

## **Impact of Foreign Aid on Economic Development in Jordan (1990-2005)**

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**Abstract:** The analysis of the impact of foreign aid on economic development, suggest that poor countries have to relay on the foreign aid as a resource to fill the deficit. There are many form of foreign resources like Foreign Direct Investment (FDI), External Loans and Credit, Technical Assistance, Project and non Project Aid and many other forms. But most of under developed countries where Jordan one of them don't have the investment friendly situation. So in one way or the other have to relay on foreign aid and debt rather than other form of financial foreign resources. This study analyses the trend and impact of foreign aid on the economic development of Jordan during the period 1990-2005 using for this purpose different statistical techniques. From the analysis of the related data of Jordan it is clear that the foreign capital flow has a direct impact on the economic development of Jordan.

**Key words:** Foreign aid, official development assistance, economic development

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### **INTRODUCTION**

Jordan is a small country with few natural resources, its economic and social wellbeing have been intricately tied to its relations with neighboring Arab countries in term of population movement and flow of trade and financial aid. With a population of about 5.5 million. In per capita term, US \$ 2533 in year 2005, Jordan is classified as a lower middle income economy

A country is poor because she is poor is an oft-quoted maxim, i.e. poverty is not only the cause but also the consequence of poverty. Consequently, the under developed countries like Jordan are entrapped in a vicious circle of poverty. Because of low incomes, the saving ratios also remain low, resulting in low investment levels. At the same time, due to low income the taxable capacity remains lower, i. e. government earning also remain low. In such situations the underdeveloped countries have to face saving investment deficit as well as the deficit in the balance of payment. The two- gap model suggests that developing countries have to rely on the foreign capital inflow to fill these two gaps: The import-export gap and the saving investment gap<sup>[1]</sup>.

There are many forms of foreign capital inflows, which include the grants, loans and foreign direct investment, export credit, project/non project assistance, technical assistance and emergency relief etc. Regardless the fact that all the under developed countries need foreign capital inflows for their

development, the amount and the form of the country size and the economic circumstances of the country are the major determinants of the volume and the form of the foreign capital inflows. For instance the least developed countries of Africa have been relying on the foreign aid, while the developing countries of the East-Asia are largest beneficiary of the foreign direct investment.

In case of Jordan, the foreign aid is a major form of the foreign capital inflow and has a significant role for the countries development which can be observed from the story of economic growth.

The Jordanian economy had passed through five distinct periods of economic development that span the period between 1950 and 2005<sup>[2]</sup>.

The first period started with the formation of the Hashemite Kingdom of Jordan at the turn of the 1950s and lasted up to the Israeli war and the occupation of the West Bank in 1967. It was a period of recovery from the effects of the 1948 war with Israel and adjustment to the enlargement of the kingdom to absorb the expansion of its territory to include the west bank and the increase of its citizenry to embody Palestinians of the west bank and the refugees from Palestine. Available of foreign recourses in the form of official aid workers remittance and later on, foreign loans allowed Jordan to maintain a huge foreign trade deficit resulting mainly from investment expenditures on capital formation and non- productive expenditures.

The second period started with the efforts at recovery from the effects of the 1967 war and the adjustment to its consequences consisting in loss of territory and influx of the second wave of refugees, with such efforts gaining assured success and mutating to a period of high economic growth that lasted up to the mid -1980s. The average growth rate in real terms for the period 1971-1982 was 11.6%, one of the highest during that period and that is due to the flow of foreign aid which claimed to an average of 382 JD million per annum for the period 1980-1983 after the Baghdad Arab summit.

The third period lasted from the mid -1980s to the breakout of the Gulf crises and war in 1990/1991. It a period of retardation of economic growth and performance culminating in the collapse of the value of national currency and the rapidly mounting burden of the external debt. The favorable economic conditions that created prosperity in the 1970s began to taper off in the early 1980s, reflecting Jordan's dependence on the well being of the regional economy.

The fourth period started with end of the Gulf war of 1991 and the ensuing economic boom stimulated by the influx of the Jordanians from Gulf countries. During the period 1992-1995 witnessed relatively high economic activities then followed by the years 1996-1999 where the GDP growth rate was 2.9% compared with 3% growth rate of population.

The fifth period started with relatively recovery of positive per capita growth, but this positive growth was quickly arrested by the outbreak of Palestinian uprising (Intfada) and the further frustration of the growth potential arising in the aftermath of the 11 September in the USA continued to have its impact.

## **MATERIALS AND METHODS**

This study attempts to analyze the effectiveness of the foreign aid in economic development in Jordan during the period 1990-2005 using for this purpose different statistical techniques.

**Sources of data:** The study is based on the following:

- World Bank, World Development Reports
- World Bank, World Development Indicators
- Government of Jordan, Ministry of Finance publications
- Central Bank of Jordan Reports

## **OBJECTIVES OF THE STUDY**

This study aims to analyze:

- The composition of foreign aid in Jordan

- The impact of foreign aid in Jordan

The role of foreign economic assistance in economic development and growth remains continuous in economic literature. Some studies proved its positive impact on the economic development, while some studies highlighted its negative effects.

