

**Effectiveness of Foreign Aid and Rent Seeking: A Case Study of Asian Countries**

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**Abstract**

The present study tries to answer the widely debated issue in the literature that is effectiveness of foreign aid. What the researcher has intended to test that how foreign aid impacts economic growth alone and then in the presence of rent seeking and policy variable. Few studies concluded that foreign aid causes rent seeking and it is the primary reason of foreign aid being ineffective in the context of economic growth. This paper investigates the impact of foreign aid on economic growth for Asian countries over the period of 1980-2015. The empirical results suggest that foreign aid has a positive impact on growth but the rent seeking and policy variables have negative impact, however, the former impact is dominated by the later one.

**Keywords:** *Foreign aid, Rent seeking, Asian Countries*

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**1. Introduction**

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The history of foreign aid can be traced back from the success of Marshal Plan initiated after the end of World War II. Since then social scientists are trying to test its effectiveness and till to date is not obvious that whether aid is beneficial for the growth of the recipient countries or not. A considerable consensus has appeared that foreign aid is proved to be harmful for its recipients and unable to serve its desire objective of spurring growth.

On the theoretical grounds foreign assistance appeared to be very fascinating as it relaxes the financial constraints by the availability of foreign exchange. Several growth models, for instance, Solow growth model, Ramsey-Cass-Koopmans growth model and two-gap theory of [1] provide rationales for the effectiveness of foreign aid in growth models. Foreign aid helps the poor countries to remove the bottleneck of savings and investment with the end result of sustainable growth. As for the empirical realities are concerned, contradictory results have been observed. For instance, numerous researches explore the existence of a positive link between foreign aid and economic growth via channel of investment. However, few studies conclude that foreign aid appeared to be growth retarding rather than growth provoking [2]. The negative impact of foreign aid is the outcome of several factors that are embedded in the recipient countries. For instance, every country differs in terms of institutional quality, political infrastructure, policies, social norms and values.

Based on the conflicting findings of theoretical and empirical research, the debate of aid-growth nexuses is still alive in literature. So in this context, the objective of the present research is to find out the nature of the underlying relationship between foreign aid and economic growth. The study uses the panel data over the Asian economies (Aid recipients) over the period 1980-2015. The primary focus of the study is to investigate the impact of foreign aid on economic growth. Next is the focus on the conditional impact proxies by the policy variables. Additionally, the study also focuses on the rent seeking behavior while, testing the aforementioned nexus. The rationale of this analysis is that foreign aid causes such kind of activities rather than accelerating the economic growth, that may have deleterious impact on the growth process.

## **2. Literature Review**

A series of retrospective studies reveal that Aid-growth nexus has been investigated by number of researchers using various theoretical models, estimation techniques, measurement variables, data samples, regions/countries and nature of data sets. On the basis of findings, these studies can be classified into

three broad categories i.e. foreign aid has a positive impact on growth, foreign aid hurts the economic growth and impact of foreign aid is conditional. It can be positive or negative depending upon several factors.

Foreign aid stimulates the growth process by increasing the investment [3-5]. The channel of investment and a positive impact of foreign aid on growth has been criticized by several researchers. According to the findings of [6] aid flows appeared to be uncorrelated with investment.

In contrast to the proponents foreign aid flows result in reducing investment, savings and raising consumption [2]. For instance, easy credit availability, higher level of consumption and reduced tax effort. A country can absorb aid up to a certain limit beyond that limit returns to aid would fall [7]. Furthermore, a negative relationship between overseas aid and growth is also supported by the findings of [8].

Literature on effectiveness of foreign aid also drew attention towards the conditional impact of aid with varying conclusions. In this regard most influential [9]. They come with an interesting finding, that is, aid appears to be insignificant but when interacted with policy variable it appears to have a positive and significant impact on growth. Thus, aid boosts the economic growth in the presence of good policy environment. However, [10-13] failed to get the robust results and conclude that aid pushes the growth irrespective of policy environment. On the other hand, [14] confirm the findings of [9]. Aid has a favorable impact on the growth of recipient countries but this effect may vary depending upon the climate conditions of various countries [15].

