

The Impact of Government Spending, Trade, Foreign Aid and Foreign Direct Investment on Poverty Reduction in Africa: GMM Estimation

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Abstract

This study examined the impact of government spending, economic growth, trade, foreign aid and foreign direct investment on poverty reduction in Africa. the study covered the period from 1974 to 2013 using annual data from the World Bank and the United Nation Development Program. the study used GMM technique in order to estimate the impact of the mentioned variable on poverty in Africa. the empirical results suggested that foreign direct investment, economic growth, trade and government spending on education and health positively and significantly related to the poverty reduction during the period of interest, while foreign aid negatively contributed to the poverty reduction in Africa.

Keywords: Economic growth; FDI; Trade; Poverty reduction

Introduction

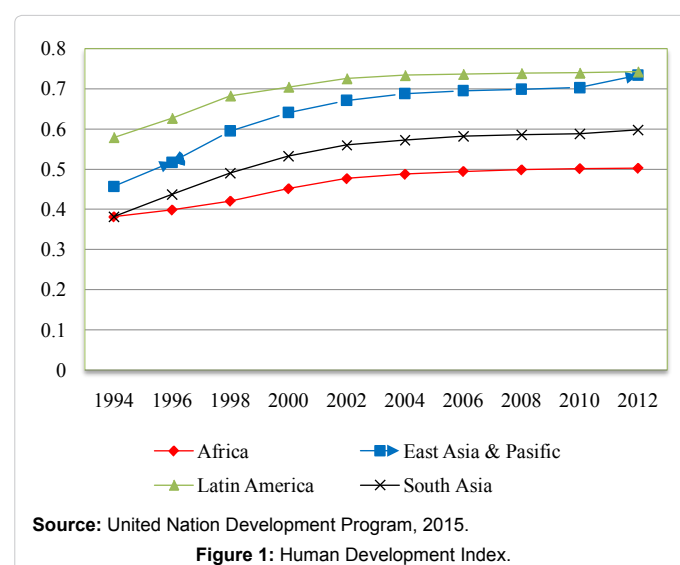
Africa is a resource-rich' continent but most of Africans are poor, in fact, poverty in Africa is one of the serious problems that facing the region. Moreover, certain African people are facing the poverty, which refers to lack of the human needs such as food, health care, education, safe water and electricity. For instance, around 76% of the poorest countries in the world are located in Africa, for example Liberia, Somalia, Ethiopia and Zimbabwe. In addition, Democratic Republic of Congo, which is the second biggest country in Africa, has been ranked as the poorest country in the world. The Gross Domestic Product of Democratic Republic of Congo was around \$395.25 in 2013. Also, in 2013, the World Bank stated that, the top 10 countries with the highest number of population which living in extreme poverty were all located in Africa. The definition of extreme poverty, according to the World Bank, is living on around \$1.3 or less in each day. Most importantly, in 2010, more than 410 million across African countries were living on \$1.3 or less, those people were accounted for around 48.4% of the African population in 2010. Pushing this further, the World Bank stated that one in three people, living in Africa, are suffering from undernourishment [1].

In the same line, the United Nation's Food and Agriculture Organization (FAO) has reported that around 240 million African people, who accounted for around 31% of the African population, were undernourished and hungry in 2010. The previous percentage is the highest percentage across all the regions around the World. Furthermore, the United Nation' Millennium Project has reported that, around 41% of the African people might not regularly get foods and medical care. Also, around 79% of the African population relies on dung, wood, charcoal and such biomass products in order to cook, this because of that, around 590 million in Africa, have no access to electricity. Moreover, around 38% of the people who have lack access to the safe water are all located in Africa, which equal to around 737 million African people. The United Nation Millennium Project stated that around 49% of the people in Africa suffering from the water related diseases such as cholera and malaria, as a result, not less than 1 million African people die every year because of the malaria, most of those malarial deaths are African children. In fact, those malarial deaths in Africa are accounted as 90% of all worldwide malarial deaths, and most of them are children below five years old.

