Poverty and unemployment in Spain during the 2008’s financial crises

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A Review of the Impact of Foreign Aid on Domestic Saving

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Abstract

This paper tried to review the main literature on foreign aid and domestic saving in developing countries between 2000 and 2013, both theoretical and empirical literature. The main arguments of scholars in this area are reviewed. There are two opposite arguments on how the foreign aid affects domestic saving. In one side, scholars argue that foreign aid can be stimulant for economic growth through domestic saving. On the other hand, other scholars strongly argue that rather than being stimulant for the economic growth and improve the life of the society, foreign aid may able the dictator governments in developing countries to finance their political regime and increases corruption. The inconsistency and disagreement on the impact of foreign aid may result due to the difference in estimation techniques, control variables, and the aggregate estimation for the whole developing countries and for a specific region like Sub-Saharan Africa since countries are very different in political ideology and governance, economic policy and social structures.

Key words: Foreign Aid, Domestic Saving, Developing Countries
1. Introduction

Foreign aid, the international transfer of capital, goods or services from a developed country or international organization to developing countries (OECD definition), has been provided for more than five decades now. It can be economic, military, emergency or humanitarian aid with the purpose of helping aid recipient countries to develop themselves. The most common foreign aid transfer is Official Development Assistance (ODA) provided to promote development and to eradicate poverty in the aid recipient countries. As the graph below shows, the amount of ODA to developing countries increases for the last 52 years and in 2012 it is around 93.6 billion USD which is 28 times more than the amount in 1960 (3.35 billion USD). Regarding this aid transfer, various literature has reflected different views. One part of the literature shows a negative impact of foreign aid on economic growth and domestic saving while another part observes a positive impact. On the one hand, Baldé (2011), Irandoust & Ericsson (2005) and Shields (2007) support foreign aid with the view that it is important for the growth of developing countries as it fills the saving gap and the trade gap and increases investment capacity. Some theoretical models, like the Harrod-Domar growth model and the two-gap model, also justify the importance of foreign aid for development. On the other hand, Kalyvitis (2007) and Moyo (2009) observe that foreign aid flows encourage rent-seeking and decrease economic growth by distorting individual incentives. Basnet (2013) argue that foreign aid increases growth, but crowds out domestic saving. To know and understand the relationship between foreign aid and domestic saving, it is important to undertake a solid literature review on this topic. Hence, this paper starts by defining aid and discussing the major incentives for developed countries to give foreign aid to developing countries. Furthermore, the paper presents a review of the literature on the link between aid and domestic saving whereby some of the theoretical and empirical studies are presented and discussed. The main research question that will be answered in this paper is: What does the current literature tell us about the link between foreign aid and domestic saving.
2. Theoretical Literature

2.1 Definition of Foreign Aid and Incentives for Donors

2.1.1 Definition of Foreign Aid

Foreign aid consists of physical goods, skills and technical know-how, financial grants, or loans at concessional rates transferred from developed countries to developing countries. The Development Assistance Committee (DAC) of the Organization for Economic Cooperation and Development (OECD) defines aid as Official Development Assistance (ODA). According to the DAC, aid qualifies as ODA on three criteria: it has to be provided by official agencies; it has to have the promotion of economic development and welfare as its main objectives and it has to have a grant element of twenty-five percent or more. In most cases, foreign aid is provided in the form of project aid, humanitarian aid including food aid, technical assistance and programme aid (balance of payments support and budget support). Also, the Non-Governmental Organizations (NGOs) provide aid in support of poverty reduction activities and emergency relief in aid recipient countries.
Aid can be bilateral aid, multilateral aid or non-governmental aid. Bilateral aid is the aid (a loan or a grant) from the individual governments of developed countries to developing countries through a bilateral agreement and negotiations between the donor and the recipient country. Multilateral aid is the money provided by donors to developing countries through multilateral organizations like the World Bank, the United Nations, and the International Monetary Fund. The Non-governmental aid is from Non-Governmental Organizations (NGOs) such as World Vision, Red Cross Society, and Oxfam. This study uses the DAC definition of foreign aid. Moreover, different forms of foreign aid have various effects on the recipient economy where they influence the macroeconomic variables positively and negatively.

2.1.2. Why Do Donor Countries Give Aid

Donor countries generally give aid because it is in their own interest to do so. Undoubtedly some aid is given with humanitarian motives in mind; however, most foreign aid is given for a variety of political, strategic and economic reasons that benefit the recipient and the donor countries in the short and longer term.

