# Review of Theoretical and Empirical Literatures on the Role of Foreign Aid to Developing Countries

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## Abstract

This study provides reviews relating to the impact of foreign aid to economic growth. Several literatures suggested that, foreign aid has a directly positive impact of the economic growth. However, some studies empirically proved that, good economic environment is main prerequisites to ensure the positive impact of foreign aid to the economic growth. Furthermore, several studies have shown that, foreign aid has negative impact of the economic growth. Most of studies in previous literature has been analyzed the relationship between foreign aid and economic growth in East Asian economies and not in African countries. From this gap, new empirical studies in to examine the channels in which foreign aid affect economic growth is needed especially in African economies, which receive largest foreign aid for long time.

Keywords: Foreign aid and Economic growth.

## **1.0 INTRODUCTION**

## 1.1 Theoretical Literatures On Relationship Between Foreign Aid And Economic Growth.

The effect and effectiveness of foreign aid in developing countries have been a topic of debate since 1960's. The first study was developed by Harold and Domar in 1930s and 1940s. They stressed on the role of physical capital accumulation in determining economic growth. From this, concluded that, foreign aid has an important role to fill the saving gap in developing countries. Saving gap was seen as as the main problem for investment in developing countries (Rotarou and Ueta, 2009; Moreira, 2005; Levy, 1988; Chenery and Strout, 1966).

Chenery and Strout (1966), proposed the "two gap" theory that supported Harold-Domar model of growth. They suggested that, in developing countries apart of saving gap, there are foreign exchange constraints (gap) for importing capital goods. Foreign aid provides capital funds for the importations of capital goods. Furthermore, Chenery and Strout (1966) added the third gap of human capital accumulation that is developing countries have a scarcity of technological abilities, managerial skills that can be used in operating production activities efficiently. In this case, foreign technical aid is needed to fill this insufficiency (Burke and Estafahami, 2006). Finally, Bacha (1990) and Taylor (1990) added what they call "three gap model" whereby they vowed that, developing countries also lack of efficient source of revenue which can be used to operate public investment. This weakness they termed as "fiscal deficit", if that is the case, foreign aid is an important tool in supporting developing countries.

In both Harold Domar model and Schenery and Strout models, assume that there is a linear relationship between investment and growth at least in the short run. However, these assumptions relied on the Leontief production which assumes the substitution of labor for capital is possible (Easterly,2003). According to Solow (1956) this assumptions does not hold, since the capital and labor are not substitute in short run. In addition to that, a critics rise towards Harold Domar and Schenery and Strout (1966) is that, they consider capital formation as only important source of economic growth for developing countries.

However, this is not the case if one considers Solow and endogenous growth modes. Since these two growth theories defined growth as function of many other factors other than physical capital formation. Secondly, the implication of the Harold Domar models and two gap theories is that, all funds of foreign aid used to fill financing gap of domestic expenditures. In this way would results to higher investment level. They assumed that domestic investment is constrained with only lack of domestic funds. Nevertheless, this is not the case for most of the developing countries.

Griffin (1970) and Griffin and Enos(1970) in their response suggested that aid does not support domestic resources instead it distorts domestic saving. By using the Harold model of economic growth, they showed that the increase of foreign aid substituted domestic saving in the public sector as results discouraging the government effort in raising the domestic tax revenues .Further to this, they treated aid as "exogenously" variable as it always determined in political wise rather that economic need .They argued that, foreign donors provide aid according to their political desire in developing countries. They just support politics that favor their needs, from this point foreign aid cannot guarantee economic growth in developing countries.

## **1.2 REVIEW OF THE EMPERICAL LITERATURES**

## 1.2.1 Foreign aid and economic growth

The empirical literatures related to foreign aid and economic growth are country specific and have mixed results. Some of the literatures found that foreign aid has negative impact to economic growth; some of them have found that, foreign aid has positive impact to economic growth. However, third group suggested that, impact of foreign aid to economic growth depend on macro economic factors in host country. In this study literature is divided into three main parts. Those who found negative and positive impact to economic growth. On other hand, those who found causality or no relationship between foreign aid and economic growth.

#### a) Negative Impact To Economic Growth

A rise of the Harold Domar model and two gap theories sparked vast empirical literatures during the 1970s and 1980s. Several studies have suggested a negative relationship between foreign aid and economic growth these studies were Mosley (1980) Weiskopff (1972) Griffin (1970) Griffin and Enos (1970). Griffin (1970) used Cross sectional analysis and correlation for LDCs countries. From OLS regressions they found that, there is a significant negative relationship between foreign aid and economic growth. They argue that, foreign aid increases the consumptions and only part of foreign aid is invested. Furthermore, the increases in aid will reduce the incentive and increase in efficiency in tax revenue collection. From this fact, foreign aid will have negative impact to the economic growth.

