard, the years in which Pakistan undertook an IMF program are given the value of 1 for the rest of years the value 0 is assigned.

As all the values are in natural log form therefore the calculated coefficients will be corresponding elasticities. The time series data analysis starts with checking the stationarity. The results relating to the Augmented Dickey and Fuller test (1979) are presented in table 3.

Table 3

Unit Root Test Results

Name of Variable	**Level**			**1st Difference**		
	Intercept	**Trend and Intercept**	**None**	**Intercept**	**Trend and Intercept**	**None**
Y	0.88511	-1.15782	1.79922	-6.64506*	……	……
OP	0.20162	-1.68221	1.72164	-7.27403*	……	……
POP	-4.92553*	……	……	……	……	……
K	3.76947	2.36999	3.56651	-2.77147*	……	……
ED	2.57052	-0.64697	4.75897	-5.76364*	……	……
FA	2.14249	-0.86197	0.11156	-1.50536	-6.39039*	-3.02405*
GR	-7.30821*	……	……	……	……	……
LN	-8.62714*	……	……	……	……	……

Null Hypothesis: Unit root exist, * denotes the rejection of Null at 5% level

Table 3 reveals that our model is mix of I (0) and I(I) variables. In such cases Pesran (2001) suggested that the most suitable estimation method is Autoregressive Distributed Lags Model (ARDL). Basic conditional VECM equation can be written as.

$$\Delta y_t = \alpha + \beta_1 y_{t-1} + \beta_2 pop_{t-1} + \beta_3 k_{t-1} + \beta_4 op_{t-1} + \beta_5 ed_{t-1} + \beta_6 fa_{t-1} + \beta_7 imf_{t-1} + \sum_{i=1}^{\rho} \omega_i \Delta y_{t-i} + \sum_{i=0}^{\rho} \tau_i \Delta pop_{t-i} + \sum_{i=0}^{\rho} \sigma_i \Delta k_{t-i} + \sum_{i=0}^{\rho} \pi_i \Delta op_{t-i} + \sum_{i=0}^{\rho} \emptyset_i \Delta ed_{t-i} + \sum_{i=0}^{\rho} \gamma_i \Delta fa_{t-i} + \sum_{i=0}^{\rho} \delta_i \Delta imf_{t-i} + \mu_t \text{------A}$$

In the equation, α denotes intercept and ut the error term. The β_1…… β_7 are long-run coefficients similarly ω,τ, σ, γ, φ and θ represents short-run coefficients. The variables y, op, pop, ed, fa and k represents per capita GDP, openness, growth rate of population, school enrolment, foreign economic assistance, and investment, respectively.

4 Estimation Results

ARDL cointegration first step is to conduct a bound test and set the null hypothesis of no co-integration-- i.e.

Ho: $\beta_1 = \beta_2 = \beta_3 = \beta_4 = \beta_5 = \beta_6 = \beta_7 = 0$ against the alternative hypothesis of

H1: $\beta_1 \neq \beta_2 \neq \beta_3 \neq \beta_4 \neq \beta_5 \neq \beta_6 \neq \beta_7 \neq 0$

In bound test, the selection of maximum lag length is very critical. We have 46 observations with 7 parameters. In case of this limited data, Pesran (2001) recommend that maximum lag length of 2 can be used. The bound test results suggest that calculated F-statistic (4.15 for specification 1 and 3.89 for specification 2) are greater than upper bound critical values at 5% significance level (2.32 to 3.50) in

both of the specifications. It suggests that there is a co-integrating relationship among variables. In the next step, the long-run coefficients have been estimated. Schwarz Bayesian Criterion of the lag selection has been used to obtain the optimal length for the long-run coefficients. The long-run estimation results are presented in Table 4.

