Foreign Aid and Economic Development

Lawrence McMillan
Master of Science in Economics by the European Business School; Researcher for the Business Intelligence Research Centre of London
147 St. John Street, 2nd Floor, London, UK
Email: l_mcmillan2008@yahoo.com

Abstract

This literature review focuses on research studies that correlate the effects of aid on the macroeconomic development of countries in the third world. I undertake the review to assess whether researchers have strongly established, based on empirical evidence, that there is any link, whether positive or negative, between aid and economic growth. The Introduction section provides a more detailed rationale for this review. In the subsequent sections, I provide a short description of the econometric models commonly used by researchers in establishing the relationship between aid and growth. I also discuss the body of research that I have looked into, their basic features, general conclusions and some key criticisms against them. I devote a separate section identifying the gaps I observed in the current research and finally conclude that although there is a wealth of research done on the impact of foreign aid on growth, these appear to be inconclusive due to methodological problems. Key words: Economics, Foreign Aid; Economic Development.

Since its birth right after World War II when the United States of America (USA) released billions of money to assist Europe (Sogge, 2002) in reconstructing the latter’s economy, foreign aid has been assumed to directly induce or at least influence economic development in a recipient country. Most donor rhetoric perpetuates this association (World Bank, 1998). Many studies have been undertaken to try to assess if aid actually fulfils its main objective, that is, to promote macroeconomic development in developing countries. After half a century characterized by some serious changes in world economy and politics (i.e. breakdown of Communism, globalization, terrorism), the link between foreign aid and economic growth remains at the center of debates on aid effectiveness.

The purpose of this literature review is to survey the available body of research done on the effectiveness of foreign aid as an agent for economic development of recipient countries, most of which come from the third world countries. In particular, this review aims to assess how strong the empirical evidence is that aid has been an effective agent for economic growth. In so doing, I hope to be able to identify areas where future research is required.

In reviewing the literature, I will attempt to provide a critical analysis of relevant research papers and articles. I will try to assess the merits or shortcomings of the research papers without leaning towards a particular perspective, for example economic structuralism or economic internationalism. Although I cannot guarantee complete objectivity, I will make an effort to be academic in summarizing, identifying issues and exposing weaknesses or gaps of each piece of literature.

Extant literature on foreign aid is immense, hence I choose to focus on empirical research correlating aid with economic growth. Even with this delimitation, there is a wealth of information available and I admit a comprehensive review is totally not possible. Rather, I have chosen materials that appear most frequently in the total body of aid-growth literature. However, literature that primarily aim to establish the effect of foreign aid on political systems, governance and human rights in the recipient countries are not discussed in this review.

As in any debate, there have been two general but contending schools of thought with regard to the effectiveness of aid in spurring economic growth in the third world. Critics of foreign aid argue that it has had no effect on and even hurts the third world economies (negative aid-growth correlation). On the other hand, Supporters of foreign aid espouse that on average or in most cases, it has been an effective development tool (positive aid-growth correlation). A recent research trend has however emerged, which I see as a third school of thought. Researchers of this school qualify that aid can either be effective or ineffective depending on certain donor conditions and country circumstances (conditional aid-growth correlation). I have organized this literature review around these three groupings, though I will briefly discuss the econometric
Econometric Models Used in the Literature

Following are the two prevalent models utilized by analysts of the aid-growth relationship. These models are econometric but can be expounded in simplistic terms, which I endeavour to do in this section.

The Two Gap Model

The Gap Model popularized by Chenery and Strout (1966) ages ago is still in use in projecting the macroeconomic impact of foreign aid. This model has two components hence it is also commonly referred to as the Two-Gap Model. The first component is the relationship between investment and growth, wherein the level of growth is assumed to be dependent on the level of investment. The second component is the relationship between savings, which is assumed as a critical factor for investment expansion, and growth. With this model, analysts are able to determine the necessary level of investment to achieve a desired level of economic growth. Gaps occur if the investment is below the desired level and these gaps can be ascribed as either a savings gap or as a foreign exchange (or trade) gap. If a country is unable to fill this gap through imports, exports or production, foreign aid inflows or foreign capital inflows are needed so that it can grow more rapidly than its internal resources would otherwise allow. Hence an inflow of foreign aid should move a country’s economy upwards.

