IMPACT OF FOREIGN AID ON PUBLIC EXPENDITURE IN PAKISTAN

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ABSTRACT

Foreign aid represents an important source of finance in most developing countries, where it increase govt expenditure, and supplements low saving, narrow export earnings and thin tax bases. This study explores the relationship between govt expenditure and foreign aid in Pakistan. Data was collected from economic survey of Pakistan, other official publication and World Bank reports for 18 years from 1990 to 2008. Simple regression is used to analysis the data. The result reveals that there is positive relation ship between both program & project aid and govt expenditure.

Keywords: Foreign Aid, Public Expenditure, Development, Pakistan

Introduction:

Every country especially developing country requires foreign aid as the financial resources is scarce. Foreign Aid used to fill the budgetary gap, trade promotion and strategic considerations. The effectiveness of the foreign aid is still under question. A consensus develops among the researcher that foreign aid has no benefits for the recipient country, after conducting remarkable research despite equivocal result. Multilateral aid is more effective due to bilateral relation as compared to bilateral aid. Foreign aid idea is dated back to human history. Today foreign aid infrastructure is developed after world war–II to help the western European countries infrastructure. During the cold war era foreign aid base on the loyalty and common interests. High inflow of foreign aid is observed in many countries which led to dependency syndrome. Foreign aid is unmitigated failure in many countries of the Latin America, Africa and Asia. The effectiveness of the foreign aid depends upon its utilization. In developing countries, it is interesting to note that there is little development in the region. Inflation, employment level and per capita income decreased. Foreign aids used for non productive projects such as to build modern cities etc. The foreign aid has played a vital role in third world countries. Foreign aid improves infrastructure, poverty alleviation and fill the budgetary gap and bring rapid development in some countries such as Indonesia, Korea, Bolivia and Ghana.

Pakistan, like other developing countries, has been facing a crisis since its birth. It needs aid to over come the troubles in the form of grants, tied aid, project aid. The foreign exchange reserve would be at a safe level by huge inflow of fund. In the beginning, Pakistan has received a small amount of aid from the world, IMF, World Bank and Asian Development Bank. Late 50's economic activity and five year plans increased dependency on foreign aid. Volume of foreign aid increased with the introduction of every five year plan. Pakistan has received a huge amount of foreign aid as a strategic partner of western countries against USSR. After the end of Afghan war and fall of USSR, scenario has changed and declining trend in foreign aid observed. Conditions on foreign aid transfer from soft to hard as a socialist country priority has changed. The period of 1990 to 2000 prove hard for Pakistan. In 90's American congress pass Pressler law to stop the Pakistan Fuji aid and impose unsympathetic conditions on social development aid. The western countries and America tightened the condition hard after the 28th May 1998 Atomic Explosion and Pakistani foreign reserve fall to danger level. After 9/11, scenario has been changing dramatically and the aid donor country imposed hard conditions on recipient country. American has a long list of demands; despite Pakistan is a strategic partner in this war, against the fund transfer. Recently the foreign aid connected to the war on terror and properly monitored. As Pakistan is high indebted country and seeks for soft loan / Foreign Aid. A "Friend of Democratic" forum comes forward but no healthy indicator seen for Pakistan as most country just rescheduled loans. The World Bank imposed hard conditions on Pakistan regarding taxes. In short Pakistan has seen the rise and fall in foreign aid. There is also a time when foreign aid/loan seized by imposing ban due to Nuclear Plant, Corruption and War on terror. This paper explores the impact of foreign aid on economic growth of Pakistan. Remaining paper composes as follow. Next part describes the Problem statement, Research question, purpose of study and rationale of study, section 2 gives literature review, and section 3 gives methodology, the preceding section concludes the paper

Problem Statement:

The importance of aid in Pakistan stems from it being the main source of capital flows and FDI, as well as its impact on macroeconomic stability. Foreign aid considered a source to fill the budgetary gap. It has required monitoring and managing closely to maintain macroeconomic stability. Pakistan economy has witnessed economic crises from the time it came into being. During the period 1990 to 1999, Pakistan has faced the worst situation. In 1990, government of Pakistan inherited an economy in deep fiscal crisis from successor. Pakistan received US Dollar 1298 Million which decreased to 1071 Million. In addition, the decline of foreign aid and hard condition imposed by the donor had worsened economic conditions. The fiscal deficit reaches a new peak of 8.7 per cent in 1990-91 despite the disbursement of $900 million by the IMF.

