

PUBLIC FINANCE, MICRO FINANCE AND ACCELERATED ECONOMIC DEVELOPMENT FOR THE ERADICATION OF EXTREME POVERTY IN SUB SAHARA AFRICA¹

Chiaku Chukwuogor²

Eastern Connecticut State University, USA

ABSTRACT

According to the World Bank, in 2011, 415 million, that is 41.5 percent of the world's extremely poor, living on less than \$1.25 a day, live in Saharan Africa. A situation where more than 415 million people in a sub region of the world still live in abject poverty should be of global concern not only because of the moral imperative but also because of the lost economic contributions. This paper examines the decline or increase in extreme poverty situation in 34 countries in Sub Sahara Africa during the period 1992 and 2012 or for the years in the period where data is available. It also attempts to identify and evaluate the factors that lead to decrease or increase in extreme poverty in selected countries. We find that three of the countries, South Africa, Botswana and Namibia achieved fifty percent or more reduction in extreme poverty and that six countries, Sao Tome and Principe, Côte d'Ivoire, Madagascar, Zambia, Kenya and Benin experienced increase in extreme poverty during the period. The factors that led to extreme poverty reduction and increase for these countries were identified. Recommendations were made for effective poverty reduction in Sub-Sahara Africa.

JEL CODES: O1; O2; O4; H 23; H24

KEY WORDS: extreme poverty, welfare, poverty reduction, public assistance, social welfare programs, micro finance, economic development

I. INTRODUCTION

According to the U.S. Library of Congress, Sub-Sahara Africa consists of fifty countries that are fully or partially located south of the Sahara, excluding Sudan. Most of these countries have past colonial history either with the British, French, Spanish or Portuguese empires. Many of these countries are acclaimed to be rich in natural resources such rich arable land, minerals, and oil etc. Yet, Elsa V. Artadi, Xavier Sala-i-Martin, (2003) observed that while the rest of the world's economy grew at an annual

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² *Chiaku Chukwuogor Ph.D. is a Professor of Finance and Banking at Eastern Connecticut State University, U.S.A. She can be reached at chukwuogorc@easternct.edu and by phone at +1 860 465 5393*

rate of close to 2 percent from 1960 to 2002, growth performance in Africa was dismal. From 1974 through the mid-1990s, growth was negative, reaching -1.5 percent in 1990. As a consequence, hundreds of millions of African citizens became poor. One half of the African continent lives below the poverty line. In sub-Saharan Africa, per capita GDP is now less than what it was in 1974, having declined over 11 percent. In 1970, one in ten poor citizens in the world lived in Africa. By 2000, the number was closer to one in two. That trend translates into 360 million poor Africans in 2000, compared to 140 million in 1975.

Chukwuogor, (2003) found that although Africa was the second largest recipient of Foreign Direct Investment (FDI) flows in the 1970s, Africa's share of FDI has eroded ever since. For example, from 1993 to 1997 Africa's regional share of FDI was 4.7 percent of the total FDI to developing regions, in comparison to 33 percent and 53 percent that went to Latin America and Asia/Pacific regions respectively. She observed that in 1997, Africa received an abysmal \$5 billion in FDI.

So many reasons have been deduced for these declines. They include the negative impact of globalization, expensive investment goods, and low-levels of education, poor health, adverse geography, closed economies, too much public expenditure, and too many military conflicts.

According to the World Bank, in 1993, the head count ratio of people in Sub-Sahara Africa living on less than \$1.25 a day was 60.9 percent, representing 338 million people. The head count ratio of people in Sub- Sahara Africa living on less than \$1.25 a day reduced to 46.8 in 2011, representing 415.8 million people. This increase of 77 million in the number of people in Sub Sahara Africa living in extreme poverty is a devastating observation. This poverty situation in Sub Sahara Africa is observed after fifteen years of the United Nations' Millennium Development Goal, number 1, reduction of global extreme poverty by half by 2015. This goal was achieved in other regions of the world that had high rates of extreme poverty. For example, according to the World Bank's 2015 Overview on Poverty, East Asia saw the most dramatic reduction in extreme poverty, from 78 percent in 1981 to 8 percent in 2011. In South Asia, the share of the population living in extreme poverty is now the lowest since 1981, dropping from 61 percent in 1981 to 25 percent in 2011.