Of course this model is not without criticism, most of which are questioning the assumptions of the model. Harms and Lutz (2004) point out that the gap model assumes that investment is the only factor in increasing output, whereas there are other determinants of growth (i.e. education, research and development). They also point out that not all aid is invested by the recipient country. Aid, as is any type of money flow, is fungible. It can be used for any purpose, and hence, aid cannot be assumed to all go into investment. A recipient country will naturally use part of the aid money for its consumption (government expenditures other than capital outlay) and part for investment. Harms and Lutz also recognize that in reality, aid availability is an incentive for corrupt administrations to intentionally lower their domestic investment efforts so that they get a continuous stream of aid money from donors. Despite these criticisms, Devarajan, et al. (2002, p. 17) defend the two gap model saying that “it is a transparent and flexible framework for examining, for a large number of countries, the aid requirements of achieving the poverty goal”. Most of the World Bank’s research studies on foreign aid and growth rely on the two gap model.

The Poverty Trap Model

The poverty trap model is actually more of a theoretical framework than an econometric one. The earliest poverty trap model was used by Nelson (1956). Unlike the gap model which sees foreign aid as a way to raise investment and thus influence growth, this model assumes that growth is hampered by poverty traps which can come from various factors like low production capacity, high population, weak savings. Regardless of the causes, poverty traps are seen to compromise growth. Foreign aid, which is a temporary injection of capital, is assumed to help the economy get out of the poverty trap and take-off towards growth. Nelson sums it up nicely when he says that “increases in income and capital achieved through funds obtained from abroad can help to free an economy from the low-level equilibrium trap” (p. 904).

Unlike the gap model which necessarily requires the continuous and incremental inflow of aid into a recipient country, the poverty trap model requires a one time infusion of aid to spur economic growth in developing countries. But like the gap model, this model too has its limitations. Harms and Lutz state that it takes more than an infusion of aid for a country to get out of poverty and achieve economic growth. They say that the role of good governance and private capital is downplayed in the poverty trap model and that aid at best only provides a brief cure to poverty.

Anti Aid Literature

Generally speaking, economists and researchers who contribute to the anti aid literature espouse that aid has no affect on growth and that it may actually undermine it. As early as the 1950s, questions on the effect of aid on economic growth have abounded. Economists like Friedman (1958) and Bauer (1972) called for an end in aid, arguing that it is not a necessary requirement for the economic growth of a country. Both Friedman and Bauer assert that foreign assistance to governments is dangerous because it increases the power of the elite in the recipient
governments, leads to corruption and hinders economic growth. In particular, Bauer noted that aid discourages the growth of private sector investments, encourages public sector-led growth (since aid is in fact money added to government coffers) thereby limiting growth and inhibiting development.

Although Bauer has been a leading critic of foreign aid, his ideas are grounded on very little empirical research and this is the main critique against his published writings. However, the lack of empirical evidence in Bauer’s was made up for by other economists in the 1970s. Griffin and Enos (1970) were among the first to publish empirical research questioning aid effectiveness. They found, through simple correlation that there is a negative relationship between aid and growth in twenty seven (27) countries.

The pessimistic view of the aid pervaded as economists observed the persistence of poverty in developing countries. Throughout his life, Bauer (1991, p. 45) maintained his stance that aid is bad for development, “because aid accrues to the government, increases the government’s resources, patronage, and power in relation to the rest of society. The resulting politicisation of life enhances the hold of governments over their subjects and increases the stakes in the struggle for power. This result in turn encourages or even forces people to divert attention, energy, and resources from productive economic activities to concern with the outcome of political and administrative processes and decisions”.

These criticisms of foreign aid dates back four decades, hence I initially thought that such arguments would have been passé. However, I found that younger economists and new research still echo the old arguments. Other studies that show the lack of connection between lack of connection between aid and economic growth include Mosley (1980), Mosley et. al. (1987), Dowling and Hiemenz (1982), Boone (1994) and Kanbur (2000). These researchers converge in saying that aid fails to induce growth. They likewise suggest a variety of reason why.

Like Bauer, these researchers claim that aid is most often misused or corrupted by recipient governments. Kanbur, in particular, reports that aid fails to induce growth because of corruption, poor administration, tying up of aid with precious resources in recipient countries and questionable aid allocation decisions by donors. Another argument that these researchers espouse is that aid is a disincentive for the private sector to invest or to improve productivity. They cite the “Dutch disease” where aid induces the recipient country’s currency to appreciate and weakens the profitability of the production of export goods. For example, food aid causes local farm output prices to decline, thus reducing local farmers’ income. They also argue that aid flows can reduce both private savings and government savings since aid impacts on interest rates and on revenues. These researchers also surmise that aid can help keep corrupt governments with poor economic policies and management capabilities in power, hence deterring growth and development.