After 28th May 1998, almost all the western and American donor imposed ban on Pakistan. In 1999 External Debt increased to $38.96 billion. After 9/11, U.S assistance has played a vital role in Pakistan's economy movement lethal level to outstanding performance. The decrease in debt is a shift of government of Pakistan from an external source of the fund to use of T-bill, and issue of Islamic bonds.

The foregoing discussion reveals that foreign aid is vital for the developing country to support social program. But at the same time the interest of donor country also a key factor, as most of the donations based on loyalty and common interests. Pakistan is facing financial crises since its birth. There is the rise and fall in history with the change of interest of the West and America. This effects the poverty alleviation and many other social programs in Pakistan.

Research Question:

It proposed whether foreign aid affects the public expenditure in Pakistan?

Objective of Study:

Utilization of sources has a key role in country development. Such country seeks soft loan/foreign aid to start social program. The objectives of the study are:

1. To study and explore the effect of foreign aid on development expenditure in Pakistan.
2. To explore and investigate the effect of foreign aid on non-development expenditure in Pakistan.

Rationale of Study:

Pakistan, like other developing countries faces huge external debts and is crying out for the debt relief. The majority argue that the poverty level, repayment and servicing costs of external debts are too high and unmanageable. These Claims open the door to reconsider the issue related to the effectiveness of foreign aid. Two gap model, developed by Chenery and Strout, declared foreign aid as a vehicle for economic growth. Opponent of this model has argued that foreign aid substitute domestic resources through declined saving, reduced government tax revenue and increased government consumption. Pakistan has great dependency on aid, coupled with crucial aid freeze period. Pakistani government considers the foreign aid as other revenue sources to fill the budgetary gap. It is important to explore how the Pakistani government responds to resultant fiscal deficits.

Scope of Study:

This study explores the role of foreign aid on development and non-development expenditure in Pakistan. Data is used from 1990 to 2010.

Literature Review:

The debit on foreign aid is still inconclusive. In literature the role of foreign aid in govt expenditure is questionable. Heller (1975); Khilji & Zampelli (1991, 1994)and Pack & Pack (1993) supported the theoretical proposition, developing countries shift resources from aided project to non aided project to made it fungible. Where as Pack and Pack (1990, 1993) rejected the idea of aid fungibility in 1990, but later accepted after conducting research in Dominican Republic. This revealed that situation varies country to country and data to data used. While Feyzioglu et al. (1998)

declared aid fungibilty with the increase of sample size. Both Cashel-Cardo & Graig (1990) and Pillai (1982) mentioned those bilateral loans were less fungible with flypaper effect. Further more Pack & Pack (1990, 1993) supported the Feyzioglu et al flypaper effect and result varies from country to country after conducting research on Indonesia, Sri Lanka and Dominican Republic.

According to the World Bank's 1998 report, Assessing Aid, countries with good monetary, fiscal and trade policies (i.e., good policy environment) registered high positive effects of aid. Whether recipient countries spend donor funds on intended purposes. Levy (1987), McGuire (1978, 1987), Gang and Khan (1990), Pack and Pack (1990) and Nathi and Sophie (1999) found no significant diversion and all agreed that countries spend foreign aid funds on the designated purposes.

Devarajan et al (1998) declared government expenditure increased with insignificant tax relief. The result showed most of aid used to offset the debt service, current account deficits and the remaining part was used to finance the investment. They also highlighted the sector, which are more fungible and least fungible. While Saroop et al (2000) announced the usage of foreign aid fund is independent of sources. In case of India, they claimed that saving form non developing fund used on existing projects. Where as Heller (1975) found Bevan et al (1993) explored in his study that govt difficult to reduce expenditure if non investment expenditure increased occurs during boon in public revenue.

Bevan et al (1993) observed increase in public expenditure, non developing expenditure, during coffee boom. Govt reallocates the resources instead of lowering its expenditure. Further more Heller (1975) confirmed by the empirical literature on the panel and time series data, foreign aid used as to treat interim reduction. Number of researchers like Corden (1984), Killick (1991), Nyoni (1997) and Cassen et al (1986) declared foreign aid as discovery of natural resources.