Foreign aid is often exploited and misallocated. For instance, it raises corruption and promotes rent seeking activities [16]. Apart from raising the productivity of capitals, aid discourages the tax effort, distorts the political economy and raises the corruption and also creates incentives for unproductive activities. It has been observed that the negative impact of aforementioned activities will dominate the positive impacts of raising productivity. As a result of it aid will not fulfill its desired objective of raising economic growth. The above discussed literature indicates that different researchers have identified different types of channels through which foreign aid affects economic growth. For instance, the channel of Investment [3]. On the other hand, [2] indicated that foreign aid result in reducing investment, savings and raising consumption hence putting negative impact on economic growth. This contradiction promoted the aid growth nexuses. Different studies using various channels and variables tried to get the appropriate. The paper uses the standard growth model, augmented with additional variables to find a link between foreign aid and economic growth. It is discussed in the following section.

### 3. Model, Methodology and the Data

To investigate the relationship between economic growth and its determinants, different researchers have suggested different growth model specifications. For example, neo classical growth models, endogenous growth models and new growth theory. Moreover, [16] argue that in the presence of larger government size an inflow of foreign aid will result in rent seeking activities which have negative repercussions for growth. So, the researchers follow, [16] to formulate the growth model for this analysis. The growth model for this assumes that in addition to aid, and rent seeking, economic growth is dependent on certain other variables.

The empirical model for this study is summarized in the following equation.

$$RGDP_{it} = \alpha_0 + \alpha_1 AID_{it} + \alpha_2 RS_{it} + \alpha_3 AID_{it} * RS_{it} + \alpha_4 IQ_{it} + \alpha_5 FD_{it} + \alpha_6 PIN_{it} + \alpha_7 POL_{it} + \alpha_8 AID_{it} * POL_{it} + U_{it} \quad (1)$$

Hence, *RGDP* is the real per capita *GDP* taken as a measure for economic growth, *AID* represents foreign aid, *RS* is rent seeking, *IQ* is institutional quality, *FD* is financial depth, *PIN* is political instability and *POL* is policy index.

$$RS_{it} = \beta_0 + \beta_1 AID_{it} + \beta_2 TAX_{it} + \beta_3 DEM_{it} + \beta_4 IQ_{it} + w_{it} \quad (2)$$

*TAX* is tax revenue, *DEM* represents democracy, *IQ* indicates institutional quality.

#### 3.1 Variables Construction and Definitions

This section presents the variables construction and definitions of key variables used in the study.

**Real GDP** is commonly used measure for economic growth as it represents the true picture of economic activity carried out in an economy. The economic growth is the dependent variable in our study which is measured using the real GDP per capita for which the data have been taken from WDI(World Development Indicator).

**Foreign aid** can be defined as transferring the funds officially with intention of promoting the economic growth and prosperity of developing countries as a soul objective which also include a grant component of at least 25 percent.

**ODA/GDP** has been commonly used in several studies, to measure for foreign aid. Following the literature on aid-growth nexuses this study uses same proxy to measure aid flows. The variable has been constructed using data from WDI (World Development Indicator).

**Rent Seeking** can be defined as socially wasteful activities with adverse implications for growth. Rent seeking behavior is difficult to measure. However, various proxies have been found in literature to measure the rent seeking behavior. For instance, size of government, number of lawyers, Employment in government sector. However, our study uses the corruption as a proxy for rent seeking activities. Data for the corruption has been taken from the ICRG.

**Financial Depth** plays a vital role in a growth process. Role of financial market is of utmost importance in aid growth relation as well. Data for M2 and GDP has been collected from the WDI. Then by applying the simple ratio formula we get the value for financial depth.