Not all of these researchers generalize that aid is bad, though. Mosley, et. al. admit that there have been some individual aid projects that achieved success. Still, he posits the idea of a “micro-macro paradox”, that the success of some individual aid projects cannot make up for the negative overall impact of aid on growth and development. While these studies have been influential, there are doubts as to their validity and quality. For one, how they measured the effect of aid on growth is unclear. Hence the attribution of negative growth with aid is also questionable, especially since a country’s poor economic performance may be caused by a host of economic, social and political factors.

Because Boone (1996) examines the effect of aid on a variety of macroeconomic variables and several development indicators, his study is one of the most cited proofs that there is no significant, positive influence of aid inflows on investment and growth in recipient countries. However, some critics accuse that Boone assumed only a simple linear relationship between aid and growth, ignored potential endogeneity or other factors that may have direct or indirect effects on growth, and used an unconventional set of co-regressors (Clemens et. al., 2004).

Boone, however did not directly estimate the impact of aid on growth but used indicators such as consumption and investment as variables. He also tested the effect of aid on private and government consumption. Boone used a lot of other variables (i.e. the black market premium, indirect taxes and the inflation tax, infant mortality, life expectancy, and primary schooling). The sample comprises 96 countries and data are averages within the 1971-90 period. Basically, Boone’s study shows that aid has no significant effect on any of the indicators frequently used to justify aid programs. Aid does not increase public investment, it does not affect taxation in developing countries, it does not lower infant child mortality and it does not raise life expectancy. Aid does, however, increase public consumption which can be construed to show that governments with access to aid
money tend to spend more. Boone (p. 322) sums up his study nicely, saying that “aid does not promote economic development for two reasons: poverty is not caused by capital shortage, and it is not optimal for politicians to adjust distortionary policies when they receive aid flows.”

A recent and also notable contribution to the anti aid literature is the one done by Easterly (1999 and 2001). This study strengthened critics’ skepticism about the effect of aid on growth. This study implies that aid money has been wasted as the predicted impact of aid (using the “two-gap” model) on output growth does not match the actual performance of a large sample of developing countries. Easterly found that aid had very little and in some cases no impact at all on the performance of majority of the individual countries he examined. In Easterly’s book (2001), he presents figures for Zambia, where its actual growth performance falls way below the predicted aid-induced growth.

As visualized in Easterly’s graphs of the Zambian case, there is a striking discrepancy or “gap” between the predicted growth line and the actual growth line. This has provided the strongest argument against a positive aid-growth relationship. Evident in Easterly’s study is that somewhere along the dynamics of aid provision and aid utilization in Zambia, not all aid went into investment or that not all aid-led investment were translated into economic growth. Other country examples include Congo, Haiti, Papua New Guinea and Somalia, which have been observed as not growing despite receiving sizeable foreign assistance. A large percent of the population in Africa and South Asia also remain impoverished despite being recipients of huge aid flows.

Pro Aid Literature

Literature reviewed under this section carry more or less the tune that there is a positive correlation between aid and growth, though there are some country exemptions. Researchers under this category maintain that the claims of the anti-aid school of thought are only partially correct, that aid can spur growth but its effectiveness decreases as the level of aid infused into the economy decreases. In other words, aid has diminishing returns.

Some early studies like Papenek (1973) and Levy (1988) found that aid had a positive impact on growth, hence sparking the debate between among economists and researchers. These analysts believed that aid increases growth by augmenting savings, financing investments, and adding to the capital stock. They argue that aid also helps increase productivity, especially aid in health or education programs. They also consider the transfer of knowledge and technology from rich countries to poor countries as a positive effect. Like the early anti-aid literature, these claims were barely substantiated with empirical research. That there is an absolute positive correlation between aid and growth was more a belief than an actual fact since research at this time was focused on testing a linear relationship between aid and growth.

Sometime in the 1990s, researchers tested the diminishing returns hypothesis, that aid does spur growth but only up to a certain extent. Such studies include Durbarry et al. (1998), Dalgaard and Hansen (2000), Hadjimichael, et. al. (1995), Hansen and Tarp (2000 and 2001), Lensink and White (2001) and Dalgaard, et.al. (2004). These studies say that although aid has no absolute positive relationship with growth, there is evidence that the higher aid flows are, the more rapid growth is. Stiglitz (2002) and Stern (2002) have likewise argued that aid may have failed in some cases but it has undoubtedly been supportive of growth in some countries and prevented decline in other countries.

In support of their thesis, most of the above researchers identified successful aid recipients like Korea, Taiwan, Indonesia, Uganda and Mozambique and to specific programs like the aid-financed campaign against river blindness and oral rehydration therapy. They also argue that ever since the concept of aid for growth and development in the third world was introduced after the second world war, there has been significant improvement in the poverty, health and education indicators in many countries.

