FOREIGN AID AND DEVELOPMENT: WHAT CAN DEVELOPING NATIONS LEARN

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ABSTRACT

In the wake of the Arab spring revolutions voices within that region started to question foreign aid. While the loud voices are clear in the media, none provided a scientific rational of the effect of aid. This paper reviews the recent findings on the relationship between foreign aid and development. Findings indicate that despite conflicting empirical results on the nature of relationship that exists between aid and growth, foreign aid can achieve some development goals in absence of corruption, with good governance present in the recipient country, with the presence of sound economic policy and institutions. Findings also indicate that aid's impact may be larger the more donors coordinate among themselves. In addition, aid in the form of technical assistance can at times be of larger impact.

INTRODUCTION

Since the revolutions and regime changes took place in Egypt and Tunisia, offers of foreign aid made headline news. At the same time, some voices within the region started to renounce aid. In Egypt, an independent campaign called for Egyptian donations to match the sum of the annual U.S. aid Egypt is receiving. None of the objecting voices gave any scientific explanation for doubting the value of aid. This paper reviews recent literature on the relationship between aid and growth to unravel recent findings in the hope of making some solid recommendations about how aid should be viewed.

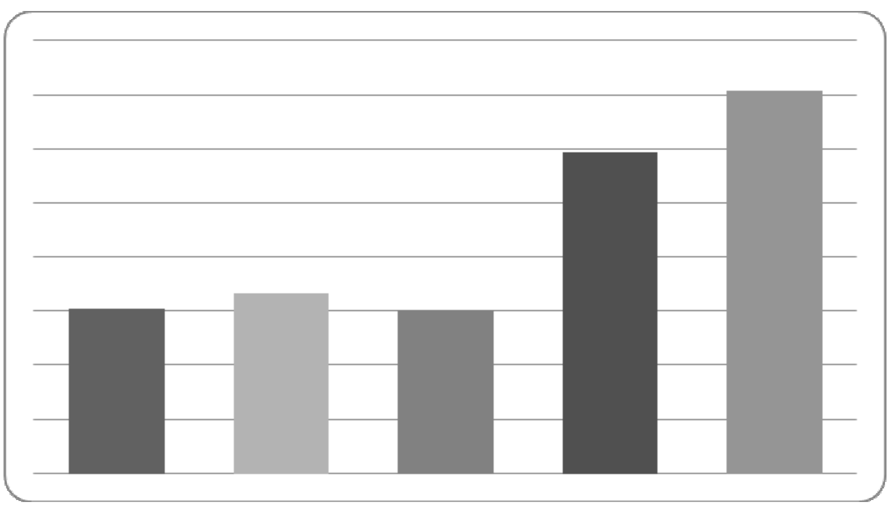
WHAT IS FOREIGN AID

There is no one agreed upon definition of foreign aid. The American Heritage Dictionary defines foreign aid as economic or military assistance offered by one nation to another. The Britanica Concise encyclopedia defines aid as transfer of capital, goods, or services from one country to another. Lancaster (2006) defines foreign aid as a voluntary transfer of public resources from a government to another government, NGO, or an international organization with at least 25% grant element with the objective of improving the human conditions in the country receiving the aid. The last definition is similar to that given by the Development Assistance committee of the Organization for Economic Cooperation and Development without the inclusion of the condition that the transfers are made from high income to low income countries, and including improving human conditions rather than the term development.

Foreign aid has many forms; it can be given in the form of capital transfers or in the form of technical assistance in consultation and training for civilian or military purposes. There are many reasons why governments give aid. Some aid is given for political reasons such as preserving peace. An example of that is the case of Egypt and Israel where the U.S. Secretary of State will have to annually declare that Egypt is committed and observing the peace treaty in order for the Congress to approve the yearly aid which is directed to military and civilian purposes. Other is given for specific development purposes whether increasing the capacity of certain industries, reducing poverty, or improving education or health care. Some is given to improve terms of trade and some can be given for humanitarian relief efforts in certain cases of emergency such as famine and natural disasters. While the political side of aid in many cases may be hard to investigate, the effect of aid in fulfilling its declared objective can be searched.