**Institutional Quality** plays a vital role in determining economic growth. Institutional quality has a significant and positive impact on the growth performance, reported [9, 12]. As for our study is concerned, we construct the variable of institutional quality using the principal component analysis (PCA) using corruption, law and order and bureaucratic quality. Keeping in mind that every country has unique in her social norms and values the variable for institutional quality has been constructed for every country separately by PCA analysis.

**Policy Index** is used to investigate the effects of three broad policies, that is, fiscal, monetary and trade policies. A higher value of index indicates the presence of good policies in place and vice versa.

A regression equation without aid term has been regressed incorporating all other explanatory variables. The results of this equation provide us the values of the coefficients of fiscal, monetary and trade variables. The values of coefficients for these particular variables are then used to assign the weights according to these policies. On the basis of these weighted values we construct policy index of our study.

**Political Instability** results in internal conflict and distorts investors' confidence which results in low investment and hence low level of economic growth [17]. Political instability cannot be measured directly. Our study measures the political instability by using the data on annual coups for selected

countries. For this purpose data has been gathered from Polity IV as data are radically available there for annual coups.

**Democracy** has a significant impact on growth [18]. Democracy not only ensures the transparency in working of the public officials but also makes them accountable for wrong deeds and reduces the possibilities of rent seeking [19]. As in the current study, the researchers will investigate both the aid and rent seeking simultaneously it is appropriate to consider this variable as an independent variable. The study takes data on democracy from Polity IV.

**Taxation:** Taxes are main source of generating the domestic revenues. However, a higher taxation discourages the producers and induces them to involve in rent seeking activities which have negative impact on growth. The study takes the data on tax as a percentage of GDP from WDI.

### **Variable description and construction**

This section explains the important variables and how they are linked with growth. In reality, as advocated by antecedent studies, there are various factors that determine the effectiveness of foreign assistance. Some of these include good macroeconomic policy environment, institutional quality, governance, democracy, political stability and geographical location. Aid flows increase the revenue of the recipient government. Behavior of the government is likely to be affected by several other factors like institutional quality, law and order and political instability. All of these taken together can affect the effectiveness of foreign aid. Moreover, Foreign aid lowers the quality of institutions and democracy which results in promoting the rent seeking activities that hurt the growth of recipient countries. Hence, doing more harm than good.

Role of financial market is of utmost importance in aid growth relation as well. As noted [20] for aid flows to work effectively it is desirable to manage these flows efficiently which can be possible only in the presence of strong financial market. They also conclude that for many developing countries one reason for aid to be less effective is the failure of financial system.

Institutional quality plays a vital role in determining economic growth. Better institutional quality will not only enhance the efficiency of the resources but also reduces the illegal activities. While discussing the aid growth relation quality of institutions is of utmost importance. As foreign aid flows are received by a government authority and then allocation of these funds to required destination involves an

active role of public institutions. In the existence of lower level of institutional quality aid transfers can be misallocated by the government officials, this can have serious implications for growth. Institutional quality has a significant and positive impact on the growth performance [9, 12].

For sustainable growth political stability is essential. Countries with stable political regime are likely to grow faster than the one with high political instability [21]. Political instability can also results in misallocation of the foreign funds. [22] joints out that political instability not only directly effects productivity but also has significant effect on behaviors of investors and policymakers. Presence of political instability also provides sufficient conditions to indulge in unlawful and wealth accumulation activities which impede growth.

This will help in stimulating the growth. Taxes are main source of generating the domestic revenues. However, a higher taxation discourages the producers and induces them to involve in rent seeking activities which have negative impact on growth.

### **3.2 Estimation Methodology**

To begin with, the aforementioned equations are estimated using a series of different estimation strategies ranging from Ordinary Least Square (OLS) to Pool Mean Group (PMG) estimator.

The current study is comprised of panel data. Availability of larger panel data sets have enabled researchers to estimate heterogeneous coefficients while on the other side, it exposed new challenges for researchers due to time series characteristics of panel data. A panel data with larger time dimension is termed as heterogeneous panel data [23]. It is essential to consider the time series characteristics in case of larger time dimensions. So, the very first step is to check for stationarity issues. According to [24] in case of long panel data some cross section may contain a unit root while the others may not which leads an analysis to some complexity. So, the problem of testing unit root is of considerable importance which cannot be neglected in case of heterogeneous panel data.