What type of expenditure increased, play a significant role in effectiveness in the boom of finance. Heavy dependency on foreign aid distorts the economy in case of uneven flow of aid. Both trade and non trade sector were affected by heavy domestic borrowing during frozen aid period. Our study tries to explore the degree of correlation among freeze and budgetary expenditures in Pakistan?

Research Model:

This paper follows the methodology used by Jmes Jjeru (2003) to discus the impact of foreign aid on public expenditure in Pakistan. The methodology used for analyzing the government's reaction to aiding flow fluctuations resulting from aid freezes. This approach follows Heller's utility model (1975), to verify the effect of foreign aid on govt expenditure. The utility model assumes the recipient country to maximize the social welfare of its citizens by using foreign aid flow into the country. This model latter used by different researchers with little modification. In this paper govt expenditure was divided into two category i.e development (Gd) and Non development (Gnd).

Maximize U (Gnd ,Gd) = Gndα Gd1-α ……………………………… (I)

Where α are the respective elasticity. Domestic or external resources, which comprise of both program aid and project aid, are prominent sources of govt expenditure. Project aid rendered fungible whereas structure aid is fully fungible. Setting the portion project aid that is rendered φ, then constraint faced by the government is

R + BS + φ (BODA) = P1Gnd + P2Gd …………………………………(II)

Where Gt¬= total government spending on development activities

Gd= Actual government expenditure on development

R = Total domestic resources from both taxation and domestic borrowing.

BS = is the program aid

BODA = The project aid

φ = The portion of aid that is fungible.

The link between foreign aid and government expenditures as follows.

$G_t = \delta 0 + \delta 1Rt + \delta 2\ BSt + [\delta 2\varphi\ + 1 - \varphi]\ BODAt + \varepsilon_t$ ....(III)

$G_{tEj} = \delta 0 + \delta 1Rt + \delta_2\ BSt + [\delta 2\varphi\ + 1 - \varphi]\ BODAt + £_t$ ....(IV)

Where GtEj {j=1, 2} are the recurrent and development expenditures.

The portion of aid that is fungible, φ can be computed from the coefficient of project aid. Letting β be the coefficient of project aid, then therefore, the fungible portion of project aid is given by

$\Phi = (\beta - 1) / (\delta_2 - 1)$

Aid funds inducted to budgeting the expenditure that is why the freeze of aid affects the public expenditure. To describe effects, here interactive term is used to measure aid intensity. They explained interactive term as assumption of policy maker during the budgetary process. According to author policy maker include only program aid and new donor commitments. The interactive term is calculated as dummy variable (0 during freezing period and 1 during continuous) multiple by total program aid.

$Gt = \delta 0 + \delta 1Rt + \delta 2\ BSt + [\delta 2\varphi + 1 - \varphi]\ BODAt + \delta 3\ AFDUMMYt + \varepsilon t$ ………………… (V)

$GtEj = \delta 0 + \delta 1Rt + \delta 2\ BSt + [\delta 2\varphi + 1 - \varphi]\ BODAt + \delta 3\ AFDUMMYt + \varepsilon t$ ….(VI)

2.2 Hypothesis

H1 : Foreign Project Aid and Programme aid impact the development Public Expenditure in Pakistan

H2 : Foreign Project Aid and Program aid impact the total Public Expenditure in Pakistan

Methodology:

Sample:

This study used time series data for 18 years from 1990 to 2010. The data period choice of study is based on data availability, taking into consideration the two main sources of foreign aids and Freeze period. The data will be collected from various issues of Economic Surveys of Pakistan published by Ministry of Finance, Government of Pakistan.

Measures & Procedure:

Foreign aid comprise of external assistance, grants and concessionary loans. Govt expenditure consists of development and recurrent estimate by central Govt. The following variables have been studied to explore the impact of foreign aid on the public expenditure:

- Total government spending on development activities
- Actual government expenditure on development
- Total domestic resources from both taxation and domestic borrowing.
- The program aid
- The project aid

Before measuring the empirical estimation, employed augmented dickey – fuller unit root.

Result And Discussion:

The study uses time series data for the period 1990 to 2010. The choice of the period of study is based on data availability, taking into consideration the two main aid freeze periods. The budgetary data were collected from the Economic Surveys, annual recurrent and development expenditure estimates, the annual budget reports and other government publications on public finance. Data on foreign aid consist of total disbursement of external assistance, and concessionary loans and grants transferred from both bilateral and multilateral sources.