2.1.2.1 Political reasons

Official Development Assistance (ODA) is often designed to achieve political objectives other than increasing prosperity in recipient countries. Some researchers argue that foreign aid can play a role as a promoter of international peace and prosperity in international politics through developing cordial relations between the donor and recipient, which has an idealist concern; and the anti-aid supporters argument, which has a realist perspective, treats foreign aid as a tool in the foreign policy of donors to promote the national interests of them and as an instrument of neo-colonialism, weapon of imperialism, getting a favorable vote in the UN, ensuring the access to very important strategic places, and even for keeping a particular regime in power (Pankaj, 2005). More recently concerns over the instability in the Middle East has made Israel, Egypt, and Iraq the largest recipients of U.S. foreign aid since the 1980s; and foreign policy and political relationships are the most important political determinants of aid flows (Radelet, 2006). Other donors have their own objectives: to promote their culture and language as well as the preservation of their influence, for
commercial interests, and tied to purchases of their products; and even many donors provide a large amount of aid for their former colonies to maintain some political influence (Alesina and Dollar, 2000 cited by Radelet, 2006).

2.1.2.2 Economic reasons

Providing aid to Less Developed Countries (LDCs) is used to fill the saving and the foreign exchange gaps. Domestic saving is important for domestic investment to take place, and if this is not sufficient, investment projects are financed by a flow of development assistance from donors. In development theory, the split of pro-aid and anti-aid arguments has been clear, and the protagonists of foreign aid argue that the major deficit of growth and development in the least developed countries are capital, foreign exchange and technical knowledge and they can’t generate these resources in their initial stage of development. Foreign aid can be helpful in pushing the growth rate by giving a solution for these bottlenecks; while antagonists of aid argue that, foreign aid may not be necessarily leading to the growth and development of recipient countries since their problems may go beyond either savings or foreign exchange constraints, and even foreign resources may not be properly utilized in the absence of proper macroeconomic policy, and may use to finance reverse flows (Pankaj, 2005, Serieux, 2011 and Girma, 2015).

Pankaj (2005) also argues that the positive impact of aid can be seen through three approaches. The first is the saving-investment gap approach, which is based on the Harrod-Domar growth model and the Cobb-Douglas production function, which states that since the least developed countries growth rate keeps at very low rate due to poor saving and investment rate as result of institutional and non-institutional reasons, additional saving in a form of foreign aid can enable their economy to have a higher growth rate than by their own resource only. The second approach is the foreign exchange earning-expenditure gap approach in which scholars argue that foreign aid can have a larger impact on growth and development of developing countries if it is used to purchase goods and services which are not produced domestically, but which are very important for growth and development. The capital absorptive capacity approach, which is the third approach, states that by spending foreign aid on human capital formation, capacity development, and the establishment of technical institutions, it is possible to increase the capital absorptive capacity of developing countries which affects the optimum utilization of domestic and foreign resources.
2.1.2.3 Self Interest of Donor Countries

Nowadays, less development assistance is given in the form of outright grants and increasingly interest is being charged albeit at concessionary rates. Tied aid, even if it decreases significantly now, was one reason to provide aid and it occurs where conditions are placed by the donor upon the recipient and usually the recipients are required to purchase the exports of the donors (OECD). This may be a more expensive option than purchasing the capital from sources other than the donors. Tied aid may help fill savings and foreign exchange gaps; however, it may not always be in the best interests of the recipient country. Economist, policy makers, states men and multilateral organizations from developed countries also highly supports the argument that developed countries have a moral responsibility to help developing countries (Pankaj, 2005). From 1999 to 2008 untying aid increases from 46% to 82% which implies tied is decreasing significantly (OCED).

2.2. The Macroeconomic Rationale for Aid

The macroeconomic rationale for aid is about how aid can supplement savings, foreign exchange and government revenue for economic growth and this assumes a simple Harrod-Domar growth model context in which physical capital formation drives growth. In the Harrod-Domar model, investment rate and productivity of investment are the factors that affect output. The 1950s and 1960s gap models also had in common the Harrod-Domar tradition of stressing physical capital formation as a central driving force of economic growth (Hjertholm, Laursen, & White, 2000). In an open economy, total savings of countries is the sum of domestic and foreign savings and investment is financed by these savings. Hjertholm, Laursen, & White (2000) argue that a savings gap will occur when domestic savings alone are not enough in financing the investment required to attain a target rate of growth; and trade gap will occur when the export earnings are not sufficient to finance the certain desired level of imports to attain the desired investment, based on the assumption that not all goods and services are produced domestically. They also strongly focus that the idea of these gaps only makes sense, when the distinction between the desired and actual investment and domestic savings (savings gap); and also between the desired and actual import-export (trade gap) is made in a given an exogenously determined target growth rate. These two desired gaps will affect growth when the gap is large, and if there is not enough foreign aid to fill
the larger of these gaps, the desired growth rate will not be attained. That is, the gaps are not additive: aid simultaneously fills both gaps (by paying for imported capital equipment, a single aid dollar relaxes both the savings and the foreign exchange constraint). If the larger gap is filled then the non-binding gap is ‘overfilled’ (the actual gap exceeds the desired one). The Harrod-Domar growth model and The Two Gap model are discussed below:

2.2.1. Harrod-Domar Model

The Harrod-Domar growth model is an econometric growth model which has a very handy application in modern aid theory and shows that capital is the most critical factor for enhancing the growth rate in the economy (Pankaj, 2005). According to the Harrod-Domar model, output depends on the investment rate and the productivity of that investment which is financed by savings (sum of domestic and foreign savings) in an open economy. The model, which explains economic growth in terms of a savings ratio and capital-output coefficient, (as cited in (Kabete, 2008: 19) is expressed as follows;

$$g = \frac{(I/Y)}{\mu} \quad \ldots \ldots \ldots \ldots (2.1)$$

$$I/Y = A/Y + S/Y \quad \ldots \ldots \ldots \ldots (2.2)$$

where I is required investments, Y is output; g is target GDP growth, A is an aid, S is domestic saving and \( \mu \) the incremental capital-output ratio (ICOR). The ICOR, which is the ratio of investment ratio to the growth rate, gives the amount of additional capital units required to yield a unit of additional output. The value of the incremental capital-output ratio (ICOR) is thought to range between 2 and 5, and a high ICOR is often taken as a measure of the poor quality of investment which implies low growth rate with a large amount of investment. By using the idea of ICOR, the Harrod-Domar model was the base for the national development plans in developing countries (de Silver, 1984 cited by Kabet, 2008). As of Sheilds (2007), the simple version of the Harrod-Domar growth model is the base for the most famous models that claim that aid induces growth in which growth is determined by the saving rate where the growth rate of per capita income (g) is given by:

$$g = s/v - n \quad \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots \ldots (2.3)$$

Where s is the marginal saving rate, v is the incremental capital-output ratio and n is the population growth rate. In this model, saving is equal to investment and anything which increases s, decreases v,
or decrease n and if n is less than g will increase g and aid is taken as either augmented savings or improving technology. Hence, the above arguments show that saving can be determined by foreign aid since it can fill the saving-investment gap which is required to achieve a target growth rate. Despite this argument, savings, especially domestic savings play the most important role in providing resources for investment and hence increase growth. Thus for developing countries to minimize their dependence on foreign aid and also the amount of aid flows from donors may decrease due to different factors like financial and economic crises, they need to increase their domestic saving, which will increase the domestic revenue to finance investment.

2.2.2 The Two Gap Model

The ‘two gap model’ of Chenery and Strout (1966) was the standard and first model used to justify the potential role that aid could play in allowing countries to achieve their desired investment for the targeted growth rate (Kabet, 2008 and Serieux, 2009). In this model, there are two assumptions; linear and stable relationship between investment and growth, and aid finances investment. The two gaps are: the saving gap (the gap between the amount of investment necessary to attain a certain rate of growth and the available domestic savings) and the trade gap or foreign exchange gap (the gap between the import requirements for a given level of production and foreign exchange earnings). Foreign resource inflows like aid can tackle the inability to generate sufficient domestic savings (saving gap) and the inability to generate sufficient foreign exchange (exchange rate gap) by providing the needed foreign exchange (Serieux, 2009). Even if the assumption that foreign aid fills these gaps will hold true only if investment is constrained by liquidity but the incentives to invest are favourable, the ‘two gap model’ supports the assumption of investment-limited growth based on the Harrod- Domar model which assumes a specific amount of investment to increase growth (Kabet, 2008). This implies that if poor incentives are the cause for low investment, aid will not increase investments rather it will finance consumption. Easterly (2003) and Bender (2005) also criticizes the two assumptions as; the production function may allow substitution of capital by labor i.e. the relationship between investment and foreign aid may not be linear if non-substitutable assumption fails, the model fail to see how the resources allocate and importance of efficient use of these resources, and foreign aid may be used to finance consumption, and even finance reverse flows as Serieux (2011) argue. In addition, the productivity of the investment also determines the
effectiveness of foreign aid in filling these gaps (White, 1992 cited by Kabet, 2008). Serieux (2009) also argues that, the saving gap is the binding constraint in the early stages of growth and as the economy develops, the saving-investment gap will be covered by domestic savings since the saving rate is expected to increase; while the higher demand for imported intermediate and capital goods generated by the higher investment rate due to economic growth may exceed the earnings generated by exports to finance it and hence the foreign exchange gap will become the binding constraint on investment.