The United Nation Millennium Project reported that, at least every 30 seconds, a child dies due to the malaria or around 3,000 daily in Africa. Besides, more than 80% of the women in African have no access

to the education; as a result, the uneducated women in Africa are more likely to get affected by AIDS and less likely to immunize their own children. Meanwhile, those African children have only 40% chance of survival, this because of the uneducated mothers. It is noticeable that, African uneducated women are around 230 times more likely to die during the giving birth or and during the pregnancy than other women around the World. In fact, one in each 16 women in Africa will die during the giving birth, meanwhile, only one woman in each 4,000 women around the World will.

Figure 1 shows the human development index of Africa compared to East Asia and Pacific, South Asia and Latin America. This index



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is a composite index measuring average achievement in three basic dimensions of human development, which are health, education and standard of living. The higher value of the index reveals an improvement in the human development in a country or in a region and the lower value implies a decrease in the human development. The figure shows that Africa has the lowest human development index among the regions; the index' value increased slightly over years. This index shows that; in term of health, education and the standard of living, Africa is the poorest region across the World regions.

Literature Review

The education of women, in Africa, is particularly critical. Education, and particularly literacy, contributes to health gains, lower fertility, improved infant survival, higher labor productivity, as well as more rapid GDP growth. But also makes a contribution to social integration through equipping individuals for participation in all aspects of social, political, economic and cultural life and, thus, reduce the poverty [2]. However, education by itself doesn't reduce poverty but through things that might reflect increases of individuals income and wealth. Also, education level of individuals has strong impact on the households' welfare and that higher level of education has relatively larger impact and increasing benefits for individuals' social activities [3]. Besides, skills obtained through education tend to enhance the households' income and reduce their poverty, not only this, but also will improve their health and increase the individuals' productivity [4].

The role of agriculture in the economic development remains a debated issue. The contribution of the agricultural sector into the poverty reduction is depends on the sector's performance and on the sector growth. Also, it enhance the economy through indirect way, its indirect impact is through growing the other sectors in the economy such as the industry' sector. However, it depends on how deep the poor people are participating on the sector performance and how big the sector's size in the economy. However, agriculture has a positive and significant impact on the poverty reduction in the poorest areas, it contributes significantly to the economic growth and all development activities and therefore reducing the poverty [5]. However, to reduce poverty, increasing the employment among the poorer areas would help in increasing individuals' income and, thus, poverty [6]. Pushing this further, more farm activities would increase the farmers' income and thus help in reducing the poverty rate of those farmers [7]. On other hand, industry sector play an important role in term of poverty reduction, not only by creating more jobs but also by its positive spillover effects on the poor areas and societies [8]. Moreover, financial development has a long-run positive significant impact on poverty reduction, its impact through attracting saving and relocating it in productive investments in the poor places [9]. However, poverty remains a serious problem that facing African countries, in this regard, the studies that focus on this issue in Africa are rare.

Fiszbein et al. [10] argue that, the social protection is a key element to start fighting the poverty across the World; they concluded that social protection is positively contributes to the poverty reduction. Further, they resulted that more than 150 billion people globally have been prevented from falling into poverty because of the social protection programs. However, they argue that if all poor countries adopted the best efficiency achieved in the World, they will not be able to fill the gap of the poverty through the social protection. Most importantly, recent studies suggested that economic growth, FDI, agriculture, industries and social protection would decrease the poverty rate among the poor countries [11-13]. However, those studies did not go through

government spending and its impact on poverty reduction, thus, this point needs more investigation to check whether government spending would reduce poverty or not.

Data, Theoretical Foundation, Empirical Model and Methodology

Data

To estimate the impact of economic growth, trade, foreign direct investment, foreign aid and government spending on poverty reduction in Africa, we collected the related data from World Bank and United Nation. The study used annual data covered the period from 1974 to 2013. Table 1 shows the data description such as units of measurement and data sources.