The natural start for estimating a panel data is to estimate through fixed effect model or Random effect models. However, the dynamic nature of the models along with the endogeneity problem doesn't allow the researcher to estimate with fixed effect models or Random effect models. Therefore, the researchers prefer [25] estimators which suggest one step and two step dynamic estimators in Generalized Method of Moment (GMM) framework. However, [26] criticize the existing studies on the basis of time

span of the studies. [26]note that the GMM has a strong assumption that data series should be stationary and the cross sections must be greater than time series. Therefore,[26] note that time series panel data can challenge the reliability of the data series properties and slope homogeneity assumptions. The slope homogeneity condition assumes that in the long run all cross section units have the same marginal change which is an unrealistic assumption in the presence of long panels.

Last few years have witnessed the use of heterogeneous panel data estimations by researchers considering the aforementioned points into account. For instance, Blackburnand Frank[27]note that, in the presence of panel data with larger time dimensions the use of traditional estimators like fixed effect and random effect has become obstruct/outdated. In the presence of larger time period than cross section the need is to take into account time series characteristics by applying time series tools instead of applying traditional panel estimates. For instance, [28-30] point out that a data set based on long panels provide bias estimates when conventional estimation techniques, that is, fixed or random effect are applied. They also highlight the issue of heterogeneous slopes in case of long panels. In case of such long panels it is unrealistic to assume a homogenous slope. So, considering all such critics, social scientists (economists) tried to search for an estimate which could lessen the bias. [28] in this regard, come up with an important estimators termed as mean group and pooled mean group to deal with issue of heterogeneous slopes.

Pesaran et al. [26] propose a broader estimator termed as the *pooled mean group* estimators. Estimators from pooled mean group lie between the mean group estimators and fixed effect. Following the same spirit of mean group the pooled mean group estimator also allows the heterogeneous intercepts for each cross section.

ARDL system of equations would be:

$$RGDP_{it} = \sum_{i=1}^p \alpha RGDP_{it-1} + \sum_{k=1}^q \beta_i k_i X_{i,t-i} + \omega_i + \varepsilon_{it} \quad (3)$$

Where  $t=1, 2, 3 \dots 32$  and  $i=1, 2, 3 \dots 23$

$X_{i,t-1}$  = all explanatory variables in our analysis

$\omega_i$ = fixed effect

As noted by[26] that long run relationship can be investigated in ARDL model setting regardless of order of integration. Summing up, the researchers need to take into account problem of testing unit root with the help of panel unit root tests. After determining level of co-integration of variables we move to estimate an ARDL model via pooled mean group estimator.



#### 4. Results Discussion and Interpretation

Evaluating the effect of foreign aid on economic growth keeping in mind the rent seeking behaviorempirical exercise was carried. To accomplish this task several models were estimated.

First of all we estimate a simple model to test the impact of foreign aid on economic growth. Then we include the rent seeking variable and test its impact. Finally, we include the policy variable in the existing model in order to test the impact of policy environment on growth. We also incorporated the interactive terms of rent seeking and policy with aid in order to evaluate the collective influence of this variable on economic growth. Results of all the above mentioned models are reported in Table 1.

Keeping in view the heterogeneous nature of the data, the very first step to carry out is to test for presence of unit root in the data. Multi panel unit is a useful tool/test as it allows multiple variables to test for unit root at different lag lengths. The test includes both Maddala and Wu test and Pesaran test. Hence, according to the heterogeneous nature of our data it is appropriate to employ the multi panel unit root test in order to test the presence of unit root in data. The results are presented in the Table 2.