It is therefore necessary to investigate and discover why Sub- Sahara Africa is not responding to the United Nations global initiative of extreme poverty reduction by examining the extreme poverty statistics for the region over a period of time. The rest of the paper is structured as follows: Section II provides a review of the literature. Section III presents the data and methodology. Section IV provides results & discussion, and Section V concludes the study.

II. LITERATURE REVIEW

In 1995, the U.N. defined extreme poverty as a condition characterized by severe deprivation of basic human needs, including food, safe drinking water, sanitation facilities, health, shelter, education and information. It explains that poverty does not depend only on income but also on access to services. The monetary income set by the World Bank to reflect this level of poverty, which now represents the international poverty line, in 2005 prices is living below \$1.25 per day. This was revised from \$1 per day in 1996. Although there are many definitions of extreme poverty, for purpose of this paper, we will adopt this U.N.'s definition of extreme poverty and the World Bank's international poverty line.

The United Nation's first Millennium Development Goal target was to cut the 1990 global extreme poverty rate in half by 2015. The effort in achieving this target was through a coalition of the United Nations, other international organizations such as the World Bank, International Fund for Agricultural Development (IFAD), United Nations International Children's Emergency Fund (UNICEF), national governments and many Non-Government Organizations (NGOs). Therefore, the understanding was that extreme poverty can be reduced by helping national governments channel funds through public finance budgetary decisions, through micro finance provided by development banks, other government agencies, NGOs and through general economic development.

It is therefore necessary to examine the efficacy of microfinance, public finance; and economic development, as tools for extreme poverty reduction.

A. Microfinance as an extreme poverty reduction tool

The Grameen Bank Bangladesh emerged in 1976 when Professor Muhammad Yunus designed a credit delivery system to provide banking services targeted at the rural poor. The objectives were to extend banking facilities to poor men and women, eliminate the exploitation of the poor by money lenders, and create opportunities for self-employment for the vast multitude of unemployed people in rural Bangladesh, bring the disadvantaged, mostly women from the poorest households within the fold of an organizational format which they can understand and manage by themselves. The aim was to reverse the age-old vicious circle of "low income, low saving and low investment", into a virtuous circle of "low income, injection of credit, investment, more income, more savings, more investment, more income". 90 percent of the shares of Grameen Bank is now owned by the rural poor borrowers, while government owns 10 percent. By the end of 2008, the Grameen Bank had lent 7.6 billion to the poor and had over 2,100 branches in Bangladesh and the credit extension style is now replicated all over the world. This is a laudable experiment and it was not a surprise that Professor Mohammad Yunus won a Nobel Peace Prize for this. Despite his claim that 5 percent of Grameen Bank's clients exit poverty each year, there is no evidence from the Bank that

the poor borrowers belong to “extreme poor” category, that is, those living under \$1.25 a day. From the objectives when the experiment was conducted, it seemed like the rural poor targeted had sufficient economic means to attract commercial lending from banks, hence the object of eliminating the exploitation of the poor by money lenders.

According to the findings of David Hulme and Paul Mosley (1996), poor households do not benefit from microfinance. It is only non-poor borrowers, with incomes above poverty lines, who can do well with microfinance and enjoy sizable positive impacts. In addition, they found that a vast majority of those with starting incomes below the poverty line actually ended up with less incremental income after getting micro-loans, as compared to a control group which did not get such loans. Thorsten and Cull (2014) documented firm and country covariates of small and medium enterprises’ access to finance across sub-Saharan Africa. They found that enterprises in the region are less likely to have a loan than in other developing regions of the world. In another study, a World Bank sponsored study, involving 1,800 households in Bangladesh, Khandker, (2005) found only very marginal improvements for borrowers of microcredit.