Theoretical foundation

The definition of poverty has been viewed by different schools of economic thought. Starting from the classical and the neoclassical definition, through the Keynesian or neo-liberation thinking. All those theories have brought poverty to the forefront of the policy agenda, beside the most recent theories. The definitions of poverty adopted by pre-20th century economists already distinguished the ideas of relative and absolute poverty. Rowntree was innovative in stressing a 'cycle of poverty'. Among recent economists, Sen is noteworthy in looking beyond narrow monetary- based measures of poverty, while Townsend highlighted the variety of resources needed to escape poverty¹. Meanwhile, the World Bank uses not only monetary measures of poverty but also context- specific measures applicable to different countries' conditions. The European Commission (and the UK) links material resources and outcomes to social exclusion (e.g. poverty and social exclusion may preclude the affordable use of energy). The United Nations extends the concept of poverty to include lack of political participation and discrimination. However, classical traditions view individuals as largely responsible for their own destiny, choosing in effect to become poor (e.g. by forming lone-parent families). The concept of 'sub-cultures of poverty' implies that deficiencies may continue over time, owing for example to lack of appropriate role models, and that state aid should be limited to changing individual capabilities and attitudes (i.e. the laissez-faire tradition). Neoclassical theories are more wide ranging and recognize reasons for poverty beyond individuals' control. These include lack of social as well as private assets; market failures that exclude the poor from credit markets and cause certain adverse choices to be rational; barriers to education; immigrant status; poor health and advanced age; and barriers to employment

Variable	Description	Measurement	Source
GDP	Real GDP	\$ Billion	WDI, World Bank
PEE	Public expenditure on education	% of GDP	WDI, World Bank, African Union
PEH	Public expenditure on health	% of GDP	WDI, World Bank, African Union
FDI	Foreign direct investment	\$ Billion	WDI, World Bank
HDI	Human Development index	Index	United Nations Development Program
TR	Trade Openness	% of GDP	World Bank
FA	Foreign Aid	USD Billion	World Bank

Table 1: Data Description.

¹For more information regarding the poverty' theories please refer to the report which published by (E Philip Davis and Miguel, 2015) on this link (<https://www.jrf.org.uk/report/economic-theories-poverty>).

for lone-parent families. Most importantly, looking at the classical and neoclassical approaches together, their main advantages reside in the use of (quantifiable) monetary units to measure poverty and the readiness with which policy prescriptions can be put into practice. They also highlight the influence of incentives on individual behavior as well as the relationship between productivity and income. Criticism of these approaches highlights their overemphasis on the individual (without, for instance, taking into account links with the community) and the focus on purely material means to eradicate poverty. Even though the neoliberal school led by the new-Keynesians also adopts a money-centered, individual stance towards poverty, the importance assigned to the functions of the government allows for a greater focus on public goods and inequality. For instance, a more equal income distribution can facilitate the participation of disadvantaged groups of society in the type of activities that are deemed essential under broader notions of poverty. On the other hand, new-Keynesians are in line with neoclassical economists in their belief that overall growth in income is ultimately the most effective element in poverty removal. Publicly provided capital (including education) has an important role to play, with physical and human capital believed to be the foundation for economic prosperity. Unlike the classical approach, unemployment, viewed as a major cause of poverty, is largely seen as involuntary and in need of government intervention to combat it. Excessive inflation, high sovereign debt and asset bubbles are other macroeconomic factors, besides weak aggregate demand, believed to cause poverty (E Philip Davis and Miguel).

From the above, poverty is a result of individuals, society and government failure. However, the more distribution of the public goods such as education and health may result in more poverty reduction. Following the theoretical thinking of the above motioned economists and the empirical work of [14] and many others, this study will include economic growth, trade, FDI, government spending on education and health in the model to examine their impact on poverty reduction in Africa.

Empirical model

To estimate the impact of economic growth, foreign aid, trade and foreign direct investment on poverty reduction in Africa, the study uses the following formula:

$$\ln \text{HDI}_{it} = \alpha + \alpha_0' \ln \text{FA}_{it} + \alpha_1' \ln \text{FDI}_{it} + \alpha_2' \ln \text{GDP}_{it} + \alpha_3' \ln \text{TR}_{it} + \alpha_4' \ln \text{GS}_{it} + \mu_{it} \quad (1)$$

Where HDI is the human development index (poverty), FA is the foreign aid, FDI is foreign direct investment, GDP is economic growth, TR is trade openness, GS is government spending on social activities and μ is the error term; i refers to the country ($i=1, \dots, N$) and t refers to the time period ($t=1, \dots, T$). α , α_0' , α_1' , α_2' , α_3' , and α_4' are the slope parameters to be estimated which are expected to be positive.