Prior to World War II the use of aid was rather scarce. However, it became obvious after the war that the United States should interfere to rebuild Europe, the political and economic dimensions of aid were apparent; a stable and productive Western Europe can stand against the spreading communist ideas and the Soviet efforts in this regard. Hogan (1987) provides a detailed description of the Marshall plan to rebuild Europe; $12 billion were funneled to 16 Western European nations to rebuild their economies in addition to fortify liberal economic policies. Through the years that followed, foreign aid became a popular policy tool of developed nations and its amounts increased dramatically. Figure one indicates that within the last twenty years, the total value of annual development assistance given increased from $60 billion to over $140 billion.

Figure 1: Official Development Assistance in Billions of $U.S.



Source: Compiled from OECD Aid Database

FOREIGN AID AND ECONOMIC GROWTH

Since foreign aid can be viewed as foreign capital early theories to explain its effect on growth resorted to traditional economic development theories and the role of capital stock and flows in development. Much of the early empirical research utilized framework offered by development economists such as Harod (1939), Domar (1946), Rostow (1960) and other variations of those models. The majority of work done assigns growth rate as the independent variable and aid as one of the dependent variables in addition to the traditional variables assigned in different development models and run regressions to evaluate the significance of the relationship between aid and growth. Research work from the 1970's, 80s and 90s have indicated conflicting results that varied from aid being positively linked to growth to negatively linked or insignificant. Griffin and Enos (1970) analyzed data from 12 countries that covered the years 1957-1964 and regressed average growth rate of GNP to the ratio of GNP to foreign aid to come up with a negative significance. In their attempt to explain it, they analyzed data from 32 developing nations between 1962 and 1964 and concluded that gross domestic savings as a percentage of GNP is inversely related to foreign savings as a percentage of GNP. That is foreign aid hinders domestic savings and hence negatively affects growth. Over (1975) expanded the data set and assumed foreign aid to be endogenous and came to a conclusion that is the opposite of Griffin and Enos; aid is positively linked to growth and can increase domestic savings. Mosley et al. (1987) argued that augmenting foreign aid into capital in the frame work of a simple Harrod-Domar model can be misleading. They argued that the impact of aid is not straightforward and that there are effects at three different levels to be considered; the direct effect aid allocation, the indirect effect on the spending pattern of the public sector of the recipient country, and the effect on the whole of government policy. They utilize a model that incorporates the three effects and simulates public sector behavior in a developing country where the government tries to use aid money to maximize its own welfare faced by the budget constraint and can take many actions of what to do with aid funds such as tax reduction, increasing productive and/or non-productive expenditures and others. Their empirical findings after analyzing data that cover from the late 1950's to the early 1980's for many developing countries indicate a non-significant relationship between aid and growth.

The 1990's have witnessed more research trying to explain the conflicting findings on the nature of the relationship between aid and growth. Bowen (1995) investigated both the direct and indirect effect of foreign aid on growth. Bowen Started from an initial model of growth where the annual GNP growth rate depends on domestic savings, foreign capital inflows, and annual growth rate of exports and expanded the model to incorporate the variations in the relationship between economic growth and its determinants according to the level of aid by adding aid to the parameters of the independent variables. Using a data base that covers 67 less developed countries between the period 1970 and 1988 Bowen's findings indicate that the aid-growth relationship is dramatically different across levels of development. This finding may explain the non-significant results on the aid-growth relationship when investigated using linear models; the negative and positive relationships at different income levels may cancel each other out. Bowen's findings indicate that aid has been given in response to recipient need, as indicated by per capita income level. Findings point out that in countries with a per capita income of less than $987 aid was substituted for domestic savings and those nations had lower economic growth where in countries with a per capita income level above $987, aid was positively correlated with growth. The positive correlation may have been because recipient governments reduced their switching behavior as income rose and hence allowing foreign aid to act as a complement to domestic capital formation instead of a substitute, or may have been because the effectiveness of other determinants of growth such as domestic investment or exports increased with the level of development.