3. Empirical Studies on Foreign Aid and Domestic Saving

The economic impact of foreign aid has been widely studied in the literature and there is no consensus on whether the impact is positive or negative. One strand of the literature examines the growth impact of foreign aid in recipient countries and some studies find evidence of a positive effect, while other studies find evidence of a negative effect. For instance, an influential study by Dollar & Burnside (2004) finds that foreign aid only increases economic growth in the presence of a good macroeconomic policy environment, and Hansen and Trap (2000) show that foreign aid still increases growth even without the policy conditionality. Foreign aid transfers have a positive impact on the economic growth of countries if it is supplemented with suitable and stable macroeconomic policy and management (Girma, 2015). Moreira (2005), Hatemi-J and Irandoust (2005), Armah & Nelson (2008), Adamu (2013) and Basnet (2013) also argue that foreign aid transfers to developing countries have a positive and significant impact on the growth of the economy.

Tassew (2011) argues that aid contributes positively to economic growth in the long run when entered alone but its short run effect appears insignificant (based on the estimation done in Ethiopia). On the contrary, when the impact of aid is estimated interrelated with policy, the growth impact of aid is negative implying the harmful impact of bad policies on growth in the long run (Tassew, 2011). This implies that the growth impact of foreign aid for developing countries can be negative due to the presence of a poor macroeconomic policy environment in the countries, which is in favor of Burnside and Dollar’s (2000) argument about the importance of suitable macroeconomic policy for the effectiveness of foreign aid.
In sharp contrast, Easterly, Levine, and Roodman (2003) find that the results obtained by Burnside and Dollar (2000) are not robust when different measures of foreign aid, policies, and growth are used and hence there is no real evidence to support the results. Kalyvitis (2007) also strengthens their idea that foreign aid transfers encourage rent seeking and hurt growth by distorting individual incentives. Rather than contribution for the economic growth of countries, the money around $1 trillion transferred from developed countries for the last 60 years for development related activities has trapped many African nations in corruption and it slows down the economic growth, and cutting off the aid flows would be more beneficial (Moyo, 2009). Collier (2006) argue that effectiveness of foreign aid in Africa is due to corruption, conflict, fractionalized society and dependence on primary commodities, and in addition to increasing aid flows, donors should also focus on security, good governance, temporary trade preferences and conditioning aid on governance rather than policies.

Even before the Burnside and Dollar (2000) study, there was no agreement about the effect of foreign aid on growth, with some studies such as Boone (1994, 1995 cited by Jones, 2013) shows that aid had no positive impact on growth and others such as Hadjimichael et al. (1995 cited by Jones, 2013) find the opposite. The positive impacts of foreign aid on economic growth not only depend on the macroeconomic policy environment, but also on income level, levels of aid allocation and geographical location of recipient countries (Durbarry, Gemmell & Greenaway, 1998)

In the growth literature, foreign aid influences economic growth through its impact on investment either through saving or income. Foreign aid increases total savings which can be used to finance investment, which is a major determinant of economic growth; and through income, foreign aid affects investment through an income effect (i.e. transfer of purchasing power) (Hansen and Tarp, 2000). In line with the literature on foreign aid and economic growth, there is no consensus on the relationship between foreign aid and domestic saving. The flow of official development assistance may be spent to finance reverse flows (debt service payment, finance capital flight, accumulate reserves), rather than for consumption and investment (Serieux, 2011). Serieux (2011) also argue that the lack of investment response from aid flows for the last three decades in Sub-Saharan Africa is due to the diversion of the aid flows to reverse flows, and from 1980-2006 nearly 50 % of the aid flows went to the financing of reverse flows. Due to this financing of reverse flows and
consumption, the impact of this incremental foreign aid flows on domestic saving and investment will decrease (Serieux, 2009). Basnet (2013), in his study of foreign aid, domestic saving and growth in South Asia, argue that foreign aid crowds out domestic saving and affects growth negatively in the very long run even if it increases growth during the study period (1960-2008) and the positive effect of aid on growth may be offset by the negative effect of foreign aid on domestic saving. Based on the theory developing the nation’s capacity to invest is limited by its entrepreneurial stock, Taslim & Weliwita (2000) argue that there is an inverse relationship between foreign aid and domestic saving.