On the other hand, a number of research studies have found evidence to support the success of microfinance as a tool for poverty reduction. Among them are Khandker (2005) that found that microfinance supports mainly informal activities that often have a low return and low market demand. He hypothesized that the aggregate poverty impact of microfinance is modest or even nonexistent. If true, the poverty impact of microfinance observed at the participant level represents either income redistribution or short-run income generation from the microfinance intervention. Afrane (2002) reviewed two studies conducted in Ghana and South Africa that focused mainly on the impact results on poverty of micro finance programs and found that micro finance interventions have achieved significant improvements in terms of increased business income, improved access to life-enhancing facilities and empowerment of people, particularly women. Mawa (2008) confirmed that microfinance is an innovative step towards alleviating poverty. Adu-Okoree (2012) found that microcredit had some impact on household income and welfare which led to improvement in the standard of the poor. Boateng, Boateng and Bampoe (2015) found a positive relationship between microfinance and the benchmark variables. Grigsby, Jeanetta, and Jivetti (2015) investigated the perspectives of Kenyan women in the Kaimosi cottage industry regarding the benefits and challenges of producing craft commodities for the global marketplace. They found inter alia that the women’s participation in the micro-enterprise had improved their family’s economic well-being, helped finance their children’s education, and improved their community status. This supports the literature that has found that women’s involvement in micro-enterprises reduces poverty and improves well-being.

There are also studies that have shown mixed or perhaps inconclusive results. These studies include Brownstein, Fleck, Shetty, Sorensen, and Vagama, (2007) and Siddiqi (2008).

Almost all the authors reiterate that microfinance cannot succeed in isolation. There must be a functioning government, infrastructural facility such as good roads and transportation, water and power supply, security, and economic growth.

However, since this study is on the strategies for the eradication of extreme poverty in Sub-Saharan Africa, these statements by David Hulme and Paul Mosley (1996) are very relevant. They state that most poor people do not have the basic education or experience to understand and manage even low level business activities. They pointed out that the poor are mostly risk-averse, often fearful of losing whatever little they have, and struggling to survive. Aneel Karnani (2007) also states that most people do not have the skills, vision, creativity, and persistence to be entrepreneurial. He observed that even in developed countries with high levels of education and access to financial services, about 90 percent of the labor force are employees, not entrepreneurs. Vijay Mahajan (2005), point out other complementary necessary factors: identification of livelihood opportunities, selection and motivation of the micro-entrepreneurs, business and technical training, establishment of market linkages for inputs and outputs, common infrastructure and necessary regulatory approvals. He argues that in the absence of these factors micro-credit works only for a limited familiar set of activities such as small scale farming, livestock rearing and petty trading, and even those will only thrive where market linkages are in place.

Anis Chowdhury (2009) concluded that the impact analysis of microfinance suggests that the majority of borrowers who already have some assets or business skills and education are more likely to succeed. The extreme poor in Sub-Saharan Africa, living on less than \$1.25 a day do not belong to this category of the poor.

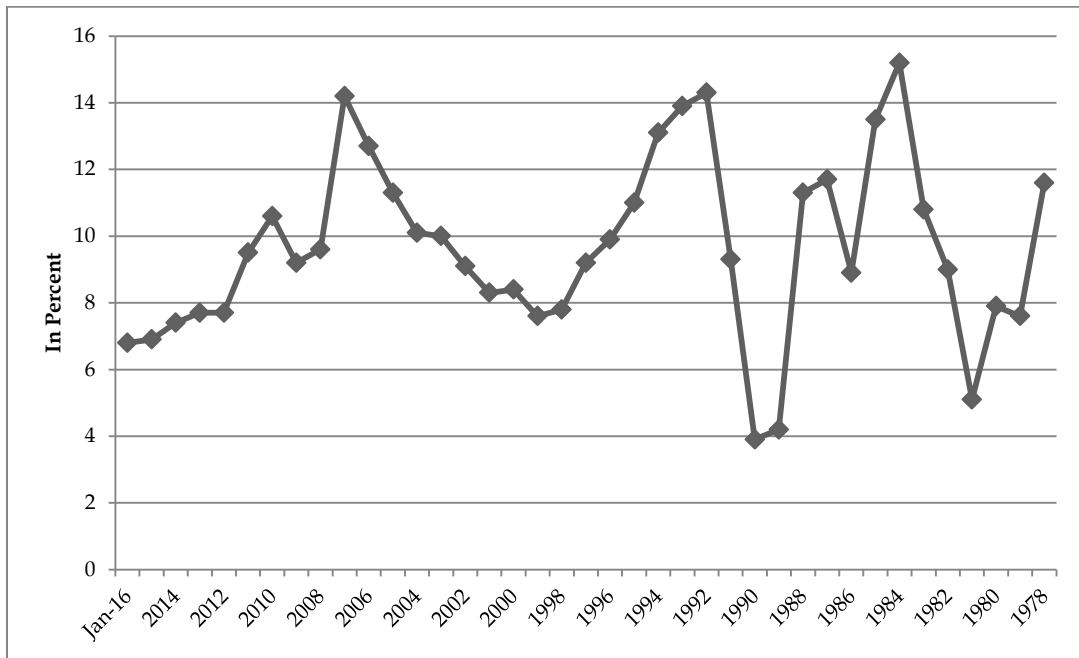
B. Public Finance and Economic Development as extreme poverty reduction tools