Furthermore, in the late 1990s several literatures have seen the importance of macroeconomic policies. It has been argued that, if the countries do not have "sound macro policies" and no 'state interventions, foreign aid will have a negative impact to recipient countries (Turnorsskey, 2008; Pallage and Robe, 2001; Burnside and Dollar, 2000; Nyoni, 1998). For example, Nyoni (1998) suggested that the increase of foreign aid results into negative relationship with the real exchange rate level in Tanzania. This happen since it results into appreciates exchange rate value. In this case, there is increased price of the domestic products (Dutch disease)18F<sup>1</sup> resulting into discouraging of domestic investment. The study concluded that, the government has to implement proper policies by directing aid inflow in more productive sectors. In forming these policies will help to offset the appreciation of currency problem and result into the positive economic growth.

Moreover, Burnside and Dollar (2000) found negative impact of foreign aid to economic growth for those countries with poor macroeconomic policies. These results, later criticized by Easterly et al (2003). They expanded the sample size for 1970-1997 and used the same model specification and the same definition of the variables used by Burnside and Dollar (2000). They argued that, there is no empirical evidence for good economic policies that as pre requisite for positive impact of aid on economic growth .Furthermore they argued that, the results were not robust for the alternative definitions of "aid", "growth" and "good policies".

The weakness of these studies is that, most of them have concentrated on cross section analysis and in this way they could not provide specific country policies. Furthermore, they did not consider standard econometric analysis of unit roots and co integration thus could results into spurious inference. In addition, Malik (2008) found that there is significant negative long run relationship between foreign aid and economic growth in five out of six counties. However, the found positive relationship in Togo. The review suggested those negative long run relationships that exist possibly due to poor government policies, aid volatility, and distortion of domestic saving.

#### b) Positive impact to economic growth

There were several studies that, supported the views that foreign aid has a positive relationship with the economic growth. These studies were Levy (1988), Gulati (1975), Gupta (1975) and Papanek (1973). Most of these studies used cross sectional analysis and single equations regressions. The studies reported that there is positive relationship between economic growth and foreign aid. Their argument relied on the concept that, foreign aid supplements the domestic savings, and reduces the constraints of foreign exchanges to developing countries. However, most of these studies also used cross section analysis, small sample. Moreover, they did not consider the time series properties of their data in their analysis, such as unit roots and Co integration tests. This could result into spurious regressions and unreliable inferences.

<sup>&</sup>lt;sup>1</sup> Dutch disease implies the situation where utilization of natural resources within a country or increase in foreign aid lead to appreciate domestic currency as results decline of manufacturing sectors due to expensive price of their domestic products .

On the other hand, Burnside and Dollar (2000) in a panel cross section study revealed that, the foreign aid can play positive role in the country with good macroeconomic policies. Examples of these policies are trade openness and monetary policies. Burnside and Dollar used interaction term of aid with good policies and found the significant and positive results for those countries having good macroeconomic policies. However, Easterly et al (2003) expanded sample data for 1970-1997 from the study of Burnside and Dollar (2000), argued that no empirical evidence for good economic policies as a prerequisite for the positive impact of aid on growth.

In contrast, in mid the 2000s several empirical literatures examined the relationship between foreign aid and growth using time series or panel for specific countries. For example, Hatemi and Irandoust (2005) using panel co integration for the period between 1974-1996. They assert that, foreign aid has positive significant effect in influencing the growth for all countries. These countries were Botswana, Ethiopia, Kenya, India, Sri Lanka, and Tanzania. On top of that, Burke and Estafahami (2006) found that, only one country supports the views of Burside and Dollar(2000) that aid has a positive impact of economic growth due to good macroeconomic policies.

On the other hand, they questioned the idea of good economic environment as the pre requisites' for the positive impact of foreign to for other sample's countries. These countries were, Thailand and Indonesia which termed by Burnside and Dollar as "good policies countries". Using simultaneous equations they found that Net official development aid (ODA) has insignificant effect on growth and did not displace domestic savings. These results were also supported by (Rajan and Subramanian, 2007; Roodman, 2007).

According to Asteriou (2009) using recently developed panel unit root in five South Asian countries, there is a positive impact of foreign aid to economic growth. On the other hand, Rutarou and Ueta (2009) supported the results of Asteriou that, aid had a positive impact of economic growth in Tanzania. On the other hand, Njoupognigni and Ndambendia (2011) in their study of 36 sub Saharan African countries by using dynamic panel data methods found that foreign aid and FDI have the positive impact of the economic growth. They suggested that, in these countries it is better to rely on domestic sources or internal factors rather than foreign capital inflows. These supports the results of Asteriou (2009), Rutarou and Ueta (2009), Hatemi and Irandoust (2005).

Moreover, Das and Choudhary (2011) by using both time series methods and panel Co integration methods for 1976-2008 in five south Asia countries. They have reported that, that there is long run positive relationship between aid and per capita income in Nepal, Sri Lanka, Bangladesh and Pakistan .This method has been used also by (Njoupougnigni and Ndambendia, 2011; Hatemi and Irandoust, 2005). These results were same as that of Njoupougnigni and Ndambendia (2011) and Hatemi and Irandoust (2005). However, their results are in contradiction with that of Malik (2008).

