ON THE LINK BETWEEN FOREIGN AID AND POVERTY REDUCTION IN DEVELOPING COUNTRIES

Edmore MAHEMBE12*

Prof Nicholas M. ODHIAMBO

Abstract
This article explores the theoretical link and transmission mechanism through which official development assistance (ODA) or foreign aid affects poverty. The study also presents some major debates on the effectiveness of foreign aid on development in general and poverty reduction in particular. The main findings from this exploratory study suggest that there is no generally accepted economic theory upon which foreign aid allocation is based. Several theories have been advanced, but most of them have been heavily criticized. As a result, there are two distinct and extreme lines of thoughts: those who believe that foreign aid can contribute to a virtuous circle of economic growth and poverty reduction against the other group, which contends that foreign aid leads to a vicious cycle of poverty and stunted development. Finally, a third group assumes that once we distinguish channels through which foreign aid affects development, we may notice several degrees of positive impact on development and diminution of poverty, depending on the choice of channel, the recipient country features and the domestic economic policies.

Keywords: Aid effectiveness; developing countries; foreign aid; poverty reduction

JEL Codes: F35 foreign aid, I32 measurement and analysis of poverty, O47 empirical studies of economic growth.

1. Introduction

Total annual ODA reached US$170.32 billion per year in 2015 (OECD, 2017). By 2013 it was estimated that total foreign aid since 1960 amounted to US$4.7 trillion at 2013 prices (Ravallion, 2016, p. 518). As a result of these volumes, foreign aid has attracted an unprecedented amount of attention from politicians, scholars, media and even celebrities (Easterly, 2008; Moyo, 2009). This massive attention also caused huge and polarizing debates on the effectiveness of foreign aid in delivering on the developmental goals (sustained economic growth and poverty reduction), with poverty reduction emerging as an explicit objective since the introduction of the Millennium Development Goals (MDGs) (Sachs, 2005; Ravallion, 2016). In actuality, the first goal of the MDG was to halve the global “US$1 a day” poverty rate by 2015. Furthermore, the recently promulgated Sustainable Development Goals (SDGs) envision a world of ‘no poverty’.

Despite this noble objective of eradicating poverty, huge debates have been raging since the 1970s on whether ODA has been or is an effective tool to reduce poverty in developing countries. Many scholars and decision makers have been raising the question; ‘Does aid work?’ The answer to this seemingly easy question has led to aid being labelled...
‘controversial’ (Glennie & Sumner, 2014) and ‘bipolar’ (Easterly, 2008). On one side of the debate, there are strong advocates for aid who argue that aid is the most effective weapons in the war against poverty and helps to reduce poverty by increasing economic growth, improving governance and increasing access to public services (Easterly, 2008, p. 1). Gates and Gates (2014) argues that “foreign aid is ... a phenomenal investment. Foreign aid does not simply save lives; it also lays the groundwork for lasting, long-term economic progress”\(^3\). On the other side of the debate are equally strong anti-foreign aid sentiments. Two of the most quoted critics are Moyo (2009, p. 28) who argue that aid “perpetuates the cycle of poverty and derails sustainable economic development”, and Deaton (2013, p. 272), who states that “giving more aid than we currently give will not better the situation”.

The main objective of this study is to highlight some of the main debates on the effectiveness of foreign aid on poverty reduction. The paper is structured as follows: section 2 gives a detailed discussion on the theoretical link between foreign aid and poverty, and explains methods of foreign aid allocation; section 3 presents some possible transmission channels through which foreign aid affects poverty; section 4 highlights the main debates on effectiveness of foreign aid from both empirical and theoretical literature. Section 5 concludes the article, with a summary of findings and a call for further research.

2. **Theoretical Link between Foreign Aid and Poverty and Aid Allocation**

The study of foreign aid by economists began in the 1950s, though aid was still a fairly new phenomenon, having been officially formalised in 1947. Earlier theorists suggest that foreign aid provides the necessary capital to boost development countries into self-sustaining economic growth (Nurske, 1953; Lewis, 1954). McGillivray et al. (2006) noted that there was no empirical research assessing the impact of foreign aid in the 1950s. This section deliberates the major development economics theories which have been used to justify the importance of aid for development. Some of these theories were also used, in practice, to estimate the total amounts of foreign aid required (aid allocation) and evaluate the effectiveness of aid.

2.1. **Vicious and virtuous cycles**

Some development theorists such as Rosenstein-Rodan (1943), Murphy et al. (1993), and Galor and Zeira (1993) started by investigating the reason some poor countries were failing to grow and why poverty seemed to be self-reinforcing (Schaffner, 2014). It was argued that underdevelopment and poverty were perpetuated by one or more ‘vicious circles’ which had the effect of preventing growth and confining the economy to a low-income or ‘poverty traps’ (Clunies-Ross et al., 2009, p. 109). On the other hand, ‘virtuous circles’ were thought to be opposing forces, which promote growth by setting into motion self-reinforcing income-raising systems that function through ‘circular and cumulative causation’ (Myrdal, 1957; Fujita, 2004; Perry, et al., 2006). According to Clunies-Ross et al. (2009, p. 109) “a typical vicious circle would see initial low productivity levels leading to low per capita income levels ... places a very low ceiling on attainable levels of savings – which, in turn, rule out the new capital investment needed to improve productivity. The economy is stuck in (a) low-productivity and low-income