<b>Table 1: Ordinary Least Square Estimates of Aid Effectiveness and Rent Seeking</b>					
<i>Dependent Variable is Real per Capita GDP</i>					
<i>Regressors</i>	<b>Model 1</b>	<b>Model 2</b>	<b>Model 3</b>	<b>Model 4</b>	<b>Model 5</b>
<b><i>Financial Depth</i></b>	0.2909***	0.2365*	0.0434	0.2423***	0.1191
	(0.0497)	(0.1334)	(0.0581)	(0.1000)	(0.0893)
<b><i>Inst. Quality</i></b>	0.0475***	0.0682***	0.0978***	0.0169*	0.0249***
	(0.0160)	(0.0181)	(0.0391)	(0.0087)	(0.0101)
<b><i>Pol. Instability</i></b>	-0.0212**	-0.0342*	-0.0520***	-0.0565***	-0.0674***
	(0.0098)	(0.0188)	(0.0173)	(0.0164)	(0.0224)
<b><i>Openness</i></b>	0.1845*	0.8415*	0.8129***	NA	NA
	(0.1115)	(0.4362)	(0.0983)	NA	NA
<b><i>Inflation</i></b>	-0.0514*	-0.0763**	-0.1070***	NA	NA
	(0.0304)	(0.0328)	(0.0179)	NA	NA
<b><i>Govt. Consumption</i></b>	-0.8333**	0.5653***	-0.2793***	NA	NA
	(0.3842)	(0.1567)	(0.1093)	NA	NA
<b><i>Foreign Aid</i></b>	-0.7481***	0.5553**	-0.8824*	0.8029**	0.7745**
	(0.2886)	(0.2530)	(0.4556)	(0.3085)	(0.3896)
<b><i>Rent Seeking</i></b>	NA	-0.5422***	-0.4567***	-0.1381	-0.8609**
	NA	(0.1189)	(0.1856)	(0.1852)	(0.4373)
<b><i>Aid*Rent Seeking</i></b>	NA	NA	-0.6042*	-0.3104**	-0.8072*
	NA	NA	(0.3214)	(0.1558)	(0.4730)

<b>Policy</b>	NA	NA	NA	0.9479***	0.5025*
	NA	NA	NA	(0.3564)	(0.2924)
<b>Aid*Policy</b>	NA	NA	NA	NA	-0.6297*
	NA	NA	NA	NA	(0.3575)
<b>Constant</b>	0.9370***	0.8562***	0.5190**	0.9383***	0.4757***
	(0.3594)	(0.3549)	(0.2375)	(0.2077)	(0.0935)
<b>Diagnostics</b>					
<b>R<sup>2</sup></b>	0.4725	0.6118	0.3898	0.6720	0.6179
<b>Note:</b> The standard errors are presented in the parentheses. ***, ** and * represent 1 percent, 5 percent and 10 percent level of significance.					

It is evident from the p-values at different lag lengths that tests of unit root are greatly sensitive to number of lags. The results are presented in Table 3. It is evident from the results that all the variables do not follow the same order of integration. Using different lag lengths it has been observed that some variables are stationary at level, that is,  $I(0)$  while some of them are stationary at first difference which can be denoted as  $I(1)$ .

<b>Table 2: Panel Unit Root Tests: p-Values are given with Null hypothesis that Series is I(1)</b>			
<b>(A) Maddala and Wu Panel Unit Root test</b>			
	Lag 0	Lag 1	Lag 2
<b>Real per Capita GDP</b>	0.0933	0.0955	0.1531
<b>Foreign Aid</b>	0.2821	0.3866	0.8030
<b>Financial Depth</b>	0.4300	0.7443	0.0172
<b>Institutional Quality</b>	0.5049	0.7678	0.8695
<b>Political Instability</b>	0.7305	0.2787	0.8987
<b>Openness</b>	0.3878	0.0658	0.1948
<b>Inflation</b>	0.1416	0.0779	0.2884
<b>Government Consumption</b>	0.5462	0.0014	0.6355
<b>Rent Seeking</b>	0.0336	0.2001	0.5511
<b>Policy</b>	0.6851	0.3972	0.5343
<b>(B) Pesaran Panel Unit Root test</b>			
<b>Real per Capita GDP</b>	0.1697	0.2157	0.1010
<b>Foreign Aid</b>	0.5992	0.6154	0.9714
<b>Financial Depth</b>	0.7916	0.7917	0.3517
<b>Institutional Quality</b>	0.9671	0.9849	0.6967
<b>Political Instability</b>	0.4453	0.0937	0.6984
<b>Openness</b>	0.2129	0.6056	0.6544
<b>Inflation</b>	0.2083	0.5186	0.8953