Equation (1) demonstrates that poverty reduction which proxied by human development index (HDI) is a function of foreign aid (FA), foreign direct investment (FDI), economic growth (GDP), trade openness (TR) and government spending in the social sector (GS). The data regarding the human development index obtained from the United Nation's development program, to estimate Equation (1) the study uses the generalized method of moments (GMM).

Methodology

This study will use the Generalized Method of Moments (GMM) to estimate the impact of economic growth, foreign aid, foreign direct

investment, trade openness and government spending on education and health. In econometrics, the generalized method of moments (GMM) is a generic method for estimating parameters in statistical models. Usually we apply (GMM) for semi-parametric models, where the coefficients of interest is finite-dimensional. Besides, the full shape of the data's distribution function may not be known, and therefore the maximum likelihood estimation is not applicable. The method requires that a certain number of moment conditions were specified for the model. These moment conditions are functions of the model parameters and the data, such that their expectation is zero at the true values of the parameters. The GMM method then minimizes a certain norm of the sample averages of the moment conditions. The GMM estimators are known to be consistent, asymptotically normal, and efficient in the class of all estimators that do not use any extra information aside from that contained in the moment conditions. One of the GMM's features is the moment conditions increase with the time. Thus, the Sargan test performed to test the over-identification restrictions. There is convincing evidence that too many moment conditions introduce bias while increasing efficiency. Therefore, it suggested that a subset of these moment conditions should be used to take advantage of the trade-off between the reduction in bias and the loss in efficiency [15] and the references cited there. Most importantly, GMM also eliminates any endogeneity that may be due to the correlation of these country specific effects and the right hand side regressors. The moment conditions utilize the orthogonality conditions between the differenced errors and lagged values of the dependent variable.

Econometrics Results

Table 2 reports the descriptive statistics of the variables used in this study, which are growth domestic products, trade openness, foreign aid, foreign direct investment and government spending on education and health.

The dynamic GMM results reveal that the lagged dependent variable positively and significantly related to the current value of poverty rate (HDI). Moreover, the impact of foreign direct investment, government spending on health and government spending on education on poverty reduction has found to be positive and statistically significant. In contract, the impact of foreign aid on poverty reduction in Africa is negative and statistically significant, however, the impact of trade openness and economic growth on poverty reduction are positive and statically significant impact in Africa in the time (1974 to 2013).

The results show that the poverty rate in Africa highly depends on the past value of the human development index (HDI), which suggests that the more human development the less poverty in the continent. Human development focuses on improving the lives people lead rather than assuming that economic growth will lead, automatically, to greater wellbeing for all. Income growth is seen as a means to development, rather than an end in itself. Thus, any increment in the human development index reflects a reduction in the poverty rate.

Variable	Mean	Std. Dev.	Min	Max	Observations
GDP	11221	290	22	369000	N=2000. n=50. T=40
FDI	235	821	-323000	1165000	N=1981. n=5. T=40
TR	74.33	42.13	6.32	566.11	N=2000. n=50. T=40
FAID	365	543	-12.4	11432	N=1995. n=50. T=40
PEE	4.88	2.11	0.11	45.12	N=1999. n=50. T=40
PEH	3.01	1.33	0.03	8.76	N=2000. n=50. T=40

Note: GDP, FDI and FAID are in \$ billion.

Table 2: Descriptive Statistics.