\[^{3}\text{Also quoted by Ravallion (2016, p. 519)}\]
trap”. Thus, the ‘vicious and virtuous cycles’ theory can be termed the “poverty trap model” (Murphy, et al., 1989). This theory suggests that there is a wide range of overlapping vicious circles, which frustrate attempts by the poor to climb out of poverty, and thereby impair national growth performance (Clunies-Ross et al., 2009, p. 110). It is further argued that the consequences of poverty may inhibit people from breaking out of it. Many development economists then argued for a “special effort to push the economy over a threshold into a region where sustained increase in per capita incomes is possible” (Clunies-Ross et al., 2009, p. 111). According to Solow (1970), there was a need for “a major burst of investment [to] lift the system into a self-generating expansion of income and capital per head”.

Increasing the rate of investment was therefore suggested as the solution for spurring growth and breaking the poverty trap. It was further argued that developing countries needed a ‘big push’ to break the constraints of the low-level trap (Rosenstein-Rodan, 1943; Clunies-Ross et al., 2009). It was also further argued that the efforts to promote growth will be most successful if accompanied by simultaneous attempts to reduce poverty and improve income distribution. Foreign aid would provide the much-needed increase in investment. The main argument was that foreign aid would “jump-start economic growth, and initiates a virtuous cycle whereby investment generates income and thus raises the economic return to further investment” (Shleifer, 2009, p. 381). See also Roser and Ortiz-Ospina (2017) and Niyoncuru (2016) for detailed discussions on the the evolution of poverty in the world.

2.2. Stages of economic growth theory
The term ‘stages of economic growth theory’ is mainly associated with Rostow (1960; 1990). The theory states that all countries pass through a series of ‘stages’ as they develop. The initial stage is the traditional society, which is characterized by lower economic growth rates with more than 75 percent of the population involved in agricultural activities. The second stage is termed transitional stage, characterized by increased efficiency of agriculture and general modernisation of the economy. The third and more critical stage in the development process is ‘take-off’. The take-off is assumed to be a result of a sharp increase in the level of savings and investment, the availability of these funds to entrepreneurs, and the adoption of modern production technologies (Clunies-Ross et al., 2009, pp. 116-117). The fourth and fifth (and final) stages are ‘drive to maturing’ and high mass consumption, respectively. This theory was, for some time, widely accepted as the ‘road map’ of the development process for poor countries (Clunies-Ross et al., 2009) and the justification for foreign aid to help poor countries take off. According to Easterly (2006, pp. 24-25), Rostow (1960) estimated that “an increase of $4 billion in external aid would be required to lift all of Asia, the Middle East, Africa, and Latin America into regular growth, at an increase of per capita income say, 1.5% per annum”.

2.3. Harrod-Domar model and gap models
According to Easterly (1997), the most widely applied model by development economists and aid policy makers to determine the amounts of aid to be allocated to development countries is the Harrod-Domar model. This model is a product of an extension of the Keynesian analysis of the economic growth model by Harrod (1939; 1948) and a similar

---

As quoted from Clunies-Ross et al. (2009, p. 112).

According to Clunies-Ross, et al. (2009) this could be from around 5% to well over 10% of GNI.
but independent study by Domar (1946). The Harrod-Domar equation or relationship is illustrated in Equation 1.

\[ g = S f_0 \]  

[1]

where \( g \) is the rate of growth of income (output) in the economy, \( S \) is the savings ratio or rate of savings (which is assumed to be equivalent to available savings), and \( f_0 \) is the capital-output ratio.

The main assumptions of the model are that there is an excess supply of labour in the economy, economic growth is constrained only by the availability and productivity of capital, and that the availability of capital (level of investment) is determined by the level of savings (McGillivray et al., 2006, p. 1033). Although it was not the original intention of the creators of the Harrod-Domar model, development economists used the Harrod-Domar relationship to estimate the savings and investment requirements for specific rates of economic growth (Clunies-Ross et al., 2009). For example, once the capital-output ratio was estimated accurately, it would have been possible to predict the growth rate given the current savings rate. Equally well, the savings rate to achieve a targeted growth rate could be estimated. Given the fact that capital-output ratio (\( f_0 \)) was assumed to be constant, the main policy implication was that the higher the savings (investment ratio), the higher the growth rate (Hussain, 2001).

The implications for foreign aid allocation were that, if the savings rate is too low (which has been the case for most developing countries) given the preferred rate of economic growth, then there is a ‘financing gap’ which needs to be filled to achieve the desired rate of growth\(^6\). The total required investment was compared with available domestic savings to determine the investment gap and the level of foreign resources that will be required to fill the finance gap. Foreign aid could be used to ease the savings constraint, increase the level of available investment, thereby boosting the rate of growth and ultimately poverty reduction (McGillivray et al., 2006).