However, I think that these claims (i.e the growth of countries and the improvement of poverty indicators are caused / partially caused by aid) still need to be substantiated. For one, the growth and development of a particular country cannot be directly attributed to the inflow of aid. For another, data on aid is most often hard to isolate, unless one is evaluating a specific project. The data on official development assistance (ODA) which economists most commonly use in measuring the impact of aid on growth is an aggregate and may not be representative of the actual aid money that is brought into a country. Economists are still in search of a measure that firmly and exclusively establishes the link between aid and growth. One analyst, Roodman (2003), conducted sensitivity analyses on some of these studies and only the modelling of Dalgaard, et.al. and Hansen and Tarp turned out to be robust.

I found that Hansen and Tarp (2000) provides a summary of about thirty (30) studies published between 1968 and 1998. Individually, these studies estimate the relationship between aid and investment growth, albeit...
with less sophisticated econometric modelling methods and smaller data sets. Hansen and Tarp proceeded to aggregate the results of these studies, in other words, they conducted a meta-analysis. The results of the meta analysis strengthen the claim that foreign aid raises the level of investment in recipient countries and Hansen and Tarp’s study is frequently referred to in the newer studies as well.

A newer study by Hansen and Tarp (2001) used newer data from fifty six (56) countries from 1974 to 1993. Similar to this study is an earlier one conducted by Feyzioglu et al. (1998) who used data from thirty eight (38) countries within the period from 1971 to 1990. Both assessed the effect of effect of aid on investment and both found a positive relationship.

Qualified View

Probably because the two camps of aid researchers above cannot generalize that aid has absolutely no effect on growth and vice versa, other researchers are taking a different approach. Instead of ascertaining whether aid has a positive or negative relationship with growth, they endeavor to see where and in what circumstances can foreign have a positive or negative impact on growth. I believe this is a more “enlightened” approach to the aid-growth analysis. As apparent from the anti-aid and pro-aid literature, the effectiveness or ineffectiveness of foreign aid in spurring growth is on a case to case basis. It is therefore rational to identify the key factors that cause aid to work or not work for growth. The studies under this category may be further grouped into those that identify country specific factors and those that point out donor specific characteristics that provide conducive environment for aid to spur growth.

A number of research point out that in most circumstances, foreign aid worked wonders in countries with good policies and strong institutions. One such study was done by Isham, Kaufmann, and Pritchett (1995). In an effort to find out which circumstances are conducive for aid-induced growth, Isham, Kaufmann and Pritchett, using World Bank data, were able to link good performance of aid-financed projects in a certain country to that country’s policies on civil liberty. Somehow, they found that there is a statistical and possibly (they say) a causal link between these two variables. Apparently, aid projects in countries that practice the best civil liberties have a higher economic rate of return than those in countries with poorer civil liberty systems. Interestingly, this study found that the type of government (i.e. authoritarian, democratic) has no effect on aid project performance.

One of the most popular studies providing evidence that aid has a positive effect on growth depending on the political-economic environment is Burnside and Dollar (2000). In a nutshell, Burnside and Dollar stipulates that aid encourages growth in countries with good policies. In this case, a country has good policy environment if there is low inflation, low budget deficit, and no protectionism meaning trade is relatively open. Statistical regression is the main method used by Burnside and Dollar to arrive at a composite variable that reflects the above criteria for a good policy environment. Using standard growth regression, Burnside and Dollar compared the interaction of aid (in percent of gross national product) with the policy variable and concluded that “the impact of aid is greater in a good policy environment than in a poor policy environment” (p. 859) and further suggested that “making aid more systematically conditional on the quality of policies would likely increase its impact on developing country growth” (p. 864). This study gained favour from aid regime supporters because it explains why aid has supported growth in several countries (Korea, Botswana, Indonesia, Mozambique and Uganda) while at the same time not influencing growth in others (Haiti, Liberia, Zaire and the Philippines). Another study done by Dollar in collaboration with Collier (2001) further substantiates the Burnside and Dollar findings. They find that additional aid of about one percent of gross domestic product increases, on average, the rate of economic growth by about 0.6 percent in countries with good policies, 0.4 percent in countries with average policies, and 0.2 percent in countries with poor policies.