<b>Government Consumption</b>	0.3623	0.7223	0.5139
<b>Rent Seeking</b>	0.0822	0.4229	0.2787
<b>Policy</b>	0.0244	0.5909	0.5180

<b>Table 3: Westerlund Error Correction Panel Co-integration Tests</b>			
<b>Null Hypothesis : No co integration</b>			
	<b>Lag 0</b>	<b>Lag 1</b>	<b>Lag 2</b>
<b>Gt</b>	0.0510	0.0105	0.0094
<b>Ga</b>	0.0284	0.0454	0.0124
<b>Pt</b>	0.0312	0.0347	0.0512
<b>Pa</b>	0.0184	0.0422	0.0552
Note: Gt and Ga are the group mean statistics. Pt and Pa are panel mean statistics.			

After testing for presence of unit root the next step is to find the co integrating vector. In the presence of different lag length Auto Regressive Distributive Lag (ARDL) will be an appropriate specification for estimating co integration vector.

According to [28, 31], the pooled mean group estimator is an appropriate estimation strategy to estimate in the presence of larger time span than cross sections. In Table 4, results reveal 45 percent speed of adjustment in dynamic setting. As depicted from estimation results it is clear that financial depth has a statistically significant and positive impact on growth of economy. By keeping focus on results of final model (model 15) as shown in Table 4. It is obvious that 1 percent increase in financial depth pushes the growth by 94 percent hence, showing a greater impact of financial depth on economic growth. Several other studies also advocate a positive impact of financial depth on growth. For instance, the findings of [9, 12, 13] support the existence of a positive impact of financial depth on growth. A well-established financial sector pushes the growth performance via several linkages. For instance, it boosts the confidence of investors and promotes the investment which is a key channel of spurring the economic growth. Similarly, a well-developed financial market ensures the availability of funds and reduces the cost of inflation.

Institutions play a vital role in determining the growth performance. The value for coefficient of institutional quality in our study contains a positive sign but it is not significant. However, a positive impact of institutional quality has also reported by [12, 32, 33]. As documented by [21] poor quality of institutions results in depressing the economic growth.