Chenery and Bruno (1962) and Chenery and Strout (1966) extended the Harrod-Domar model from the original ‘savings-investment gap’ to include the ‘foreign exchange gap’. It became known as the ‘two-gap or dual gap model’. The foreign exchange gap was premised on the notion that in order for the developing economies to grow at an acceptable rate, there is a need for importation of significant quantities of capital goods and other essential inputs for production (McGillivray et al., 2006). It was further argued that developing countries do not have export earnings required to acquire these capital goods for investment (McGillivray et al., 2006). Even with enough funds to finance the investment gap, the foreign exchange gap was argued to be ‘binding’ and could retard the growth rates. An important assumption for this two-gap model was that local savings could not easily be turned into foreign exchange, at least in the short run. Thus, foreign aid would play a dual role: augmenting the amount of resources available for investment and providing the much-needed foreign exchange. According to Hussain (2001, p. 2), the World Bank computerised the Chenery version of the Harrod-Domar model, and Easterly (1997) states that this version (and its similar updates) were used by around 90 percent

\(^6\) The starting point of the two-gap analysis was that developing countries are constrained by a dearth of capital for investment, due to a shortfall in savings. The level of savings available in developing counties was assumed to be below the level required to achieve the target level of growth (Clunies-Ross et al., 2009, p. 119).
of the countries’ economists in the World Bank to create economic growth and resource requirements predictions. Bacha (1990) and Taylor (1990; 1994) identified a third gap: the ‘fiscal gap’. The main argument was that some developing country governments do not have the “revenue raising capacity to cover the desired level of investment” (McGillivray et al., 2006, p. 1034). Thus, foreign aid given directly to recipient governments could potentially ease the fiscal gap, provided that the aid is used for investment purposes.

In summary, the Harrod-Domar and the gap models were used to justify and explain the importance of aid to the developing countries, and to calculate the amounts of aid to be allocated. Using the three-gap models (the savings-investment, the foreign exchange and the fiscal balance gap), it was argued that foreign aid would supplement the low savings and therefore increase the level of investment funds, provide the foreign exchange needed for the importation of crucial capital goods and inputs, and boost domestic revenues. The overall objective was to raise savings and investments which were assumed to be the key for sustainable economic growth and poverty reduction. The early studies on aid effectiveness investigated the impact of aid on savings and investment and assumed that “one dollar of foreign aid will increase savings and investment by one dollar and therefore lead to increases in growth (McGillivray et al., 2006, p. 1034).

The Harrod-Domar models have been criticised for being too rigid and unrealistic. For example, the models assume that the marginal propensity to save and the capital-output ratio are constant, even in the long run. The harshest critic of the Harrod-Domar and the gap models was Easterly (1997). He asserted that “Domar’s model was not intended as a growth model, made no sense as a growth model, and was repudiated as a growth model forty years ago by its creator” (Easterly, 1997, p. 2). Hussain (2001) followed this criticism up and developed an alternative model, which is explained in the following subsection. Despite the criticism, Masud and Yontcheva (2005) argued that Harrod-Domar and the two-gap model by Chenery and Strout (1966) remain the most influential theoretical underpinning of the aid effectiveness literature.

2.4. The Thirlwall-Hussain model

The Thirlwall and Hussain (1982) model, also known as the balance of payments or constrained growth model, is based on Thirlwall’s law7 (Thirlwall, 1979). Thirlwall’s law states that the rate of growth of any open economy is equal to its export volume growth divided by the income elasticity of demand for imports (Thirlwall, 1979). Thirlwall and Hussain (1982) extended this law and showed the effects of economic growth emanating from initial imbalance in the current account, terms of trade and capital inflows. This extended model can be used to forecast growth, measure the ‘financing gap’, formulate policy advice, and offer indicators for estimating the development effectiveness of foreign aid (Hussain, 2001).

Unlike the neo-classical growth theories, which are supply-side models, the Thirlwall and Hussain (1982) is a demand-side model. It postulates that the main binding limitation on growth in an open economy is a shortage of foreign exchange. It contends that the balance of payments position of a country is the main constraint on growth, because it imposes a limit on demand to which supply can adapt (Hussain, 2001). It is further argued that economic growth can only be faster and sustainable if the exports are expanding more

---

7 Named after Thirlwall (1979).
than imports. Thus, countries’ growth strategies should be anchored on “foreign exchange productivity of investment” such as foreign exchange earnings (Hussain, 2001, p. 5).

Hussain (2001) argues that foreign aid can contribute to higher growth rate if it can be used to finance the excess of imports over exports. It is further argued that if there is no corresponding change in the production structure and the pattern of trade in the recipient country, the economy will continue to depend on foreign aid for higher growth rates. Thus, if the fundamental objective is faster economic growth and poverty reduction, the allocation of foreign aid should be in a manner that can help poor countries graduate to a self-sustaining growth path. The model suggests two broad indicators of measuring the long-term development effectiveness of foreign aid: (i) the ability to promote export growth relative to that of imports in the recipient country, and (ii) creation of an environment that attracts private capital into the aid recipient country (Hussain, 2001).

Hussain (2001) applied the Thirlwall and Hussain (1982) model to the estimation of the financing gap for a sample of 24 African countries, as an alternative model to the Harrod-Domar. The study concluded that foreign exchange is the binding constraint in most African countries, and therefore the effectiveness of foreign aid should be measured in terms of foreign exchange earnings (or savings) (Hussain, 2001).