Boone (1996) tried to relate the effectiveness of foreign aid programs to the political regime of recipient countries. He presented a model where poverty is caused or increased by distortionary policies introduced by politicians. His model is demonstrated a maximization problem where politicians want to maximize the use of distortionary income tax and foreign aid in financing public spending and transfers and consumers want to maximize their utility. The model was tested on data that covers around 97 developing nations from the period of 1971 to 1990. Boone's findings indicate that aid increased consumption and that higher consumption did not benefit the poor. His findings also indicate that aid had an insignificant impact on improvements in basic measures of human development such as infant mortality and primary schooling ratios. Boone's paper introduced political determinants of aid as a factor in explaining the aid-growth relationship. However, an argument can be made that some governments may be increasing consumption to dampen the effect of the economic reforms path that could have been chosen.

The World Bank (1998) issued a report in which it stated that aid is more effective when given to nations with sound policies. In addition, the report indicated that beyond a certain level, aid can cause negative effect. The involvement of the domestic economic policies role in using aid gave way to more research in this area. Burnisde and Dollar (2000) investigated whether the effect of aid on growth is conditional on economic policies and whether donor governments and agencies allocate more aid to countries with good economic policies. Using a neoclassical growth model Burnside and dollar allowed for economic policy variables to interact with aid. The model treats a gift of aid as an additional capital that should be positively linked with growth, however, if economic policies affected growth negatively then so would the aid. To define good policies Burnside and Dollar chose from the economic variables that are associated with growth; the budget surplus, the inflation rate, and index of openness of a country that was developed by Sachs and Warner (1995). They tested their model on data for 56 countries divided into six four- year time periods from 1970-1973 until 1990-1993. Their findings indicate that aid has a positive impact on growth in developing countries with good fiscal, monetary, and trade policies and little effect in the presence of poor policies. Good policies are ones that are themselves important for growth. In addition, their findings suggest that the quality of policy in the recipient country has only a small impact on the allocation of aid. Findings imply that aid would be more effective if it were conditioned on good economic policy. Another interesting finding of their work is that aid which is multilaterally managed was allocated in favor of good policy, where bilateral aid had a strong positive correlation with government consumption. That finding may explain why the impact of aid on growth may not be positive in some cases. The findings of Burnside and dollar spurred a lot of research that followed suit. Hansen and Tarp (2001) used similar model specification with the addition of more variables. They investigated the relationship between foreign aid and real GDP per capita growth as it emerges from simple augmentations of popular cross-country growth specifications. Their findings indicate that aid in all likelihood increases the growth rate, and contrary to the Burnside and Dollar the result is not conditional on good policy. They demonstrate that there exists a decreasing returns to aid, and that the estimated effectiveness of aid is very sensitive to the choice of estimator and the set of control variables. They point out that aid impacts growth via investment and hence when investment and human capital are controlled for they find no positive effect of aid. Dalgaard and Hansen (2001) used the same data set as Burnside and Dollar. They developed a neoclassical growth model where aid leads to growth even in economies where aid is consumed and demonstrated that in such model the interplay between good economic policy and aid is ambiguous. They argued that good policy may tend to reduce the growth effect of aid because they act as substitutes in the growth process. Their findings indicate that a more positive impact of aid on growth in good policy environments is not robust. They conclude that it is premature to apply policy selectivity rules in aid allocation and point out that applying the policy selectivity rule will increase returns to aid when returns are measured as the correlation between aid and growth in income per capita because good policy leads to higher growth.