Economic development can be defined as sustainable action by a community or government to improve the standard of living of its citizens. This can be achieved through job creation and entrepreneurship support, providing educational and health facilities, infrastructural facilities such as good roads, and constant power supply, etc. Increase in economic growth is usually used to measure economic development. Deaton and Kozel (2005) noted that India's experience with economic reforms is of particular interest because it has led to economic growth unprecedented in the half century after independence. But economic growth does not always lead to poverty reduction, although it should, at least in the longer run. Siggel (2010) used a functional relationship between the poverty index and the human development index to project the debated end-of-1990s, a period of great acceleration of economic growth in India, poverty head

count. The result confirms a slow-down in poverty reduction in the post-reform period. This adds to the argument in support of the position that economic development alone cannot eradicate poverty. The result of Deepak, Mohan and Natarajan (2001) survey in India indicates the stagnation of poverty at around 37-38 percent throughout the 1990s. This severely colored the perception of analysts and the lay public alike of the effects of economic policies carried out over the prior decade. They arrived at the inescapable conclusion that poverty reduction has accelerated significantly along with higher economic growth in India in the 1990s.

According to the Economist, global poverty rates started to decline towards the end of the 20th century largely because of the developing-country growth acceleration, from an average annual rate of 4.3 percent from 1960 to 2000 to 6 percent from 2000 to 2010. It is estimated that about two-thirds of poverty reduction within a country comes from economic growth. China is responsible for three-quarters of the achievement. As a result of the huge GDP growth rates between 1981 to 2010, China reduced its extreme-poverty rate from 84 percent 1980 to 10 percent in 2013. See the astronomical GDP growth rates achieved by China during the period 1978 to 2016 in Figure 1.

Figure 1: China’s GDP Growth Rates 1980 to 2014



This figure shows China’s GDP growth rates between 1978 and January 2016. China achieved astronomical GDP growth rates for most of the period except in 1980 to 1981 and 1989 to 1990 when the Chinese economy experienced and economic slowdown. The highest GDP growth rates were achieved in 1984, 15.2 percent; 1992, 14.3 percent and 2007, 14.2 percent.

Public finance focusses on government’s revenue and government expenditure patterns with the objective to equitably collect revenue with the aim of allocating such revenue to achieve desirable effects and avoid or eliminate unwanted outcomes. This is particularly important in developing economies where there is abundance of

underdevelopment in infrastructure, in terms of health facilities, educational facilities, power and water supply, road networks and transportation systems. Improvements in these will lead to increased GDP growths and encourage the inflow of foreign investments which will enhance the capital base.

Public finance through budgetary allocations, is also used to address the presence of unintended outcomes in the economy such as high level of poverty and little or no social services. Budgetary reallocations can help provide social services that relate to providing food, shelter, education, healthcare for the poor. Possible initiatives include free or subsidized health care, education subsidies at least up to a certain level, food stamps, unemployment pay, free or subsidized shelter for the poor. These social services hardly exist in Sub-Saharan Africa despite the high poverty head count.

Dollar, Tatjana and Aart (2016) found that average incomes in the poorest two quintiles on average increase at the same rate as overall average incomes. This is because, in a global dataset spanning 121 countries over the past four decades, changes in the share of income of the poorest quintiles are uncorrelated with changes in average income. The variation in changes in quintile shares is also small relative to the variation in growth in average incomes, implying that the latter accounts for most of the variation in income growth in the poorest quintiles. In addition, they found little evidence that changes in the poorest bottom quintile shares of income are correlated with country-level factors that are typically considered as important determinants for growth in average incomes or for changes in inequality. This evidence confirms the central importance of economic growth for improvements in living standards at the low end of the income distribution. It also illustrates the difficulty of identifying specific macroeconomic policies that are significantly associated with the growth rates of those in the poorest quintiles relative to everyone else.