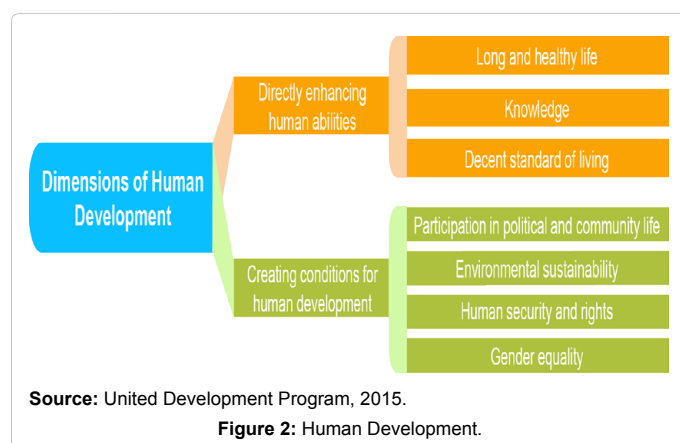
For instance, human development is about providing the best life style to the people and giving them more freedom to live the lives they value. In fact, human development aims to develop the people's abilities and, of course, giving them the chance to use these abilities. For example, educating a girl will build-up her skills, however, it is useless if she couldn't get a job, or her skills does not match the requirements of the domestic labor market. Nevertheless, there are three foundations for the human development concept, which are to live a healthy, creative and long life, to have a right and appropriate education, and to have an honorable, respectable and suitable standard of living. Moreover, there are many other important things, especially those things related to creating the favorable conditions of the human development. Therefore, if the basic needs of the human development are achieved, then this will open up adequate opportunities other aspects of the life to be improved. From this end, the results reveal that the improvement in human development index will lead to more decrement in the poverty rate in the region.

Figure 2 shows the dimensions of human development and the components of the human development index, it shows that an improvement in the long and healthy life, knowledge and decent standard of living are directly enhancing the human development in a country or a region. Further, the figure shows that, participation in political and community life, environmental sustainability, human security and rights and gender equality are conditioning the human development in a community.

Thus, the results suggest that removing the conditions of the human development and improving health, education and achieving high economic growth will help in the matter of the poverty reduction in Africa. Pushing this further, African governments are advised to invest more in the term of health human capital and education human capital to enhance the human development in the region and reduce the poverty rate among all African countries.

Moreover, the results show that government spending on education and health have important role in reducing the poverty rate in the region, this is not only reflects the importance of human development in reducing the poverty- but also- reveals that the significance role of the government sector in term of poverty reduction. Up to my knowledge, educated and healthy people are more likely to have a good job with a high salary, thus, the more investment on education and health the less poverty as confirmed by the results [16].

Governments' spending on social activities is not only reducing poverty in a direct way- but also- indirectly through other channels.



The direct effects arise in the form of benefits the poor receive from the employment programs that which directly targeted the poor areas in a country. The indirect effects arise when government investing in infrastructure, agricultural research, health and education of the poor areas. In fact, the relationships between health, education and poverty reduction are more complex than what they look, thus, the share allocated to the education and health in most of African countries doesn't recognize the role of these services on the poverty reduction in the continent.

Public spending on health is particularly important in Africa because of the poor's inability to pay for the health services and because insurance and other risk-sharing approaches to financing catastrophic costs are generally not available, even wealthier African households cannot afford catastrophic care. Without an insurance market, private for-profit providers are generally limited to the provision of simple clinical services to urban population who can pay out of their pocket. For the near future, public expenditure will function as insurance for both rich and poor households in the region, and thus, will help in reducing the poverty rate across African nations.

Most importantly, increasing government spending on social activities is not only explains how the poverty will be reduced, but also allocating that spending in the right areas will- more effectively- help in the poverty reduction. In addition, targeting the poorer places, in-which the people are extremely poor, by allocating more government spending and build new schools besides improving the existing ones will result in more school attainment. Hence, the impact of government spending on poverty reduction is small, thus, the effectiveness of allocation the spending will lead to higher impact on poverty reduction.

Pushing this further, Castro et al. found that government subsidies in Africa are poorly targeted the poor households, and indeed favors those who are better off. Besides, improving targeting to the poor involves not simply rearrange the public subsidies, but also increases the chances that the poor access these services, and thus reduce the poverty rate. According to official website of African Union 2015, yet the African' governments do not recognize the importance of public spending on education and health in reducing the poverty. From this end, the study recommends that more government spending in social activities be required to improve the human development, and reduce the poverty among the region.