The Thirlwall and Hussain (1982) model has not been able to find traction in development economics and the practitioners’ community. It was criticised by Ranaweera (2003, p. 2), who asserted that it was an “incomplete model”.

3. Channels by which Foreign Aid Affect Poverty

Mosley et al. (1987, p. 616) highlighted three ‘effects’ through which foreign aid can influence development in a recipient country. Firstly, aid can have direct effects when its disbursement can be traced directly to the project for which the aid money was originally intended. Secondly, aid can affect the development outcomes indirectly through its influence on the public-sector spending of the recipient government. The availability of foreign aid presents the recipient country with an opportunity to reallocate its expenditure. Lastly, “transfer of aid money raises the prices of some goods, depresses the price of some others, and hence has side-effects on the private sector of the recipient economy through the price system” (Mosley et al., 1987, p. 617).

Recently, Guillaumont (2011) and Guillaumont and Wagner (2014) described three main macroeconomic channels through which foreign aid can affect poverty. These include the impact of aid on poverty through growth, social public expenditures, and the macroeconomic stabilizing effect of aid. There is a clear link between these channels and the ‘effects’ proposed by Mosley et al. (1987). These channels are briefly discussed below.

3.1. Traditional growth channel

This is the traditional channel, which is mainly discussed in the theory of foreign aid and mainstream empirical literature on effectiveness of foreign aid. The empirical analysis is based on the growth models which are anchored on savings and investment. It is assumed that foreign aid will stimulate growth through increasing investment, and economic growth would in turn lead to poverty reduction. There are two main debates concerning this channel: the first is whether aid has been effective in boosting growth and the second is whether growth translates to poverty reduction.

3.1.1. The aid-growth nexus

After many ambiguous and conflicting results, there is now evidence of convergence and consensus that foreign aid has significant impact on growth. It has been concluded that aid has been successful in some countries and unsuccessful in others, and therefore the
results of the effectiveness of aid on growth may depend on the type of aid, how it is financed, the time horizon, and also on the policy and institutional environment of the recipient country (Kraay, 2005; Radelet, 2006). Kraay (2005, p. 9) argued that though aid can contribute to poverty reduction through growth, over the medium to long term, where most of changes in poverty depend on growth, factors other than aid will be important as well for determining the level of poverty alleviation.

3.1.2. From growth to poverty reduction
According to Feeny (2003, p. 73) “growth is often viewed as the primary driver of poverty reduction. Therefore, inferences of the impact of aid on poverty are commonly drawn from the impact of aid on growth.” Kraay (2005, p. 1) asserts that “sustained poverty reduction is impossible without sustained growth”. The main assumption here is that, if aid has a positive impact on growth and if growth reduces poverty, then aid contributes to poverty reduction (Guillaumont & Wagner, 2014, p. 11). The extent to which aid affects poverty will depend on the growth elasticity of poverty (or income elasticity of poverty). Earlier studies by Collier and Dollar (2001; 2002) assumed that the universal income elasticity of poverty is two (2); they were explicit in their assumption that the aid-poverty-growth channel is the only aid-induced route to poverty reduction.

As a result, Collier and Dollar (2002) used this uniform income elasticity of poverty to calculate what they termed the ‘optimal aid allocation’. However, subsequent studies by Hanmer and Naschold, (2000) and Mosley et al. (2004) show that the partial growth elasticity of poverty reduction could be around 0.34 and 0.48 respectively. Overall, the income elasticity of poverty varies according to the recipient country’s income distribution (level of inequality), change in the level of inequality, income per capita and growth volatility (Bourguignon, 2003; Guillaumont & Wagner, 2014).

3.2. Pro-poor public expenditure channel
In their aid-growth regressions, Burnside and Dollar (2000) introduced the importance of good policies (which included budget deficit, inflation and openness) as a condition for the effectiveness of foreign aid. Subsequent studies incorporated quality of institutions, corruption, governance and a host of other variables. However, as noted by Mosley et al. (2004, p. 223), the policy variables emerging from these aid-growth regressions were highly controversial and could not offer a conclusive answer on how aid would eventually lead to poverty reduction.

Gomanee et al. (2003) and Mosley et al. (2004) argued that foreign aid can affect poverty through what they termed pro-poor (public) expenditure (PPE). This is a composition of public expenditures which are most likely to benefit the poor (Guillaumont & Wagner, 2014, p. 14). The PPE include government expenditures on social sectors such as basic health care, primary education, water and sanitation, rural roads and agricultural extension services (Mosley et al., 2004). Studies which show that PPE is an important channel by which aid can reduce poverty include those by Mosley et al. (2004), Gomanee et al. (2005a) and Kosack (2003).

3.3. Macroeconomic stabilizing effect channel
Guillaumont and Wagner (2014, p. 23) argued that at the macroeconomic level aid is expected to stabilise the recipient country’s economic growth. The main assumption is that growth, especially in developing countries, is volatile owing to exogenous shocks, such as exports instability. Though aid has been accused of instability, unpredictability and ‘pro-cyclist’, Guillaumont and Wagner (2014) maintain that aid has a destabilizing macroeconomic impact. Studies by Collier and Goderis (2009), Guillaumont and Le Goff
(2010) and Guillaumont and Kpodar (2012) tested the stabilizing impact of aid using different methods, and found evidence that foreign aid has a stabilizing effect.