Government expenditure and revenue consist of development and recurrent estimates by the central government (hence no activities of the local authorities). We obtained data from the annual development and recurrent estimates published by the government for all the ministries, Economic Surveys and statistical abstracts. The generation of these data sets was not free of problems; in some cases, different series had different figures reported for the same fiscal year and once again we computed the averages. Table 1 reports the summary statistics for the sample. Our results show that the budgetary outturns were capricious during the 1990s (an era associated with both political and economic reforms), with virtually all the expenditure categories recording sharp deviations between the budgeted and actual levels.

Table 1 : Summary statistics (Average value) (Rs. In Million)

Variable	1990 – 1999	2000 -2008*
Total government expenditure	459,091	1,318,340
Foreign aid flow (Total)	82,220	162,743
Non-development expenditure	36,328	107,375
Development expenditure	9,359	24,459
Domestic resources	91,848	908,618
Real GDP	537,058	4,463,926

*Due to change in base year for the calculation of National Accounts from the financial year 1980-81 to 1999-2000, the data has been divided into two groups.

The central government expenditure is composed mainly of two components: recurrent expenditure, which finances day-to-day activities of the government, and capital expenditure, which finances the development activities of the government. To assess how changes in aid flow affect the budget process, this section first discusses the linkage between total government expenditure and foreign aid, and then decomposes government expenditure into recurrent and development expenditures. The aid variable—the total ODA disbursement—is decomposed into programme aid from multilateral sources and project aid from bilateral sources.

Before carrying out empirical estimations, we have divided all the variables by Real GDP in order to eliminate any possibility of spurious regressions and erroneous inferences. The data is summarized in the figure 1 and figure 2. Figure 1 shows the year-wise data of development and non-development government expenditures and project & non-project aid. In the figure 2 real GDP, total government expenditure and total aid are shown. The data depict a drastic increase in real GDP after the financial year 1999-2000, which is primarily due to change in base year for the calculation of National Accounts from the financial year 1980-81 to 1999-2000.

Figure 1 (Rs. In Million)

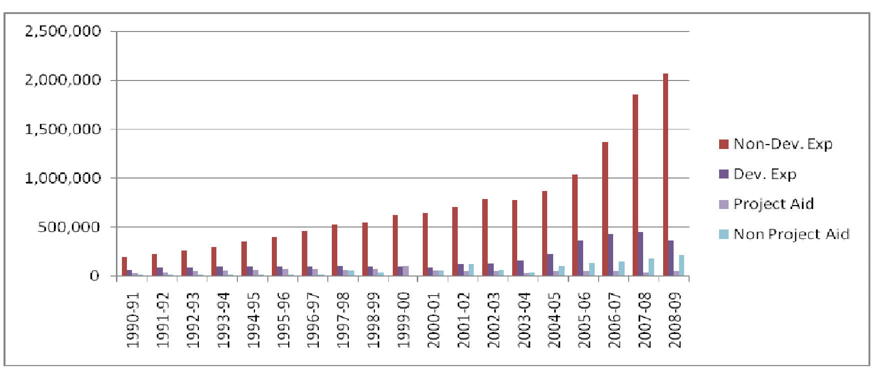
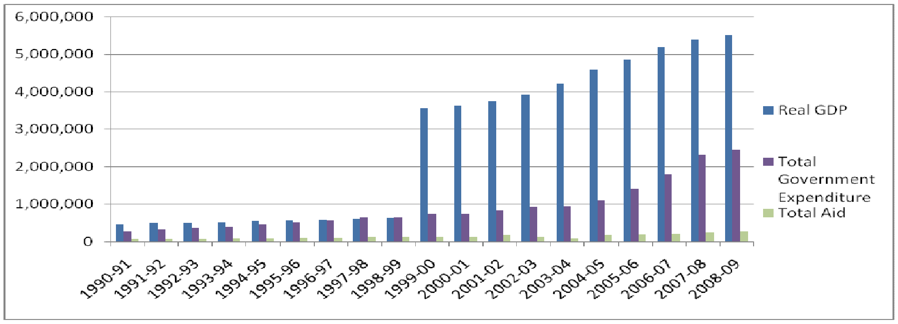


Figure 2 (Rs. In Million)



The summary of models presented in the equations (III) and (IV) is shown in table 2. The values of adjusted R-square for the equations (III) and (IV) are 0.91 and 0.97 respectively which, depicts that the overall significance of the estimated regressions equations is good.