Table 4

Long Run Estimation Result

Variables	**Specification 1 (1,0,0,1,0,1,1)**		**Specification 2 (1,0,0,1,1,0,0)**	
	Coefficient	**P-Value**	**Coefficient**	**P-Value**
Y(-1)	0.1689	0.4933	0.4598	0.1085
POP	-0.7546**	0.0796	-1.2365*	0.0098
K	1.1756**	0.0917	0.1083*	0.0374
ED	0.9975*	0.0116	----	----
FA	-0.3871*	0.0028	----	----
IMF	0.1901*	0.0352	0.1788	0.7842
OP	0.6312	0.1336	-0.3258	0.8154
GR	----	----	0.8796*	0.0146
LN	----	----	-0.7456*	0.0339
Constant	3.5481	0.0654	-1.9195	0.4434
R-squared	0.9788		0.9871	
Adjusted R-squared	0.9648		0.9683	
F-statistic	107.4581		115.0241	
Prob(F-statistic)	0.00000		0.00000	
Serial correlation LM test	1.1447		0.9547	
[value in () is p value]	(0.3981)		(0.4637)	

* and ** denote significance at 5% and 10 % level respectively

Long Run Relationships

The results reported in Table 4 reveal that foreign aid in the long run has a significant negative impact on economic growth. It has also been found that loans have a negative impact, while grants have a positive effect on economic growth. Similarly, IMF in the long run, has a significantly positive effect on economic growth in our first specification.

Furthermore, the results indicate that population growth has significantly negative relationship with economic growth. Investment, however, positively affects economic growth. Contrary to expectations, openness has negative, although insignificant, association with economic growth. The estimated results indicate that education portray a positive and significant association with economic growth.

The diagnostics tests confirm the satisfactory goodness of fit (High R-Square) and non-existence of a serial correlation (Serial correlation LM test). The significant F-Statistic suggests that all regressors are jointly significant.

Short-run Relationships

After the long-run coefficients, the final step in ARDL analysis remains the estimation of Error Correction Model. The results are presented in table 5.

Table 5

Error Correction Description of the Selected ARDL Model

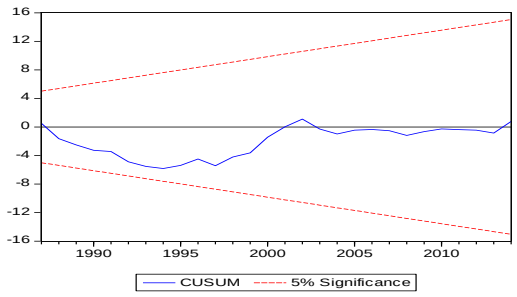
Variables	Specification 1 (1,0,0,1,0,1,1)		Specification 2 (1,0,0,1,1,0,0)	
	Coefficient	P-Value	Coefficient	P-Value
Constant	-0.4569	0.2817	-0.5611*	0.0092
D(Y(-1))	0.0978**	0.0905	0.2356*	0.0423
D(POP)	-0.6785	0.1956	-0.1236	0.9759
D(K)	2.1258*	0.0000	2.0215*	0.0000
D(ED)	0.8796	0.7977	----	----
D(ED(-1))	0.6148	0.8633	----	----
D(FA)	-0.6280*	0.0001	----	----
D(IMF)	-0.7852*	0.0075	-0.4581**	0.0572
D(IMF(-1))	-0.4019	0.6382	-0.3128	0.2961
D(OP)	-0.3412	0.1446	-0.0874	0.6628
D(OP(-1))	-0.7451	0.3744	-0.5596	0.1123
D(GR)	----	----	0.3158*	0.0263
D(LN)	----	----	-0.1245*	0.0057
ECT (-1)	-0.3678*	0.0337	-0.5085*	0.0117
R-squared	0.8721		0.7958	
Adjusted R-squared	0.759		0. 7152	
F-statistic	4.9852		3.4256	
Prob(F-statistic)	0.0061		0.0042	

* and ** denote significance at 5% and 10 % level respectively

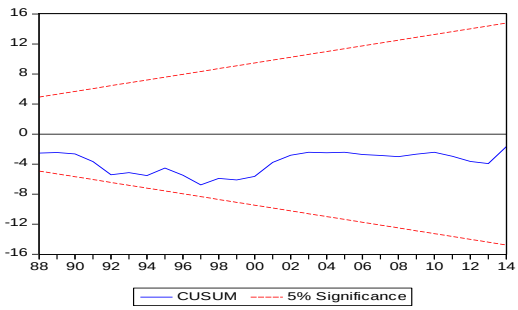
The error correction terms emerged as negative and statistically significant. It confirms that there exists a stable long-run relationship among variables. It also indicates that after one year of following a shock approximately 37% in specification 1 and around 51% in specification 2 adjustment to long-run equilibrium is completed.