Guillaumont and Wagner (2014, p. 25) further argue that because economic growth is a major factor in poverty reduction, growth instability harms the poor through its adverse effect on economic income. Collier and Goderis (2009) found that aid reduces the negative effect of vulnerability on growth. Chauvet and Guillaumont (2009) investigated the effect of aid on income volatility and found that aid makes growth more stable and that the higher effectiveness of aid in vulnerable countries could be as a result of aid’s stabilising effect. Guillaumont and Kpodar (2012) also discovered that not only does aid stabilise resources available for the financing of consumption, investment and trade, but it is also effective in aid-dependent and vulnerable countries (also see Collier, 2007). Guillaumont and Korachais (2008) further discovered that income instability affects poverty through growth and also impacts poverty through increase in income inequality.

Guillaumont and Wagner (2014) justifies that “if macroeconomic instability generates poverty and if aid has a stabilizing impact, it should be expected that due to this impact, aid contributes to poverty reduction not only by increasing the rate of growth but also by making this growth more pro-poor” (Guillaumont & Wagner, 2014, p. 27). The paper, however, noted that this field of aid effectiveness, through stabilisation impact, is fairly new and has not been tested empirically.

3.4. Other channels of international cooperation to poverty eradication

Guisan et al. (2015) offers an estimation of the quantitative impact of seven channels of international cooperation to development and poverty eradication in developing countries, including not only foreign official aid, but also private aid, foreign trade, remittances and other channels. The results show that the impact is usually positive, particularly when the flows from international cooperation are used to improve education, health, infrastructures, industry and development.

4. Debate on the Effectiveness of Foreign Aid

The above discussion on the theoretical link between foreign aid, growth and poverty is supportive of the idea that foreign aid is necessary for stimulating economic growth and reducing poverty in developing countries. The main argument was that poor countries were poor due to an insufficient savings rate or insufficient savings for other reasons (the saving rate may be high, but the income per capita is very low). The proposed solution was to fill this savings gap using outside aid. Foreign aid injection would allow developing countries to ‘take off’ due to increased growth rates in the short run and transition to a higher steady-state income level. This section presents some of the main debates in the aid effectiveness literature.

4.1. Theoretical criticism of the effectiveness of foreign aid

According to Shleifer (2009), the early critics of foreign aid were: Friedman (1958) and Bauer (1972; 2000). When the majority of the early development theorists were justifying the importance of aid using the big push theory and the gap models, Bauer (1972) criticized the big push model arguing that foreign aid will lead to misallocation of scarce resources and destroy economic incentives and therefore would not boost economic growth. Bauer (2000) criticised the argument that developing countries can break out of the poverty trap through foreign aid. He reasoned that:

"Development aid is ... not necessary to rescue poor societies from a vicious circle of poverty. Indeed, it is far more likely to keep them in that state [italics added]. It promotes
dependence on others. It encourages the idea that emergence from poverty depends on external donations rather than on people’s own efforts, motivation, arrangements, and institutions” (Bauer, 2000, p. 46).

Friedman (1958), on the other hand, was more critical of the perceived role of foreign aid, and observed that:

“Foreign economic aid is widely regarded as a weapon in the ideological war in which the United States is now involved. Its assigned role is to help win over to our side those uncommitted nations that are also underdeveloped and poor ... The objectives of foreign economic aid are commendable. The means are, however, inappropriate to the objectives ... The proponents of foreign aid have unwittingly adopted a basic premise of the Communist ideology that foreign aid is intended to combat. They have accepted the view that centralized and comprehensive economic planning and control by government is an essential prerequisite for economic development ... An effective program must be based on our ideology, not on the ideology we are fighting” (Friedman, 1958, pp. 63, 77-78).

Thus, Friedman (1958) and Bauer (1972; 2000) criticized the precise findings of the theoretical argument, that, foreign aid can lead to development and poverty reduction in developing countries.

4.2. Aid dependency syndrome

According to Doucouliagos and Paldam (2006), the motive of aid and the empirical discussions on the effectiveness of aid in the late 1960s and mid-1970s was the use of aid as a political tool. The dominant viewpoint then was that poverty in developing countries was due to the exploitation by the rich capitalist world. Thus, aid was treated as a compensation for the past wrongs. Early empirical studies by Griffin (1970) and Weisskopf (1972) found that aid was counterproductive as it had a tendency of replacing domestic saving, thereby creating aid dependency. Friedman (1958) and Bauer (1972) also argued that foreign aid causes dependency by making resources available for governments to expand public spending, often pursuing flawed (socialist or populist) policies that are harmful in the long run. It is also argued that ‘excessive aid’ may distort the economy of a recipient country, leading to an aid dependent low-growth economy (Doucouliagos & Paldam, 2006, p. 232). A more recent study by Hansen and Tarp (2000) shows that the optimum amount of aid is about 10-20% of the recipient country’s GDP and beyond that point, aid dependency becomes an increasing problem. Moyo (2009, p. 28) argue that aid “perpetuates the cycle of poverty and derails sustainable economic development”.