On the contrary, by using the ordinary least squares and instrumental variables estimation method, Baldé (2011) argue that foreign aid positively and significantly influences and promotes savings and investment in Sub-Saharan Africa which is the major aid recipient region. Loxley and Sackey (2008) in their study of “aid effectiveness in Africa” and Gyimah-Brempong & Racine (2010) in their study of “aid and investment in the least developed countries” also indicate that foreign aid has a significant positive impact on the investment rate which is the major transmission mechanism in the aid-growth relationship. This implies that foreign aid also affects savings positively based on the Harrod-Domar growth model theory, which assumes investment is equal to saving, and on the two-gap model theory, which states that foreign aid can fill the saving-investment gap and foreign exchange gap. By supplementing domestic saving, assisting to fill foreign exchange gap, creating access to modern technology and managerial skills, and by allowing easier access to foreign markets, foreign aid can increase the growth of a country’s economy (Irandoust & Ericsson, 2005).

Shields (2007) also tries to see the crowding out effect between foreign aid and domestic saving by using value added in agriculture as percentage of Gross Domestic Product, labor force and foreign aid as an explanatory variable and gross domestic saving as a percentage of Gross National Income in 119 countries and confirm a positive relationship between foreign aid and domestic saving which implies foreign aid can increase domestic saving. Tolessa (2001) also tried to see the impact of foreign aid on domestic saving and investment by distinguishing foreign aid into foreign grant and foreign loan and concludes that foreign grant has a negative effect on domestic saving while foreign loan has a positive impact on domestic saving and investment.
Investment, the most important transmission mechanism, is often omitted from aid growth regressions. As a result, estimated aid coefficients in typical growth regressions may suffer from omitted variable bias. Aid has been beneficial to African countries’ economic growth through transmission mechanisms (investment), but more needs to be done to ensure that these benefits lead to sustained growth (Gomanee, Girma & Morrissey (2005). Foreign aid has also been contributing to the growth of aggregate domestic savings in the long run and short run but debt service payment have a negative impact on saving in short run and long run in Nigeria as Eregha and Irugha (2009) argue. They used ordinary least square regression with an autoregressive model to examine the long run and short run elasticity coefficients of foreign aid. On the other hand, on his cross-country estimation of foreign aid and domestic saving by disaggregating foreign aid as bilateral and multilateral aid, Nushiwat (2007) argue that bilateral aid has positive and significant impact on domestic saving and economic growth, while multilateral aid has negative impact since multilateral aid comes in most cases during poor economic and political conditions, natural disasters, civil wars, and low saving, and hence, economic and saving growth are not expected.

4. Brief Summary of some articles on Domestic Saving and Foreign Aid

The following table shows a brief summary of the abovementioned scientific articles on the relationship between foreign aid and domestic saving in aid recipient countries since 2000. The table shows the authors, the research topic, the methodology they used, the area of the research and the results obtained by the researchers.

<table>
<thead>
<tr>
<th>No.</th>
<th>Author (year)</th>
<th>Research Topic</th>
<th>Methodology</th>
<th>Area of Research</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Basnet (2013)</td>
<td>Foreign aid, Domestic savings and Economic Growth</td>
<td>Simultaneous Equation System (Growth and Saving Equations)</td>
<td>South Asia (Bangladesh, India, Nepal, Pakistan and Sri Lanka)</td>
<td>Foreign Aid Affects Economic growth Positively but Domestic Saving negatively</td>
</tr>
<tr>
<td>2</td>
<td>Balde (2011)</td>
<td>The Impact of Remittances and Foreign aid on Savings/Investment</td>
<td>Ordinary Least Square (OLS) and Instrumental Variables (2SLS)</td>
<td>Sub-Saharan Africa</td>
<td>Foreign Aid has Positive and Significant impact on Saving and Investment</td>
</tr>
<tr>
<td>3</td>
<td>Serieux (2011)</td>
<td>Aid and Resource Mobilizations: The Role of reverse flows</td>
<td>Pooled Mean Group (PMG) estimator</td>
<td>Sub-Saharan Africa</td>
<td>Aid flow spent for the financing of reverse flow (debt service payment, finance capital flight and accumulate reserves)</td>
</tr>
</tbody>
</table>
As we can see from the table above, current literature on the topic confirms that there is the inconsistency of results and no consensus on how foreign aid affects domestic saving and growth. This difference may exist due to the political, economical and social difference between sample countries, availability of data and difference in use of control variables (like per-capita income, agricultural value added). If we see sub-Saharan Africa, countries’ political, economical and social situation is very different and there is no enough data for some countries like Somalia and Eritrea. The second possible reason may be difference in methodology and variables used. Ordinary Least Square regression may not give the same result with other more advanced econometric models.