It has been found that in short-run population growth, openness and School enrolments have insignificant relationships with economic growth. Conversely , foreign economic assistance as % of GDP has a negatively significant relationship with economic growth in the short run. However, grants have a positive relationship while loans harm economic growth negatively. In contrast , the finding suggests that in short-run the presence of IMF has negative and significant effect on growth.

The cumulative sum CUSUM) graphs (see Figure 3) indicate that short-run coefficient falls within the critical limits confirming stability of coefficients in sample period.



Specification 1



Specification 2

Figure 3
CUMSUM Test Results

5 Discussions

In line with Mitra and Hossain (2013), the study concludes that foreign aid both in short run as well as in the long run have negative relationship with economic growth. The cause seems to be the accumulation of debt burden on future generations. Various theories conclude that crowding out and debt overhang effects of debt create negative effects of debt on economic growth. On the other hand, foreign grants have a positively significant impact on economic growth.

The IMF also has a positive significant impact on economic growth (in the first specification). IMF policies related to increasing revenue, curtailing subsidies, and other reforms in long run help stimulate economic growth. However, in short run, impact is insignificant. Linking this with the results of long-run estimation reveals that, in short run, IMF hurts economic growth, but in the long run, participation in IMF programs yields positive impacts for economic growth. It is noteworthy here that IMF loans are only made when an economy is in trouble to avoid collapse. Hence, IMF loans are a response to the balance of payment crisis in the economy. These results suggest that adjustment policies associated with IMF programs (reduction in expenditure, imposing more taxes, raising interest rates, etc.) have negative effects on economic growth in the short run (lower growth), but these policies can yield positive impacts in long run. It can also be inferred from these results that as long as a country remains in the IMF program, economic growth remains low, but when the country is able to get out of the IMF program, economic growth is accelerated to some extent. These findings are supported by Gupta et al. (2016).

In line with the Malthusian theorem, in the long run population growth impedes economic development. Similarly in support with the findings of Acemoglu et al. (2016) , openness emerges as having a negative, relationship with economic growth. This may have been due to reason that the limited openness of an economy to the world, coupled with inconsistent economic policies, do not improve the competitiveness and productivity in the economy. In support of Barro (2001), education has a positive and significant association with economic growth.

In the short run, population growth, openness, and school enrolments have insignificant relationships with economic growth. It indicates that the effect of these variables on economic growth is transmitted in the long run, whereas the short-run, effects are marginal. This has also been supported by Akram (2015).

Similarly, in line with conventional wisdom, investment positively influences economic growth both in the short and long run. Akram (2011) also comes to the similar conclusion that, in Pakistan, investment positively affects economic growth.

6 Conclusions and Policy Implications

Over the years Pakistan has been heavily relying on external sources to finance its development. It has been recognised as one of the biggest aid recipients in Asia. This study analyses the impact of foreign aid and IMF programs in economic development of Pakistan during 1975-2020.

The findings suggest that foreign economic assistance as a percentage of GDP has a negative and significant relationship with economic growth in Pakistan both in long run as well in short run. It has also been found that loans have a negative impact while grants establish a significantly positive impact on the economic growth in Pakistan. Similarly, it has also been found that in long run role of IMF is turned out to be positive for the economic growth in Pakistan however, in the short run, this effect is negative.

The major policy implication is that the best option is to avoid foreign economic assistance and rely on internal resources by increasing tax revenue. Instead of relying on aid there is a need that country may adopt policies to promote entrepreneurship, exports, and FDI. It is also suggested that

government may adopt the IMF programs in a way that all the desired targets may be met. In that case, the IMF programs will lead towards sustainable economic development in Pakistan

However, there is a likelihood that despite all efforts Pakistan may have to look for foreign assistance to start mega projects like dams, energy sector projects, and develop infrastructure etc. However, before acceptance of a loan, its implications on macroeconomic stability should be carefully examined. The decision to take foreign loans should be considered as follows:

a. Social sector projects based on foreign loans should be discouraged. For social sector development, only grants may be accepted.

b. The projects related to infrastructure having a high internal rate of return (IRR) should be encouraged to finance through foreign aid.

c. The programmes and projects related to promotion of exports like export processing zones, FDI should be prioritized to enhance Pakistan's foreign exchange earning capabilities.

Finally, the current study has limitation that it only examines the impact of foreign aid in Pakistan. However, there is a need that a study may be carried out to estimate the rate of return on foreign aid for different sectors of the economy. This would help policymakers to prioritize various sectors for foreign aid.

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