4.3. Poverty and development traps

As discussed in the theoretical link between foreign aid and poverty, some of the arguments for foreign aid allocation are the concepts of poverty and development traps. It was argued that developing countries are ‘trapped’ in poverty and underdevelopment and that they need outside assistance to ‘escape the traps’. Kraay (2005) stated that in spite of the popularity and plausibility of poverty traps from theoretical literature, very few empirical studies found evidence of the existence of poverty traps. One of the researchers who attributes the underdevelopment in Africa to poverty traps is Sachs (2005); however, Collier (2007, p. 5) argued that “poverty is not intrinsically a trap”. Kraay (2005, p. 3) further asserted that there is “little compelling evidence that such [poverty] traps exist”.

---

8 This quote was taken from Brumm (2003, p. 167).
Sachs (2005) and Collier (2007) have expounded further on how the development traps keep poor countries poorer. Collier (2007, p. 5), used the examples from empirical studies, to assert that poor countries are facing one or more of four development traps, namely: conflict trap, the natural resource trap, the trap of being landlocked with bad neighbours, and the trap of bad governance in a small country. Collier (2007) concluded that though properly structured and targeted aid can help poor countries overcome some of these development traps; however, “aid does have serious problems, and more especially serious limitations ... aid alone will not be sufficient to turn the societies of the bottom billion around, [though aid] is part of the solution rather than part of the problem” (Collier, 2007, p. 123). Moyo (2009) strongly disagreed, stating: “the problem is that aid is not benign — it’s malignant. No longer part of the potential solution, it’s part of the problem — in fact aid is the problem” (Moyo, 2009, p. 47).

4.4. The Dutch disease
One of the channels through which foreign aid can hurt the local economy and lead to increase in poverty is through a process called the ‘Dutch disease’. Aid comes in the form of foreign exchange\(^9\). To use this money locally the government has to sell foreign exchange in order to get the local currency equivalent. The buyers of foreign exchange in a local economy are mainly importers, which mean that the main determinant of demand for foreign exchange is demand for imports. Without foreign aid, an economy pays for its imports through exports (the main generator of foreign exchange). Now with foreign aid, importers can choose to get foreign exchange from exporters or foreign aid. Thus, foreign aid is now in direct competition with exporters: more aid means less need for exports, leading to reduced earnings for exporters. According to Collier (2007, p. 162), the mechanism that generates this effect is the exchange rate. An increase in foreign aid leads to an increase of foreign exchange in the local economy, which in turn leads to the appreciation of the exchange rate. An appreciation of the exchange means that a dollar earned by an exporter is now worth less in terms of local currency. Foreign aid may crowd out exporters, thereby killing the export competitiveness of the already poor economies. One possible solution is to ensure that foreign aid is accompanied by trade liberalisation, which increases the demand for imports by making them cheaper without the need to appreciate the exchange rate (Collier, 2007, p. 163). Stiglitz (2007, p. 148) also recommended that a country must spend part of the foreign resource currency from aid on imports and keep some of the rest abroad.

4.5. Diminishing returns to aid and aid-absorptive capacity
According to Collier (2007), foreign aid is subject to what is called ‘diminishing returns’. This means that as donor countries keep on increasing the amount of aid to a recipient country, the returns from each additional dollar tend to decrease. Clunies-Ross, et al. (2009, p. 595) define aid-absorptive capacity as ‘the maximum amount that a country can effectively use’. A study by Radelet et al. (2004) showed that their category of aid (termed ‘short-impact aid’) had no effect on growth when it got to 8 percent of the recipient country’s GDP; thereafter, the additional foreign aid had a negative effect on growth. Burnside and Dollar (2000) also found that the larger the current amount of aid, the smaller the additional growth benefit from extra aid. According to Collier (2007, p.100), without any change in aid absorption capacity, the doubling of aid envisioned in the MDGs might have exceeded the limits to aid absorption. Clunies-Ross et

\(^9\) Mostly USA dollars, British pounds and euros.
al. (2009), however, argued that aid-absorptive capacity can still be increased through training, reduction of corruption and capacity building (or technical assistance). Recent studies (Gomanee et al., 2003; Guillaumont & Wagner, 2014) showed that there are two thresholds: lower and upper aid thresholds. The lower threshold justifies the need for a ‘big-push’ (Guillaumont, 2011, p. 8).

4.6. **Fungibility of aid**

Foreign aid is said to be fungible\textsuperscript{10} when a portion or the entire amount of aid money earmarked for a particular purpose (which would have been financed anyway) is freeing resources for another purpose that would not have been funded otherwise (Guillaumont & Wagner, 2014, p. 17). A seminal paper by Boone (1996) found that aid is fungible. The World Bank (1998) argues that foreign aid (especially project aid) is fungible and this reduces aid effectiveness. Another study by Feyzioglu et al. (1998) found aid to be fungible in some economic sectors such as education, agriculture and energy, but found evidence of fungibility in the transport and communication sectors.