**Table 4: PMG Estimates of Aid Effectiveness and Rent Seeking**

<i>Dependent Variable is Real per Capita GDP</i>					
<i>Regressors</i>	<b>Model 11</b>	<b>Mode 12</b>	<b>Mode 13</b>	<b>Mode 14</b>	<b>Mode 15</b>
<i>Lag of Dependent Var.</i>	0.3554**	0.7301**	0.9194***	0.8092***	0.5431***
	(0.1534)	(0.3364)	(0.2753)	(0.2331)	(0.2076)
<i>Financial Depth</i>	0.1742*	0.3268**	0.8508**	0.8256***	0.9457***
	(0.1048)	(0.1639)	(0.3773)	(0.2509)	(0.1063)
<i>Inst. Quality</i>	0.1586*	0.4856***	0.6460***	-0.2223	0.7448
	(0.0885)	(0.1769)	(0.1706)	(0.5579)	(0.4585)
<i>Pol. Instability</i>	-0.3365***	-0.8566	0.6494**	-0.3962	-0.8630***
	(0.0430)	(0.8715)	(0.1292)	(0.6593)	(0.3109)
<i>Openness</i>	0.5654**	0.9522***	0.3613*	NA	NA
	(0.2490)	(0.2839)	(0.1922)	NA	NA
<i>Inflation</i>	0.4993*	0.2260	-0.4091***	NA	NA
	(0.2694)	(0.9174)	(0.1661)	NA	NA
<i>Govt. Consumption</i>	-0.2775***	0.9052	0.1545***	NA	NA
	(0.0234)	(0.7495)	(0.0261)	NA	NA
<i>Foreign Aid</i>	-0.8688**	0.1908***	-0.5366***	0.3483	0.5153***
	(0.3176)	(0.0164)	(0.0719)	(0.8165)	(0.1565)
<i>Rent Seeking</i>	NA	-0.8738**	-0.6683***	-0.9706**	-0.1635
	NA	(0.4404)	(0.0865)	(0.4745)	(0.1742)
<i>Aid*Rent Seeking</i>	NA	NA	-0.4663*	-0.2209***	-0.8882***
	NA	NA	(0.2449)	(0.0403)	(0.2926)
<i>Policy</i>	NA	NA	NA	0.9235***	0.7140*
	NA	NA	NA	(0.1549)	(0.4278)
<i>Aid*Policy</i>	NA	NA	NA	NA	-0.9531***
	NA	NA	NA	NA	(0.3444)
<i>ecm<sub>t-1</sub></i>	-0.0387***	-0.4325***	-0.1440	-0.2134***	-0.1324***
	(0.0046)	(0.0879)	(0.1012)	(0.0795)	(0.0534)
<b>Note:</b> The standard errors are presented in the parentheses. ***, ** and * represent 1 percent, 5 percent and 10 percent level of significance.					

Estimation results of our study confirm the negative impact of political instability on growth. According to the value of coefficient if political instability increases by 1 unit it lowers the growth by 86 percent. Empirical findings of [4] confirm the existence of an opposite relationship between political instability and economic growth. Political instability results in creating uncertainty about policies which leads to reduce the confidence of investors. As a result of it, both domestic and foreign investors would be

reluctant to invest which will result in a serious setback to growth process. On the other hand, political instability also gives rise to corruption and ill legal activities [34].

A positive linkage between foreign aid and economic growth is confirmed by a statistically positive value for coefficient of foreign aid in our analysis as shown in Table 5. With a 1 unit increase in foreign aid will boost the growth by 51 percent. A number of studies advocate a positive impact of foreign aid, for instance, findings of [3] reveal that foreign aid pushes growth via channel of investment. Number of studies supports this channel of investment, included [4, 5,35].

Furthermore, the objective to rent seeking variable and its impact on dependent variable. The estimated coefficient of variable bears a negative sign in study results. 1 unit increase in rent seeking lowers the growth by 0.163 percent. Various studies, like [36], advocated a negative impact of rent seeking on growth. Using different proxies for rent seeking, [37] also supports the existence of an inverse relationship between rent seeking and economic growth. However, some of underlying reasoning for this negative relationship can be as follows. As discussed by prior studies, increasing returns to rent seeking activities make them attractive. Furthermore, rent seeking discourages the innovative activities, a key driver of economic growth, by moving the talented individuals from productive to unproductive activities. A significant proportion of funds have been wasted in quest of getting preferential treatment from government[38].

Impact of foreign aid in the presence of rent seeking has been captured by introducing an interactive term of aid and rent seeking. Statically negative impact of this term has been noted. As 1 unit increase in foreign aid in the presence of rent seeking will reduces the growth by 0.88 percent. Our results are in line with findings of [39]. Moreover, [16] empirically proved that favorable impact of foreign assistance has been lessening by the adverse implications of rent seeking.