The problem is that most developing countries need buoyant budgets and there is scarcity of financial resources in Sub-Saharan Africa. Sourcing donations from foreign governments, multinational cooperation, and international institutions are plausible options. Wolf (2008) concluded that multi-donor budget support mechanisms are currently the predominant tool in development cooperation. They are heralded for granting greater autonomy to the recipient government and for increasing its discretion to spend the public budget. The article illustrates that the Ghanaian government formulated development strategies with a view of pleasing the donors but with little intention to alter conventional patterns of everyday politics.

From the above discussions it is obvious that microfinance provides some financial relief for the poor but there is no evidence that it is instrumental to eradicating extreme poverty. There mixed evidence regarding the impact of economic development on extreme poverty eradication. There seems to be more consensus that economic growth coupled with other initiatives such as social assistance, budget reallocations targeting

providing amenities for the poor and supporting business initiatives will prove more successful in eradicating extreme poverty.

III. DATA AND METHODOLOGY

This paper examines the decline or increase in extreme poverty situation in 34 countries in Sub-Sahara Africa during the period 1992 and 2012 or for the years in the period where data is available. Data was primarily collected from the World Bank's Poverty and Equity Data Base and from other relevant sources cited. We identify the degree of extreme poverty in the region, determine the degree to which Sub-Sahara African countries reduced their extreme poverty levels during the period and evaluate the factors leading to decrease or increase in extreme poverty in selected countries. We calculate the reduction or increase in extreme poverty level thus:

$$C = \frac{(ERt_i - ERt_o)}{ERt_o} \times 100$$

C = Percentage change in extreme poverty rate

ERt_o = Extreme Poverty rate at beginning of the period

ERt_i = Extreme Poverty rate at end of the period

A positive sign indicate an increase in extreme poverty and a negative sign indicates a decline in extreme poverty.

IV. RESULTS AND DISCUSSION

A. Sluggish Improvement in Extreme Poverty Level in Sub-Sahara Africa

There is marginal decrease in extreme poverty head count ratio in Sub-Sahara Africa. It declined from 56.6 percent in 1990 percent to 46.8 percent in 2011. Published data for 2015 is not yet available but the World Bank overview discussed earlier indicates this to be the trend. See Table 1 below. A closer examination of Table 1 indicates that it was not until 2005 that the extreme poverty head count ratio declined to below the 1990 level while the number of people living in extreme poverty in Sub-Sahara Africa increased by 124.8 million between 1990 and 2011.

Table 1: Extreme Poverty Trend, People living on less than \$1.25 a day in Sub-Saharan Africa

Years	Millions of Poor	Head Count Ratio
1981	201.4	52.8
1984	244	56.2
1987	263.3	55.7
1990	291	56.6
1993	338	60.9
1996	359.2	59.7

1999	385.8	59.3
2002	400.7	57.1
2005	398.9	52.8
2008	403.4	49.7
2010	411.3	48.2
2011	415.8	46.8

Source: World Bank, Poverty & Equity Databank and PovcalNet, <http://povertydata.worldbank.org/poverty/region/SSA>

This Table shows the historical trend of extreme of poverty in Sub-Sahara Africa. It show that even though the head count extreme poverty ratio declined 52.8 in 1981 to 46.8 in 2011, the number of Sub-Sahara African living in extreme poverty more than doubled, increasing from 201.4 million in 1981 to 415.8 million in 2011.

Sub-Sahara African Countries that Achieved Reduction in Extreme Poverty

Only three of the Sub-Sahara African countries achieved reduced extreme poverty ratio by 50 percent or more. South Africa led the way by reducing the extreme poverty ratio between 1993 and 2010 by 61 percent; Botswana between 1994 and 2009 by 58 percent; and Namibia between 1993 and 2009 by 50 two percent. Tables 2 to 4 below shows countries that achieved varying degrees of poverty reduction during the period.