However, recent studies have produced mixed results. Mavrotas and Ouattara (2006) did not find evidence of aid fungibility in a case study of three countries\textsuperscript{11}. A study by Dreher, et al. (2008) found that, though aid allocated to education sector was fungible, it led to a positive impact on school enrolment. Guillaumont and Wagner, (2014, p. 18) argued that even if aid is fungible, it does not mean that it is less effective. They further argue that the recipient government may use the extra resources to finance other sectors which are ‘pro-poor’, such as agriculture. Thus, fungibility can be either good or bad depending on the recipient government’s decision on the use of released resources. However, Moyo (2009) argued that the majority of African governments have been diverting freed resources to worthless and detrimental agendas such as corruption.

4.7. **Foreign aid volatility**

According to Lele and Goldsmith (1989), donors’ aid commitments and the actual aid flows are not always in sync. This causes mistrust, increasing the risk of aid being used to support non-productive expenditures. Mosley and Suleiman (2007) further argued volatility of aid flows affects relationships between donors’ organizations which will in turn affect total aid flows to recipient countries. Furthermore, the failure to sustain aid flows weakens the political base of support for developmental expenditure (Mosley & Suleiman, 2007, p. 140). Chauvet and Guillaumont (2009, p. 452), however, found that even if aid is volatile, it “is not clearly as pro-cyclical as is often argued, and, even if pro-cyclical, is not necessarily destabilizing”. They further argued that foreign aid has a stabilizing impact with respect to exports and income volatility.

4.8. **Foreign aid and consumption**

Boone (1996) showed that foreign aid does not increase investment, has zero effect on growth and does not reduce poverty (using human development indicators as proxies). Paradoxically, the study found that aid increases the size of the recipient government’s consumption expenditure. According to Moyo (2009), aid can be inflationary as it leads to increased demand for locally produced non-tradable goods and imports.

\textsuperscript{10} Fungibility is said to occur when the marginal increase in sectoral expenditure following the receipt of aid is lower than the marginal amount of foreign aid dedicated to this particular sector. Fungibility can be total, if aid does not have any impact on the targeted sector, or partial, if the impact is lower than the total amount of aid affected.

\textsuperscript{11} The three countries are Philippines, Costa Rica and Pakistan.
4.9. Foreign aid, corruption, governance and policies
Moyo (2009) argued that because aid is fungible, it is easily stolen, redirected and extracted, leading to increased rent seeking and corruption. Burnside and Dollar (2000 and 2004) emphasised that aid is only effective in its goals if the recipient country has good policies and quality institutions. A study by Barro (1999) argued that democracy helps in combating corruption and also encourages more redistribution of income from rich to the poor. The World Bank (2002, p. 8) stated: “We have learned that corruption, bad policies, and weak governance will make aid ineffective.”

4.10. Macro-micro paradox
Mosley (1987) is credited for coining the phrase, ‘macro-micro paradox’ of aid. This was out of the general observation that while most micro or project-related studies were quite clear about the effectiveness of foreign aid, macro-level studies could not offer such clarity (McGillivray et al., 2006, p. 1032). For example, while evaluations of aid effectiveness at the microeconomic level continue to indicate positive rates of return (World Bank, 2008; Rajan & Subramanian, 2008) conclude that at macro levels “it is difficult to discern any systematic effect of aid on growth”. A recent study by Arndt et al. (2010, p. 1) used some modern micro methods to evaluate macro phenomenon concluded that “there is no micro-macro paradox” after finding positive effects of aid on growth from both the micro and macro perspectives.

5. Summary of Findings and Conclusion

The main objective of this study is to highlight some of the main debates on the effectiveness of foreign aid on poverty reduction, through a review of both theoretical and empirical literature. The main findings from this exploratory study are that there is no generally accepted economic theory upon which foreign aid allocation is based, and the debates on the effectiveness of foreign aid on poverty reduction is still far from over. Several theories have been advanced, but each of these has been heavily criticized. Results from empirical studies are still diverse. There are two distinct and extreme lines of thought: those who believe that foreign aid can contribute to a virtuous circle of economic growth and poverty reduction against the other group which contend that foreign aid leads to a vicious cycle of poverty and stunted development. Perhaps the debate needs to shift to “What makes aid work or how to make aid work?” In this regard there are some interesting studies, as those cited in section 3.4, showing the positive effect of several channels of foreign aid in the diminution of poverty, and increase of quality of life, of recipient developing countries.

References


1 http://www.usc.es/economet/eaat.htm

On line Annex at the journal Website: http://www.usc.es/econo/RGE/benvidag.htm
Annex

Roser and Ortiz-Ospina(2017)

**Global Extreme Poverty**

*by Max Roser and Esteban Ortiz-Ospina* [cite]

First published in 2013; substantive revision March 27, 2017.

“The number of people in poverty over the past two centuries

We have seen that the chance of being born into poverty has declined dramatically over the last 200 years. But what about the absolute number of people living in extreme poverty?

The visualization below combines the information on the share of extreme poverty shown in the last chart, with the number of people living in the world. For the years prior to 1970, we use the estimates of people ‘living in poverty’ from Bourguignon and Morrison (2002) as shown in the previous chart; from 1981, we use the World Bank estimates.