Chenery and Strout<sup>[3]</sup> concluded, on the basis of empirical evidence from LDCs, that foreign capital has a positive effect on the economic growth. Burnside and Dollar in their study found that aid has appositve impact on economic growth in developing countries with a good fiscal policy, while it has negative effect on economic growth in the presence of poor policy.

Leff<sup>[4]</sup> analyzed its negative impact on growth. They argued that foreign aid could adversely affect the economic growth by substituting the domestic saving.

Ghulam Mohey-uddin<sup>[5]</sup> concluded that the foreign aid has both positive as well as the negative effects in the economic development, on the positive side it helped in boosting the GDP growth, but on the negative side it has substituted domestic saving.

Robert and Nicholas<sup>[6]</sup> found that the relationship among foreign aid, government policy and economic growth is tenuous and depends heavily on the particular set of countries included in their study.

The role of foreign aid varies from one country to another. Jordan has been relying on the foreign aid to support its development programs since independence. And the aid still has the larger proportion in the foreign capital inflows to Jordan. In Jordan many economists have tried to find out the role of foreign aid in economic development of Jordan. As, Ansoor<sup>[7]</sup> in his study the evaluation of foreign aid to Jordan concluded that it has appositve effect in the growth of GDP as well as in the export of goods.

So, the literature on effectiveness of foreign aid show both, positive as well as the negative effects of foreign aid on economic development

## **TRENDS OF FOREIGN AID IN JORDAN**

Table 1 shown an altering behavior of official development assistance over the (1990-2005) in terms of both official development assistance as well as per capita Aid. From 1970 to 1975 there is an increasing in Aid, for the years 1976 and 1978 a declining trend and there is swift increase in aid from 1979 to 1981 then it started declining to reach its lowest level in 1989and it has risen again during the following period to reach its highest level in 2003 in terms of aid and per capita aid while 2004 and 2005 it has fallen by 50%. But the over all trend of foreign aid in Jordan is increasing.

Table 1: Official Development Assistance (ODA) and GDP in Jordan

Year	GDP (current \$) millions	ODA (current \$) millions	External debt (current \$) millions	Aid % Govt. expenditure	Aid % of GNI	Aid % Gross Capital Formation	Aid % Import Goods and Service	Aid Per capita (current \$)
1990	4020	886	3556	-	23	69	23	279
1991	4193	938	3845	-	23	87	24	265
1992	5311	424	5510	-	24	27	9	114
1993	5606	309	879	17.3	5.8	15.0	6.3	79
1994	6238	372	5074	19.6	6.2	17.8	7.7	91
1995	6727	539	4953	25.7	8.3	24.3	10.2	129
1996	6928	507	5218	21.6	7.5	24.0	8.7	117
1997	7246	462	5157	19.5	6.6	24.8	8.2	104
1998	7912	411	5676	18.25	5.3	23.8	7.3	89
1999	8149	432	5773	16.9	5.4	25.6	7.9	91
2000	8460	552	5621	21.0	6.4	32.7	8.8	113
2001	8975	449	5780	15.1	4.9	18.9	6.7	86
2002	582	537	5780	15.1	5.8	25.0	8.1	103
2003	10195	1248	6428	41.1	12.6	55.2	17.1	233
2004	11398	601	7203	16	5	22	6	114
2005	12712	622	7201	13.9	4.8	20.7	5.1	114

Sources: World Bank, world development indicators

Table 2: The list of top donors and sector wise allocation of official development assistance to Jordan

**Jordan**

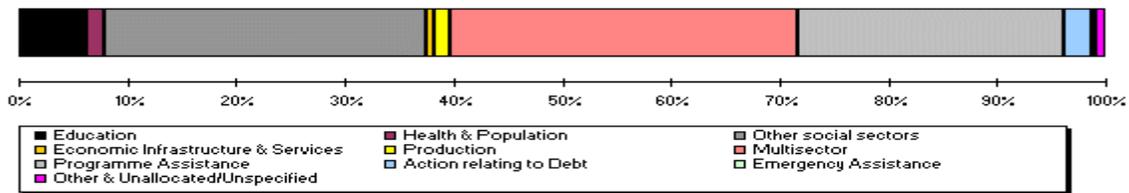
Receipts	2003	2004	2005
<b>Net ODA (USD million)</b>	1 248	601	622
<b>Bilateral share (gross ODA)</b>	89%	77%	78%
<b>Net ODA / GNI</b>	12.1%	5.1%	4.7%
<b>Net Private flows (USD million)</b>	- 134	- 3	50

For reference	2003	2004	2005
<b>Population (million)</b>	5.1	5.3	5.4
<b>GNI per capita (Atlas USD)</b>	2 010	2 260	2 500

Top Ten Donors of gross ODA (2004-05 average) (USD m)	
1	United States 368
2	UNRWA 96
3	Japan 65
4	EC 57
5	Germany 42
6	Israel 19
7	Italy 15
8	Arab Countries 11
9	France 9
10	Canada 7

**Bilateral ODA by Sector (2004-05)**



Sources: OECD, World Bank.