Hence, the Burnside and Dollar study has largely influenced donor policies on aid. Their findings are consistent with donor claims that individual aid projects do impact on growth positively. This study also explains the “macro-micro paradox”. Hence, donors like the World Bank are drawing on this study in rethinking the way they allocate aid and assess aid effectiveness. The main thesis of one of World Bank’s policy research reports in 1998, for example, maintains that “money matters in a good policy environment” (p.28). The implication of this trend in the aid regime is that donors, in the near future, are more likely to allocate more aid to countries with good policies although this is yet to be seen.

After the 2000 study of Burnside and Dollar, other researchers followed suit and studied the interaction between aid and other country specific variables that may possibly explain the conditional relationship between aid and growth. Collier and Dehn (2001) linked aid effectiveness with the actual occurrence of external shocks (i.e. export price
Observed Gaps in Existing Research

There is a wealth of information dealing with foreign aid and growth and as apparent from the literature I have reviewed, there is no consensus at all on whether aid can indeed fuel growth at the macroeconomic level. Statistical and economic analysts, although employing identical or at least similar models of analysis, have arrived at different conclusions. To some, the impact of foreign aid on macroeconomic growth is negative, to some it is positive, and to some it is dependent on country-specific conditions. Furthermore, the methods used in each study have been subjected to sensitivity analyses and have been found lacking in one way or another. Evidently, a method or model of analysis has yet to be perfected in assessing the aid-growth correlation. I believe this is an area where economists can further delve into. The major challenge here is to develop a model that is sensitive enough to capture all the nuances of the aid-growth relationship, one that more or less takes into consideration the possible factors that affect this relationship (not just savings and investment as in the two gap model). Or economists can finetune the existing ones to make their results more robust and hence less misleading.

I have also observed that in the studies I have reviewed, the time factor was rarely mentioned. Assuming that we accept the traditional growth theory that aid increases investment and investment produces growth, it will still take a lot of time before we see the impact of the former on the latter. Hence, in assessing aid and its effects on growth, the time lag needs to be factored in as a variable. Interestingly, most researchers are silent about this time factor in their analyses. Aside from the time factor, the treatment of aid in aggregate terms (researchers use macro ODA data) may not be ideal because there are different types of aid which form part of the aggregate data but are not actually directed towards growth. Hence, using muddled ODA data in analysing the impact of aid on growth may also muddle the results. Researchers still need to find a way to isolate data on aid that is intended solely for economic growth.

The studies I have reviewed all do cross country regressions as they try to establish the aid-growth causality, yet come up with different conclusions. Most of them work on the same data sets over the same period of time (at least the recent studies), but still come up with conflicting results. The problem, I believe, is in the attempt to generalize the effectiveness of aid across all countries, an attempt to globalize the benefits of aid. In doing so, researchers neglect to consider that each country is differently situated, differently governed and differently structured. Hence the macro approach or generalizing that foreign aid has a positive (or negative) effect on growth should not be the way to go in doing research on the aid-growth relationship.

The recent research trend (the qualified views) which attempt to identify country specific factors that allow aid to be effective, I believe is a more reasonable approach to aid and economic growth. Most researchers are now delving into this matter at present but the country specific factors that have been identified that facilitate aid-induced growth still generate debate. More research is necessary to firmly establish the link between a good policy environment and aid-induced growth (Burnside and Dollar’s thesis). Since this type of research looks into country specific characteristics, I believe that country case studies is the way to go.

While country specific factors are being studied, I think it is also wise to study donor specific characteristics that could have an influence in inhibiting or facilitating aid-induced growth. After all, the foreign aid system is an interplay between a country and a donor. I have not come across any study that does this and I believe this is where future research should be focused on. Donor policies, practices and systems in providing aid need to be examined thoroughly. Donor procedures in aid provision could be one of the reasons why aid has not induced growth in some developing countries.

Conclusion

In this review, I have shown that despite the vast literature linking foreign aid and economic growth, there is yet no conclusive evidence that these two are positively (or negatively) correlated. This is basically due to the weaknesses of the models being used to assess this relationship. Most of the pro-aid and anti-aid studies
outlined above use either the two-gap model or the poverty trap model and deal with more or less the same data sets but still arrive at different conclusions.

The basic fault in the studies, I believe, is the attempt to generalize the effect of aid on growth across all countries. Because each country has varying features, and growth is affected by other variables, which the models cannot possibly incorporate, most studies, both under the anti-aid and the pro-aid literature, have been found lacking in merit.

Recent research, however, are moving towards identifying country specific factors responsible for the success or failure of aid in promoting growth. I believe this research trend is on the right track and where future research should concentrate on. It would also be prudent to study donor specific characteristics that possibly facilitate or hinder aid effectiveness in promoting growth, an area where there is yet very little research on.

References