In addition to that, Sakyi (2011) despite using different methods in the study supported the results of Das and Choudhary (2011). Using ARDL test the study found that, foreign aid and trade openness have the both short run and long run positive impact relationship with economic growth. However, their interactions reduce this relationship and results into negative impact.

## c) Causal Relationship Between Foreign Aid And Economic Growth

Several empirical literatures investigated the causality relationship between foreign aid and economic growth. Bowles (1987) found a causality relationship between foreign aid and saving for ten countries out of 20 countries studied . The study concluded that, the causality between foreign aid and saving is not universal as it subjects to the proportions of aid from bilateral or multilateral relationship. He suggested that, bilateral aid influenced on political grounds. In contrast, multilateral aid is mostly provided on the basis of the needs of the recipient countries, and vary according to the earliest performance. The domestic saving depends on the aid inflow in some of the countries while in other countries the decline in the saving rate causes the aid inflow to increase (bidirectional in Greece and Paraguay). Therefore, the results do not confirm to the results of Griffin (1970) and Griffin and Enos (1970) or "dual gap" theories.

On the other hand, Dhakal et al (1996) used bivariate causality analysis for the four Asian countries and four African countries .They used time series data from 1960-1996, but found no causal relationship between foreign aid and economic growth. These results imply that, the increase in foreign aid cannot eliminate the constraints of the economic growth. Moreover, Burhop (2005) in the same year found little evidence to support the evidence of the Burnside and dollar. The study tested large samples of developing countries for 40 years and Wald VAR test. They found no causal relationship between foreign aid and economic growth except in Haiti

#### d) No impact on economic growth

Few studies found that, foreign aid had neither positive nor negative impact to economic growth. These studies revealed that, foreign aid stimulates domestic neither investment nor domestic saving. For example, Shabir and Mahmood (1992) found an insignificant relationship between foreign aid and economic growth in Pakistan. Moreover, Khan and Rahim (1993) found that aid does not directly have significant impact to the economic growth in Pakistan. In supporting this, Boone (1996) used panel data regressions and neo classical growth

models for 16 countries for 20 years period. The results showed that, aid cannot influence economic growth in standard growth models. The argument raised is that foreign aid only increased consumptions and not investment.

#### **3.0 CONCLUSION AND RECOMMENDATIONS**

Generally, the role of foreign aid to economic growth is still dynamic in developing countries. The major reasons for this difference, perhaps is due to the methods that have been used in making the analysis, different measurement, sample size difference, area of the research and data span. Specifically, for the case of foreign aid some studies founds that foreign aid has a directly positive impact of the economic growth. However, some studies empirically proved that good economic environment are main pre requisites to ensure the positive impact of foreign aid to the economic growth.

Furthermore, several studies have shown that, foreign aid has negative impact to the economic growth. Moreover, some of the studies found causality relationship whilst others found no causal relationship Most of studies in previous literature used cross country data and has been analyzed the relationship between foreign aid and economic growth in Harold Domar and Two gap theories .On top of that, most of the studies until 2000 have not considered causality relationship between foreign aid and economic growth in relation with export, FDI in multivariate framework.

Despite endogenous growth theory to show that foreign aid, FDI, trade in affecting economic growth, yet we have very few studies (if not exist) which analyze the impact of these three variables and their relationship with the economic growth. Most of African countries have been relied on foreign aid as major source of external finance

Generally, commonly used methods are panel methods that are mainly used for cross country analysis, panel co integration framework under Pedroni (1999), Toda and Yamamoto (1995) as the method of non causality test. ARDL bound test under Pesaran et al (2001) used for testing the co integration. Johansen and Juselius (1990) that mainly involve the use of Granger causality test and error Correction term. Moreover, these methods have been argued that, they face several limitations.

For examples, they don't give information of the single country, but only give the average in all cross observations. In panel and cross sectional studies, they use fewer data that can accelerate the business. On top of that most of time series studies rely mainly on bivaried analysis. The use of bivaried analysis has several weaknesses. It can cause the invalid inferences, faces the problem of mis-specification, and cannot make an analysis of interaction with more than one variable.

In general, the policy makers have to realize that role of foreign aid to economic growth is not guaranteed. The inflows of foreign aid has to be encouraged only if it has positive impact to economic growth, otherwise immediate correction has to take place in reducing the inflows of foreign aid. On other hand, to ensure sustainable role of foreign aid to economic growth, the government has to control inflations, enhance trade openness, control of corruptions and other economic misbehavior. A future study has to search empirical role of foreign in developing countries. The studies have to interact foreign aid with trade openness and FDI inflows. The use of time series analysis is highly required to investigate the individual impact of foreign aid to different developing countries.

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