Table 1 also shows the external debt of Jordan over the study period which indicates that the amount of external debt rises over the period 1990-2005 in Jordan. It is clear also that the overall debt burden increased as the foreign capital inflow increase.

The data of official development assistance received during the years 2003-2005 shown in the Table 2. The list of the top donor of official development assistance to Jordan is shown in the upper-right corner that USA remained the major donor to Jordan and provided the 368 million US\$ to Jordan in

2004-2005. After analyzing the top ten donors list during the 1990s becomes clear that Jordan is highly dependent upon the USA, Japan and European Commission, as they are the top 3 donors to Jordan.

The lower portion of the Table 2, shown the sector wise allocation of the official development assistance received by Jordan in 2004-2005. It is clear that the major share of bilateral aid went to social sectors and multi sector whereas the share of education, infrastructure and services, health and population remains very low.

**IMPACT OF THE FOREIGN AID  
ECONOMIC GROWTH**

$$GDP = \alpha + \beta_1 ODA + \beta_2 lon$$

The results of the estimated model are given as:

$$GDP -2.657 + 0.114 ODA - 1664 lon$$

Many types of studies were under taken by different authors in order to understand the impact of foreign capital inflows on the economic development and many methods and variables were used for this purpose. Some of these studies focused on the study of impact of aid on the domestic saving, investment and capital formation, while some other researchers paid much attention to study the role of aid on the debt burden, GDP growth etc. Some other studies focused upon the impact of aid on different sectors of the economy.

It is difficult to analyze the effect of foreign aid on all the sectors and variables as described above in a single study. There for, I narrow down my analysis to the impact of foreign official assistance and debt on the GDP.

Many studies were carried out to examine the impact of official development assistance on the GDP growth rate, in order to analyze the impact of official development assistance in Jordan the data on the official development assistance and the GDP given in Table 3 is used. The regression model is fitted to the data. The quadratic model is given as:

**Coefficient data:**

Overall significance of model (F)	= 57.151
$\alpha$	= -2.657
$\beta_1$	= 0.114 (t statistic = 1.379)
$\beta_2$	= 1.664 (t statistic = 10.502)
R <sup>2</sup>	= 0.895 = 90%
Standard Error	= 0.05012
Correlation coefficient (r)	= 0.946 = 95%

The result depicts the positive effect of foreign aid on the GDP during the period 1990-2005 as the  $\beta_2$  has appositve sign showing that the GDP increases as the foreign capital inflow increase. The entire coefficients are significant. The value of R-Squared is 89% variations in GDP explained with the help of foreign aid. And there is 95% correlation among foreign aid and GDP in Jordan.

Table 3: Impact of official development assistance, GDP and regression model

**Model Summary (b)**

Model	R	R <sup>2</sup>	Adjusted R <sup>2</sup>	Std. Error of the Estimate	Change Statistics					
					R <sup>2</sup> Change	F Change	df1	df2	Sig. F Change	Durbin-Watson
1	0.946(a)	0.895	0.878	0.05012	0.895	55.151	2	13	0.000	1.402

a Predictors: (Constant), LON, AID, b Dependent Variable: GDP

**Variables Entered/Removed (b)**

Model	Variables Entered	Variables Removed	Method
1	LON, AID(a)	---	Enter

a All requested variables entered, b Dependent Variable: GDP

**Coefficients (a)**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-2.657	0.660	-----	-4.029	0.001
	AID	0.114	0.083	0.125	1.379	0.191
	LON	1.664	0.158	0.953	10.502	0.000

a Dependent Variable: GDP

**Residuals Statistics (a)**

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	3.5892	4.0936	3.8666	0.13592	16
Residual	-0.1441	0.0659	0.0000	0.04666	16
Std. Predicted Value	-2.040	1.670	0.000	1.000	16
Std. Residual	-2.875	1.314	0.000	0.931	16

a Dependent Variable: GDP

Thus we can conclude that there is a positive relation between the GDP and the foreign aid in Jordan. But it is clear that official development assistance impact in economic development is very low as the regression model shows that the relation between the GDP and official development assistance is insignificant, the reason behind that is the follow of foreign official assistance depends upon the donors and the diversion of the official development assistance is predetermined to specific projects by the donor country. As we have observed earlier that most of the official development assistance in 2004-2005 went to social sectors while the share of productive sectors was very low.

### CONCLUSION

The present study shows a positive effect of the foreign capital inflow on the economic development. As it has significant impact on the economic development of Jordan as this financial resources in particular the long term loans mostly used in productive sectors or in building the infrastructure which help in increasing the productivity of the over all economy. As the regression analyses of the GDP and foreign capital inflow confirm its effect on the GDP. Thus overall the impact of the aid on the economic development is positive.

The policies are also important in the effectiveness of the foreign capital inflow, as aid has a more positive impact on growth with good fiscal,

monetary and trade policies. In the presence of poor policies, on the other hand, aid has no positive effect on growth. Accordingly, there is a need of not only good policies but also the implementation of these policies as well as the proper monitoring of the aid -utilizing projects is necessary in order to avoid the misutilization and the mismanagement of the foreign capital resources.

Finally, we can say that aid may be helpful in promoting economic growth only if the proper monetary, fiscal and trade policy present.

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