More extensions of the Burnside and Dollar were introduced. Guillamont and Chauvet (2001) proposed that aid effects on growth are not necessarily positive but depend on specific conditions in each recipient country. They argued that aid effectiveness also depends on exogenous and mostly external environment factors such as the terms of trade trend, the real value of exports instability, climatic shocks, and others. Their findings indicate that aid seems to have accelerated growth only in the more vulnerable countries. That is, aid significantly dampened the negative effects of a bad environment or external shocks. They were not able to find that aid effectiveness (in growth terms) has been increased by a better government policy. They suggest that aid should be allocated to countries affected by poor environment or external shocks and also in countries where support for good policies are needed. Similar results were obtained by Collier and Dehn (2001) who incorporated export price shocks into the analysis of the effect of aid on growth. They introduced these large shocks into the Burnside and Dollar setup. Their findings indicate that the shocks are highly significant in reducing growth and as these shocks are included, the Burnside-Dollar results turns robust to choice of sample. They pointed out that the effects of negative shocks on growth can be decreased through increases in aid. They conclude that targeting aid to countries experiencing negative shocks may be more important for aid effectiveness and reduction of poverty than targeting aid to countries with good policies; however their findings show that donor countries usually do not follow this policy. Lensink and White (2001) challenged the World Bank (1998) report that aid can have negative returns after a certain threshold. Their regression set up followed that of Burnside and Dollar (2000) and included variables that reflect good policy. Their data pool had 138 countries covering the period between 1975 and 1995. Their findings showed some support for the argument that aid may have negative returns at a certain high level of inflows beyond that predicted by the World Bank. Their findings also point out that both inflation and terms of trade as signs of good policy were significantly correlated with the use of aid funds.

Feng (2001) indicated that oppressive regimes in developing nations may deter private investment. Isham et al. (1997) findings point out that oppressive regime can cause a decrease in the return on public investment. Wright (2008) noted that two third of aid recipient countries during the period 1960 - 2002 were authoritarian regimes. However, he observed that some of those regimes managed to use aid well such as Botswana and South Korea between 1961 and 1987, where for the same period Zaire and Kenya did not use it effectively. Wright focused on how a dictator's time horizon formulates his incentives over how to use aid. The time horizon reflects whether the authoritarian regime is stable and thinks it has a higher probability to stay in power or have a higher probability of losing power due to perceived threats. Wright argued that the predicted probability of authoritarian regime failure serves as the best proxy for measuring time horizons. Wrigh's logic is that authoritarian regimes use of aid can be affected by the time they perceive to last in power in three ways; the first affects all types of regimes and is the incentive to invest in public goods and the protection of property rights and so on if they perceive that they will hang on to power for a long time. However, if they perceive higher threats to their seats they tend to consume state resources in ways that can harm economic growth by resorting to oppression and paying off their political opponents, which in turn directs resources to consumption rather than investment and increase rent seeking behavior. The last incentive when they are facing a short time horizon is to secure personal wealth in fear of what to do after they lose power. Analyzing data from1961 to 2001, and using proxies for political risk from International Country Risk Guide and democracy measures based on the work of Przeworski et al. (2000) and Cheibub and Gandhi (2004), Wright concludes that in authoritarian regimes with a low probability of regime failure there is a robust positive relationship between aid and growth and the opposite with dictators with higher probabilities of losing power.

Rajan and Subramanian (2008) recognized that the flow of aid is influenced by a country's situation as it may go to a country experiencing a natural disaster which may show a negative correlation between aid and growth, or it can flow to a country that effectively used aid in the past, and since growth exists already there may be a positive correlation between aid and growth. They went to investigate and under one framework, the robustness of the relationship of aid and growth across time horizons; medium and long run, and over periods; 1960s through

1990s, the sources of aid; multilateral or bilateral, types of aid; economic, social, food, etc., the timing of impact of aid; short-term or long-term, data specifications; cross-section or panel, and samples chosen to investigate. Their control variables included initial income, initial life expectancy, a measure of institutional quality, a variable indicating quality of policies, a measure of geography that reflects weather and land fertility, an indicator of external shocks that captures average growth and the variability of a country's terms of trade, government consumption, and index of revolutions and other variables. Their findings show little evidence of a robust positive impact of aid on growth. In their cross-sectional analysis they find some evidence for a negative but non-significant relationship between aid and growth in the long run. They also obtain evidence of a positive relationship for the period between1980-2000 when countries with extreme variables within the sample are included. In addition, they find no evidence that aid works better in better policy or institutional or geographical environments, or that certain types of aid work better than others.