As we can see, in 1820 there were just under 1.1 billion people in the world, of which more than 1 billion lived in extreme poverty. Over the next 150 years, the decline of poverty was not fast enough to offset the very rapid rise of the world population, so the number of non-poor and poor people increased. Since around 1970, however, we are living in a world in which the number of non-poor people is rising, while the number of poor people is falling. According to the estimates shown below, there were 2.2 billion people living in extreme poverty in 1970, and there were 705 million people living in extreme poverty in 2015. The number of extremely poor people in the world is 3 times lower than in 1970.

In 1990, there were 2 billion people living in extreme poverty. With a reduction to 705 million in 2015, this means that on average, every day in the 25 years between 1990 and 2015, 137,000 fewer people were living in extreme poverty.  

On every day in the last 25 years there could have been a newspaper headline reading, “The number of people in extreme poverty fell by 137,000 since yesterday”. Unfortunately, the slow developments that entirely transform our world never make the news, and this is the very reason why we are working on this online publication.”
Failure of Foreign Aid in Developing Countries: A Quest for Alternatives. Bus Eco J 7:231. doi:10.4172/2151-6219.1000231.

Final Conclusions: "Not refute foreign aid as such, its usefulness will occur when contracted to be used in the government’s short and long term public investment (infrastructure) and human capital (health and education) which is likely to create enabling environment for industries, foreign investors. To yield results the foreign, once directly injected in the productive investment projects, making it possible for the gain of the weight of local currency... Conditionality attached to it should be waved so as to maximize its usefulness. It can also be used in institutional consolidation and building to create fertile grounds enabling transparency and confidence from donor community."

Aka and Guisan(2017) and Guisan(2014):
“In Guisan, Aguayo and Exposito(2016) we present a quantification of the main sources of international cooperation to development at World level. We distinguish 7 channels of foreign aid, in descending order accordingly to the amount received per head, on average, in developing countries (Dollars in year 2010), as contribution to increase economic development in those countries: 1) Foreign trade (Exports from developing countries to other areas, 628 Dollars per head in year 2010), 2) Foreign Direct Investment net stock (543 Dollars per head). 3) Financial support: investment less savings (97 Dollars per head). 4) Foreign tourism expenditure in developing countries (63 Dollars per head), 5) Private aid and donations (39 Dollars per head).
6) Private aid through remittances from other countries to developing countries (38).
7) Official Development Aid (23 Dollars per head).

Graph 1 shows the impact of the increase of production per head on the diminution of the poverty rate. Graph 2 shows that the increase of education shows, usually a great positive impact on economic development for countries with and average of 6 or more years of schooling per adult. Graph 3 shows the positive impact of investment per head on production per head. Graph 4 shows the important role of industrial development on economic development.”

Graph 1. Poverty and Production per head Graph 2. Production per head and Education

Note: POV05X is the percentage of people with income below 2 Dollars a day in year 2005. PH0SPP05 is Gross Domestic Product per head, in Dollars, in year 2005, at 2005 prices and Purchasing Power Parities (PPPs). TYR05F is the average years of schooling of adult population Source: Guisan(2014) with data of 132 countries (38 from Africa) from World Bank Statistics, Barro and Lee and other international sources.

Graph 3. Investment and development Graph 4. Manufacturing and Non-Manufacturing

Source: Guisan(2014) elaborated from WB and international statistics. Note: PH and IH are, respectively, Gross Domestic Product per head and Investment per head. QMH and QNMH are Production in Manufacturing (M) and Non-Manufacturing(NM). Values at 2005 USD PPPs.
Comments to interesting books related with poverty and international cooperation, at the Blog of the Euro-American Association of Economic Development Studies (https://euroamericanassociation.blogspot.com.es) and publishers Webs:

Books of Arvin and other ones selection at that Blog:
https://euroamericanassociation.blogspot.com.es/search/label/Books


2) Collier(2007): "The Bottom Billion: Why the Poorest Countries are Failing and What Can Be Done About It"
Book by Arvin and Lee (eds) at the publisher Website:
https://www.elgaronline.com/view/9781783474578.xml
https://www.elgaronline.com/view/9781783474578.00013.xml

Chapter 6: MDGs and international cooperation: an analysis of private and public aid and the role of education,

Maria-Carmen Guisan, Eva Aguayo and Pilar Exposito

Extract

"The United Nations' Millennium Development Goals (MDGs), among other factors, have increased interest in the challenges facing international cooperation in development to alleviate poverty and promote sustainable development. Many debates have focused on the role of official development aid (ODA). At the same time, it is also important to analyze other channels of international cooperation, including the role of private aid, foreign investment, trade and other factors relevant to development. As stated in the report by the US Agency for International Development (USAID, 2014): Thirty years ago, 70% of resource flows from the US to the developing world came in the form of ODA. Today, 80% of those resource flows come from foreign direct investment, private donations, remittances, and other non-governmental sources. ODA accounts for only 14% of these resource flows today, underscoring the increasing importance of the private sector in the development process. Adelman et al. (2013) present an interesting report on global philanthropy and remittances, based on data from the Organisation for Economic Co-operation and Development (OECD), the World Bank and other sources. They estimate that the US contribution to developing countries in the year 2011 was around $278.5 billion, where ODA accounted only for $30.9 billion (11 percent), while private philanthropy accounted for $39 billion (14 percent), remittances for $100.2 billion (36 percent) and private capital flows for $108.4 billion (39 percent)."