<table>
<thead>
<tr>
<th></th>
<th>Study Reference</th>
<th>Methodology/Approach</th>
<th>Countries/Variables</th>
<th>Insights and Findings</th>
</tr>
</thead>
<tbody>
<tr>
<td>4</td>
<td>Gyimah-Brempong and Racine (2010)</td>
<td>Panel Data and Local Linear Kernel Estimator (LLKE)</td>
<td>Least Developed Countries</td>
<td>Foreign aid has a positive impact on physical investment</td>
</tr>
<tr>
<td>5</td>
<td>Eregha and Irugha (2009)</td>
<td>Time series Analysis (OLS with an autoregressive model)</td>
<td>Nigeria</td>
<td>Both in the short run and long run foreign aid affects domestic saving positively</td>
</tr>
<tr>
<td>6</td>
<td>Serieux (2009)</td>
<td>Panel Data Analysis</td>
<td>29 Sub-Saharan Africa countries</td>
<td>Aid flow spent for finance of reverse flow and consumption and hence decrease saving</td>
</tr>
<tr>
<td>7</td>
<td>Loxley and Sackey (2008)</td>
<td>Panel (Fixed Effect growth model estimation) data analysis</td>
<td>40 AU member countries</td>
<td>Aid increases the major transmission mechanism in aid-growth relationship—Investment</td>
</tr>
<tr>
<td>8</td>
<td>Nushiwat (2007)</td>
<td>Multivariate regression</td>
<td>Developing countries</td>
<td>Impact of Aid may depend on its sources and hence bilateral aid has a positive impact while multilateral aid has negative impact on domestic saving</td>
</tr>
<tr>
<td>9</td>
<td>Shields (2007)</td>
<td>Ordinary Least Square regression</td>
<td>119 aid recipient countries</td>
<td>Foreign aid is beneficial for domestic saving and investment, and crowding out effect does not appear a common problem</td>
</tr>
<tr>
<td>10</td>
<td>Girma, Gomannee and Morrissey (2005)</td>
<td>Panel Data Analysis</td>
<td>25 Sub-Saharan</td>
<td>Foreign aid increases economic growth through transmission mechanism (Investment)</td>
</tr>
<tr>
<td>11</td>
<td>Irandoust and Ericsson (2005)</td>
<td>Likelihood based Panel Co-integration</td>
<td>African Countries</td>
<td>Foreign aid can supplement domestic saving and fill the exchange gap, to foster economic growth</td>
</tr>
<tr>
<td>12</td>
<td>Tolessa (2001)</td>
<td>Times series analysis</td>
<td>Ethiopia</td>
<td>Loan has a positive impact and the grant has a negative impact on domestic saving</td>
</tr>
</tbody>
</table>
since it considers many assumptions like no hetroschedasticity and endogeneity problem, and even
the time frame that researchers used may also affect the result.

5. Conclusion
Foreign aid, the international flow of money in cash or in kind from donors, has a long history of
flowing to promote the development of recipient countries and to eradicate poverty. The impact of
this aid on growth through investment and domestic saving is inconsistence and there is no
consensus between scholars. Some scholars like Shields (2007), Eregha and Irugha (2009), and
Irandoust and Ericsson (2005) argue that foreign aid promotes growth by increasing domestic
saving and investment. While others like Serieux (2011) argue on the contrary that foreign aid
decreases domestic saving. Basnet (2013) argue that foreign aid increases growth but crowds-out
domestic saving; and Nushiwat (2007) argue that bilateral aid affects domestic saving positively,
but multilateral aid affects domestic saving negatively. Hence, the disagreement still exists even if
there are theories like the Harrod-Domar and the two gap model which support a positive impact
of foreign aid on domestic saving and growth.

The inconsistency and disagreement on the impact of foreign aid may result due to the difference
in estimation techniques, control variables, and the aggregate estimation for the whole developing
countries and for a specific region like Sub-Saharan Africa since countries are very different in
political ideology and governance, economic policy and social structures.