Kurt and Stephen (2009) argue that the aid-growth literature is conflicting because it does not differentiate between foreign aid as technical assistance and non-technical assistance. They also argue that there exists economies of scale that is associated with technical assistance aid and that its effectiveness may depend on how the level of aid is fragmented. To theoretically and empirically support their argument they construct a neoclassical growth model frame work, where technical assistance induces knowledge spillovers that improve the productive capabilities in the recipient country through human capital. This spillover is affected by the degree of fragmentation of technical aid. On the other side, non technical assistance is treated as a transfer of income that increases the available resources for consumption and investment. They empirically test their theoretical model and their findings point out that technical assistance was positively correlated with growth and the less the degree of fragmentation of aid donors the higher the impact on growth. The question of donor cooperation in giving aid was raised in the literature. Raechelle and Todd (2006) raised the question whether donors cooperatively fund foreign aid. They tested for the underlying allocation process for foreign aid commitments in its numerous forms, when these commitments are viewed as yielding public benefits. They theoretically derive a set of reduced-form equations for non-cooperative Nash-Cournot and cooperative Lindahl behavior in a setting where aid may provide purely public benefits to all potential donors along with donor-specific benefits. For countries that do not follow either behavior they tested alternative forms of bureaucratic-based decisions. They empirically test their model and conclude that there is no evidence of donor cooperation.

There is plenty of research in the literature that investigates the relationship between aid efficiency and good governance in the recipient countries. Winters (2010) reviewed different accountability relationships that exist in foreign aid projects among donors, governments, implementing agencies and end users. In addition, he reviewed existing empirical evidence in the literature that inquire the relationship between aid effectiveness, democracy and governance in the recipient countries. Winters points out to prevailing evidence that aid is more effective in countries with superior accountability institutions. That is, in countries where governments are more democratic and the rule of law is upheld, foreign aid is more likely to lead to economic growth and individual foreign aid projects are more likely to witness higher rates of return. Winters points out that aid projects that incorporate end user participation as direct accountability mechanism are more likely to be achieve their goals. Bourguignon amd Sundberg (2007) point out that that it is not surprising that cross-country evidence on aid effectiveness is weak and argue that this does not imply that all aid is ineffective, nor does it imply that little is known about how to make aid more effective. They stress the need to link aid to the development outcomes expected from it. They argue that such link would demonstrate three relationships that can be easily explored and where much is known; how funds are transferred from donors to policy makers, how policy makers can translate the funds to working policies, and how the policies shape the outcome. They argue that an aid model with those three links well examined, with donors aligned around the development strategy of the recipient, and aid allocation system that is ruled by good governance and based on results that well monitored will achieve its development goals.

CONCLUSIONS

This paper reviewed existing literature on the nature of the relationship between aid and growth. Findings indicate that there still exists a large degree of conflicting results about the nature of this relationship. While there may be more research pointing out to a more positive but somewhat insignificant relationship, much of the reason of such conflict may pertain to the different model specifications used and the statistical noise surrounding the process. Despite conflicting empirical results on the nature of relationship that exists between aid and growth, there is relatively high consensus that foreign aid can achieve some development goals in absence of corruption, with sound economic policy and institutions and when given to more stable governments. There is also evidence that aid's impact may be larger the more donors coordinate among themselves. In addition, recent literature points out that aid in the form of technical assistance can at times be of larger impact than non-technical aid.

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