Table 2 **MODEL SUMMARY**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
Dependent Variable: Gt	0.960126	0.921841	0.90621	2.023204
Dependent Variable: GtEj	0.987169	0.974502	0.969403	5.458914

Predictors: (Constant), Rt, BSt, BODAt

The analysis of variance (ANOVA) tables for the equations (III) and (IV) are presented in table 3 and table 4. The values of F-statistic are 58.97 and 191.10 for the equations (III) and (IV) respectively. The High value of F-statistic indicates that the model specification is good and the variables included in both the models are relevant.

Table. 3 **ANOVA (Gt)**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	724.1846	3	241.3949	58.97237	1.56E-08
	Residual	61.40033	15	4.093356		
	Total	785.5849	18			

a) Predictors: (Constant), Rt, BSt, BODAt b. Dependent Variable:Gt

Table 4: **ANOVA (GtEj)**

Model		Sum of Squares	df	Mean Square	F	Sig.
	Regression	17083.78	3	5694.594	191.0954	3.59E-12
	Residual	446.9961	15	29.79974		
	Total	17530.78	18			

a. Predictors: (Constant), Rt, BSt, BODAt b. Dependent Variable: GtEj

The estimates of the coefficients of the equations (III) and (IV) are presented in table 5 and table 6. In the estimated equations (III) and (IV) the coefficient that appears in front of Rt, BSt and BODA term describes the unit change in government expenditure (development i.e. Gt or total i.e. GtEj) associated with a unit change in domestic resources (Rt), programme aid (BSt) and project aid (BODAt).

Table 5: COEFFICIENTS (GT)

	Unstandardized Coefficients		**Standardized Coefficients**	**t**	**Sig.**
		Std. Error	Beta		
(Constant)	-5.5346	2.64531		-2.09223	0.053836
Rt	0.460612	0.132222	0.282467	3.483623	0.003334
BSt	0.121655	0.3026	0.034459	0.402033	0.69333
BODAt	1.304876	0.11894	1.006469	10.97089	1.46E-08

a. Dependent Variable: Gt

In the table 5 the coefficients of Rt, BSt and BODA are 0.46, 0.12 and 1.30 respectively. The symbols of all three coefficients are positive which shows positive relationship between domestic resources, programme aid, project aid, and the government development expenditure (Gt). Further, the t-statistic for Rt, BSt and BODA are 3.48, 0.40 and 10.97 respectively. The high t-values of Rt and BODAt shows that domestic resources (Rt) and Project aid (BODAt) have significant impact on the government development expenditure (Gt). However, the study has found insignificant impact of Programme aid (BSt) on government development expenditure owing to the low value of t-statistic i.e. 0.40.

Table 6: COEFFICIENTS (GTEJ)

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Std. Error	Beta		
(Constant)	-13.4635	7.13745		-1.88632	0.078765
Rt	1.26013	0.356755	0.163585	3.532194	0.003017
BSt	4.196596	0.816461	0.251632	5.139985	0.000121
BODAt	5.387994	0.320918	0.879739	16.78932	3.92E-11

a. Dependent Variable: GtEj

In the table 6 the coefficients of Rt, BSt and BODA are 1.26, 4.20 and 5.39 respectively. The symbols of all three coefficients are positive which shows positive relationship between domestic resources, project aid, programme aid and the government total expenditure (GtEj). Further, the t-statistic for Rt, BSt and BODA are 3.53, 5.14 and 16.79 respectively. The high t-values of Rt, BST and BODAt shows that domestic resources (Rt), Programme aid (BSt), Project aid (BODAt) and all have significant impact on the government total expenditure (GtEj).
This table shows there is strong and positive significant relationship exists between total government expenditure and foreign aid.

Conclusion:

This study has found strong and positive significant relationship between total government expenditure and foreign aid. The relationship between government development expenditure and foreign project aid has also been found positive and significant. However, the relationship between government development expenditure and foreign programme aid has been found positive but not significant.

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