Moreover, the results reveal that, foreign direct investment have had a positive significant impact on poverty reduction in Africa, this finding is in line [13]. Since the net flows of foreign direct investment in Africa has increased significantly over the past years and the poverty rate slightly decreased, thus, FDI is positively related to poverty reduction in the continent.

It's now widely accepted that the benefits accrued from FDI might include adopting of the new and advanced technology, creating new jobs opportunities, through human development, enhancement of the international trade, encourages the domestic investors, and increasing tax revenue (Jenkins et al. World Bank, 2015). All these benefits will not only contribute to economic and employment development, but also will help in the issue of the poverty reduction. The positive impact of FDI on poverty reduction in Africa might be directly or indirectly. The indirect impact of FDI on the reduction of poverty is through the economic growth that results in improving the standards of living because of the increase in gross domestic products in the country, improving the technology and increasing the productivity, as well as enhancing the economic environment. The direct impact of FDI on

poverty reduction through the job creation caused by FDI, further, this will not only increase the income of individuals- but also- more social development through more health insurance and human development.

Most importantly, foreign investments create more jobs for local poor African people, besides that, the health protection offered by the foreign investors to their local labor is the key in reducing the poverty in the region. Most of African people are poor which result in their limited abilities to get medical treatment when needed neither for themselves nor for their families. In this regard, the health insurance that provided by foreign investors to the local poor labors will not only improve their health conditions, but also will result in more available income to be used in other life needs [17-19].

Moreover, foreign direct investment generates more value added to the economy, and thus, increases the tax revenue of the local governments. Therefore, the governments get additional financial sources in order to finance their spending, either spending on social activities such as health and education, or other spending types. Further, increases the public spending on health and education will lead to more reduction in the poverty rate as the impact of government spending on education and health on poverty reduction is positive and statistically significant as seen in Table 3.

Foreign direct investment has positive spillover effects on most of the sectors in the host economy such as importing advanced technology, adopting new protection process and integration with other manufacturing [20,21]. From this end, those spillovers will help in developing other sectors and thus create more jobs in these sectors, this will not only help in employing more local poor people but also will lead to more economic growth in the economy. Besides, the more employment generated in those sectors, will therefore, and reduces the poverty rate among the African countries.

This finding advises African governments to introduce policies that encourage the current foreign investors and attract more foreign flows to come in the region. Also, facilitating doing business for foreign investors, removing barriers that facing those investors and reducing the total tax rate will generate more foreign direct investment into the continent. Thus, more spillover that is positive effects from the FDI to the economy will take place, and enhances and integrate with other manufacturing in the African countries.

In the same line, economic growth has a positive significant impact on poverty reduction in the region. In fact, the more economic growth in the continent the less poverty, this reflects the importance of the

national income, in a country, to finance the social activities and to develop other sector in the economy. Pushing this further, economic growth would give more financial sources for African governments that facilitates achieving the targets set by the governments, and therefore, reduce poverty rate. Gohou and Soumare argue that African countries need to invest more on the social sector in the region; they concluded that poverty in Africa could be reduced only by spending and more spending.

However, economic growth would not only reduce poverty in a direct way, but also through other development activities. In fact, when African governments gain more economic growth, then they start investing in other sectors in the economy such as invest in developing infrastructure, agriculture and industrialization. Thus, those projects will generate more jobs for the local African people, this will not only reduce poverty by increasing the income of those local people -but also- through the health insurance and other benefits [22]. In this regards, African policy-makers should introduce policies that expand the economy and generate more job opportunities for the good of African citizens.

Moreover, trade has significant role in reducing the poverty rate among African countries; in fact, the results suggest that the more trade the less poverty rate in the continent. In general, African economy depends on trade of good and services; this reflects the importance of trade in reducing poverty rate in the region. According to the official website of African Union 2015, more than 50% of African people are traders while the rest are consumers, however, the more trade the more job opportunities for the local people in the domestic ports or the airports in African countries.

Most importantly, the more trade lead to more export and more import as well, which generate more value added to the economy and increase the revenue of the governments in Africa. This will lead to more government spending on the social activities such as education and health, and thus, reduce poverty rate in the continent [23-25]. Moreover, people who work at ports or airport are richer than those in other sectors or companies (African Union, 2013), this reflects that trade sector in African countries is very important in reducing poverty among the region. However, trade in Africa needs more organizing and developing to start contribute more positively in term of economic development and poverty reduction.