Macroeconomic policies hold a key position in explaining the growth of an economy. This theoretical assertion is supported by our results as statistically positive impact of policy variable has been noted. Growth rises by 0.71 percent in case there is a 1 unit improvement in policies. Our interest does not lie in policy variable alone but in the interactive term of foreign aid and policy variable. Contrary to the findings of [9] our results indicate a negative impact of this interactive term on economic growth. However, our results are in line with the findings of different studies [10-12, 15]. Foreign aid often comes with conditionality's, like liberalization and adoption of adjustment programs. These conditions are usually not compatible with the structure of recipient and results in adverse policy adoption. As a

consequence, rather than strengthen the growth foreign aid proved to be growth retarding. It is interesting to note that magnitude of negative coefficient for both of interactive terms is larger than the positive magnitude of aid coefficient. It clearly points out that negative impacts dominate the positive spillover effect of foreign aid hence, retarding the economic growth.

Speed of adjustment is shown by the value of error correction term. According to our estimates this term bears the correct sign and is statistically significant at one percent level. Value of error correction term indicates that 13 percent speed of adjustment is needed to adjust the previous year shock from short run to long run equilibrium.

## **5. Summary and Policy Implications**

The present study tried to judge the effectiveness of foreign aid. Considering various problems faced by most of the developing countries, for instance, inadequate capital, financial constraints, ill-legal activities (corruption), political instability, insufficient property rights and lower level of institutional quality. What would be impact of foreign aid in the existence of all aforementioned factors? For this objective, our study takes the data of aid recipient countries of Asia. The time period for which the analysis has been conducted varies from 1980-2015.

Considering both positive and negative spillovers of foreign aid our study attempts to find out which one is dominating the other. Following the most influential study of [9], we also construct a policy index variable and test whether the aid requires a strong policy framework to fulfill its objective of stimulating growth. Some economists censured the foreign aid on the grounds that it did more harm than good as it raises the corruption and unlawful activities, termed as rent seeking. And these activities have deleterious implications for growth. Such activities are hard to measure but various proxies have been found in literature for it. Based on the availability of data we use corruption as a proxy for rent seeking.

Considering the endogeneity and heterogeneous nature of panel data we adopt PMG estimation technique. Empirical results on bases of PMG estimator clearly reject the findings of Burnside and Dollar as interactive term of foreign aid and policy variable appeared with the negative sign. However, the results are in accordance with [10, 12,15]. This result implies that it is not necessary for foreign aid to be growth enhancing only in the presence of macroeconomic policies. Foreign aid and policies are found to have a favorable impact on the growth of an economy. On the other hand, rent seeking appeared to be growth retarding with significant larger negative impact as compare to positive impact of aid and policies.

Several other factors are of utmost important which need to be taken into account while discussing the impact of aid on economic growth. Some of these factors include, for instance, political instability and quality of institutions. Overcoming from such deficiencies can also help to decrease the negative impacts of these factors which enable the foreign assistance to attain its desire objective.

Most of the developing countries are equipped with lower quality of institutions, political instability, poor enforcement of property rights, under developed financial sector and corruption. Under such circumstances an inflow of aid raises the rent seeking activities. As a result of it the positive spillover effects of foreign aid are reduced and over all a negative impact will prevail. Thus, we can conclude that existence of such an environment can be a possible justification for ineffectiveness of foreign aid.

For better and effective utilization of overseas assistance the sole responsibility comes on both donor and recipient countries. Donors need to transfer the aid flows with the aim of removing the existing negative factors. For instance, foreign aid should be such that it promotes the both physical and human capital not to support the corruption. Furthermore, policies should be formulated by keeping in mind the environment of economy. Providing the foreign assistance just to serve the strategic goals by the donors can have serious implications for growth of recipient countries.

On the part of recipient, it is the responsibility of the government to provide a conducive environment and overcomes from all of its deficiencies. This can be done by utilizing the aid funds for productive investment not for luxurious consumption. Moreover, transparency, improving the rule of law, enforcement of property rights, promoting accountability and democracy will also be helpful in raising the economic activity.

Summing up, for foreign aid to work effectively donors and recipients should play their role. Only the existence of good macroeconomic policies is not prerequisite for effective utilization of foreign aid. It is also necessary to eradicate corruption that dampens the positive impact of foreign aid.

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