In contradict, the results found that, foreign aid has negative and statistically significant impact on poverty reduction in Africa. For instance, Helping Africa is a noble cause, but the campaign has become a theater of the absurd- the blind leading the clueless. The record of Western aid to Africa is one of abysmal failure. More than \$500 billion in foreign aid-the equivalent of four Marshall Aid Plans- was pumped into Africa between 1960 and 1997. Instead of increasing development, aid has created dependence. The budgets of Ghana and Uganda, for example, are more than 50 percent aid dependent (World Bank, 2015).

The more aid poured into Africa, the lower its standard of living. Per capita GDP of Africans living south of the Sahara declined at an average annual rate of 0.59 percent between 1975 and 2000. Over that period, per capita GDP adjusted for purchasing power parity declined from \$1,770 in constant 1995 international dollars to \$1,479 (United Nation Development Program, 2015). The evidence that foreign aid underwrites misguided policies and feeds corrupt and bloated state bureaucracies is overwhelming.

Foreign aid given to support reform in Africa has not been

Variable	Coefficient
HDI _{it-1}	0.872*** (0.206)
InFA	-0.025* (0.009)
InFDI	0.027*** (0.009)
InTR	0.0004** (0.0002)
InGDP	0.029* (0.015)
InPEE	0.162*** (0.039)
InPEH	0.074* (0.043)
Constant	-0.245 (0.310)
Sargan test (p value)	0.2295
AR1: p-value	0
AR2: p-value	0.7651

Notes: ***, ** and * denote significance at the 1%, 5% and 10% levels, respectively. Between () are the standard errors.

Table 3: Reports the econometrics results of the GMM estimation (GMM Results).

successful either. According to the United Nations Conference on Trade and Development, “Despite many years of policy reform, barely any country in the region has successfully completed its adjustment program with a return to sustained growth. Indeed, the path from adjustment to improved performance is, at best, a rough one and, at worst, disappointing dead-end. Of the 15 countries identified as ‘core adjusters’ by the World Bank in 1993, only three (Lesotho, Nigeria and Uganda) are now classified by the IMF as ‘strong performers’ (George Ayittey).”

In my opinion, aid can only go so far. Aid can only provide relief, but it does not provide economic transformation. Economic transformation in the long-term, where people learn skills, where they earn high and rising standards of wages and of living, comes from locally run, locally owned businesses. And that’s what’s been missing from the development discussion in Africa. It’s when you have a local business that’s thriving, that’s employing people that are enabling employees to send their kids to school, to change their habitat, to get the health benefits and so on: this is what really transforms communities.

Moreover, Aid has kept Africa behind or Africans behind, in terms of getting the confidence they need, the experience they need to take a full part in the global economy, create businesses that compete globally and succeed globally, because it has distorted markets in Africa. So the sooner Africa can graduate from its dependence on aid, the better. Up to this end, aid will never help in reducing poverty among African countries as the empirical results of this study confirm that, Africa needs more than aid in order to reduce poverty and develop the economy in the continent.

Conclusion

This study examined the impact of government spending, economic growth, trade, foreign aid and foreign direct investment on poverty reduction in Africa. The study covered the period from 1974 to 2013 using annual data from the World Bank and the United Nation Development Program. The study used GMM technique in order to estimate the impact of the mentioned variable on poverty in Africa. The empirical results suggested that foreign direct investment, economic growth, trade and government spending on education and health positively and significantly related to the poverty reduction during the period of interest, while foreign aid negatively contributed to the poverty reduction in Africa. The results provided a valuable policy implications for all African policy makers, it suggest that the policy makers should introduce effective policies that enhance the development activities and generates more economic growth, also, attracting more FDI flows to come in the region. Further, targeting the poorer areas by spending more in improving the education in those areas, and developing and expanding the health services which target the poorer areas and poorer people.

References

1. Doing Business (2015) *Going Beyond Efficiency* (12th eds.), World Bank group, Washington DC, USA.
2. Cremin P, Nakabugo MG (2012) Education, development and poverty reduction: A literature critique. *International Journal of Educational Development* 32: 499- 506.
3. Rolleston C (2011) Educational access and poverty reduction: The case of Ghana 1991-2006. *International Journal of Educational Development* 31: 338- 349.
4. Gounder R, Xing Z (2012) Impact of education and health on poverty reduction: Monetary and non-monetary evidence from Fiji. *Economic Modelling* 29: 787-794.
5. Christiaensen L, Demery L, Kuhl J (2011) The (evolving) role of agriculture in poverty reduction-An empirical perspective. *Journal of Development Economics* 96: 239-254.
6. Herman E, Georgesce MA (2012) Employment Strategy for Poverty Reduction. A Romanian Perspective. *Procedia - Social and Behavioral Sciences* 58: 406-415.
7. Hoang TX, Pham CS, Ulubasoglu MA (2014) Non-farm activity, household expenditure, and poverty reduction in rural Vietnam: 2002-2008. *World Development* 64: 554-568.
8. Gamu J, Le Billon P, Spiegel S (2015) Extractive industries and poverty: A review of recent findings and linkage mechanisms. *The Extractive Industries and Society* 2: 162-176.
9. Uddin GS (2014) Financial development and poverty reduction nexus: A cointegration and causality analysis in Bangladesh. *Economic Modelling*, 36: 405-412.
10. Fiszbein A, Kanbur R, Yemtsov R (2014) Social protection and poverty reduction: Global patterns and some targets. *World Development* 61: 167-177.
11. Donaldson JA (2008) Growth is Good for Whom, When, How? *Economic Growth and Poverty Reduction in Exceptional Cases*. *World Development* 36: 2127-2143.
12. Saboor A (2015) Multidimensional Poverty in Pakistan: Regional Variations and Temporal Shifts. *Quarterly Review of Economics and Finance* 56: 1-25.
13. Gohou G, Soumare I (2012) Does Foreign Direct Investment Reduce Poverty in Africa and are There Regional Differences? *World Development* 40: 75-95.
14. Perera LDH, Lee GHY (2013) Have economic growth and institutional quality contributed to poverty and inequality reduction in Asia? *Journal of Asian Economics* 27: 71-86.
15. Baltagi BH, Demetriades PO, Law SH (2009) Financial development and openness: Evidence from panel data. *Journal of development economics* 89: 285-296.
16. Abora AEKJ, Adjasib CKD, Yawsonc A, (2013) Exploring the causality links between financial markets and foreign direct investment in Africa. *Research in International Business and Finance* 28: 118-134.
17. Herzer D, Klasen S, Nowak-Lehmann DF (2008) In search of FDI-led growth in developing countries: The way forward. *Economic Modelling* 25: 793-810.
18. Ran J, Voon JP, Li G (2007) How does FDI affect China? Evidence from industries and provinces. *Journal of Comparative Economics* 35: 774-799.
19. Sbia R, Shahbaz M, Hamdi H (2014) A contribution of foreign direct investment, clean energy, trade openness, carbon emissions and economic growth to energy demand in UAE. *Economic Modelling* 36: 191-197.
20. Omri A, Kahouli B (2014) The nexus among foreign investment, domestic capital and economic growth: Empirical evidence from the MENA region. *Research in Economics* 68: 257- 263.
21. Sadik AT, Bolbol AA (2001) Capital flows, FDI, and technology spillovers: Evidence from Arab countries. *World Development* 29: 2111-2125.
22. Fosu AK (2010) Does inequality constrain poverty reduction programs? Evidence from Africa. *Journal of Policy Modeling* 32: 818-827.
23. Kim DH, Lin SC, Suen YB (2013) Investment, trade openness and foreign direct investment: Social capability matters. *International Review of Economics and Finance* 26: 56- 69.
24. Ortega F, Peri G (2014) Openness and income: The roles of trade and migration. *Journal of International Economics* 92: 231-251.
25. Yanikkaya H (2003) Trade openness and economic growth: A cross-country empirical investigation. *Journal of Development Economics* 72: 57-89.