Table 2: Sub-Saharan African Countries that Achieved 50 percent or More Reduction in Extreme Poverty

Country	Period	Percentage Reduction	Trend in Extreme Poverty Level
South Africa	1993 to 2010	61	Decrease
Botswana	1994 to 2009	58	Decrease
Namibia	1993 to 2009	50	Decrease

This Table shows the Sub-Saharan African countries that achieved 50 percent or more reduction in extreme poverty (by International Standards), Those Living on Less than \$1.25 a day as a percent of Total Population between 1992 and 2012. The percentage reduction in extreme poverty was calculated $C = \text{Percentage change in extreme poverty rate is represented by: } [(ERT_i - ERT_o) / ERT_o] \times 100$ where $ERT_o =$ Extreme Poverty rate at beginning of the period; and $ERT_i =$ Extreme Poverty rate at end of the period.

Table 3: Sub-Saharan African Countries that Achieved Between 40 percent and 50 percent Reduction in Extreme Poverty

.Country	Period		Trend in Extreme Poverty Level
Cameroon	1996 to 2007	42	Decrease
Chad	2002 to 2011	42	Decrease
The Gambia	1998 to 2003	49	Decrease
Mali	1994 to 2012	41	Decrease
Niger	1994 to 2011	48	Decrease
Nigeria	1992 to 2012	46	Decrease
Tanzania	1992 to 2012	40	Decrease
Uganda	1992 to 2012	47	Decrease
Mauritania	1994 to 2012	45	Decrease

This Table shows the Sub-Saharan African countries that achieved between 40 percent and 50 percent reduction in extreme poverty (by International Standards), Those Living on Less than \$1.25 a day as a percent of Total Population between 1992 and 2012. The percentage reduction in extreme poverty was calculated $C = \text{Percentage change in extreme poverty rate is represented by: } [(ERT_i - ERT_o) / ERT_o] \times 100$ where $ERT_o =$ Extreme Poverty rate at beginning of the period; and $ERT_i =$ Extreme Poverty rate at end of the period.

Table 4: Sub-Saharan African Countries that Achieved Less 40 percent Reduction in Extreme Poverty

Country	Period	Percentage Reduction	Trend in Extreme Poverty Level
Angola	2000 to 2008	20	Decrease
Burkina Faso	1994 to 2009	38	Decrease
Burundi	1998 to 2006	6	Decrease
Cape Verde	2005 to 2010	35	Decrease
Central African Republic	1992 to 2008	25	Decrease
Congo (Brazzaville)	2005 to 2010	39	Decrease
Ethiopia	1994 to 2010	39	Decrease
Ghana	1994 to 2012	27	Decrease
Guinea	1994 to 2012	36	Decrease
Guinea-Bissau	1993 to 2002	25	Decrease
Lesotho	1993 to 2010	16	Decrease
Malawi	1997 to 2012	13	Decrease
Mozambique	1996 to 2009	25	Decrease
Rwanda	2000 to 2010	12	Decrease
Senegal	1994 to 2011	36	Decrease
Sierra Leone	2003 to 2010	5	Decrease

This Table shows the Sub-Saharan African countries that achieved less than 40 percent reduction in extreme poverty (by International Standards), Those Living on Less than \$1.25 a day as a percent of Total Population between 1992 and 2012. The percentage reduction in extreme poverty was calculated C = Percentage change in extreme poverty rate is represented by: $[(ERT_i - ERT_o) / ERT_o] \times 100$ where ERT_o = Extreme Poverty rate at beginning of the period; and ERT_i = Extreme Poverty rate at end of the period.

As can be seen on Table 4, sixteen countries representing about 47 percent of the sample studied achieved some degree of extreme poverty reduction but not up to 40 percent. Burundi and Sierra Leone achieve meager reductions in extreme poverty level of 6 percent and 5 percent respectively.

Burundian economy is agriculture based and agriculture. Most of the labor force are employed in the agricultural sector, majority of whom are subsistence farmers. It also suffered from a lengthy civil war. In the case of Sierra Leone. Since it emerged from a decade of civil war in 2002, it has experienced substantial economic growth. However the country is plagued by such problems as poverty, unemployment, destroyed and dilapidated infrastructure. Both countries also suffer from effects of poor governance.

B. Factors Responsible for Reduction of Extreme Poverty

In the countries where significant progress was made regarding the reduction of extreme poverty, there is evidence of economic growth but most importantly, increase in social assistance. For example, according to the 2010 UNDP report, social assistance grants increased in South Africa from R10 billion (U.S.\$ 820 billion) in 1994 to R37.1 billion (U.S.\$3billion) in 2004 with beneficiaries growing from 2.6 million to 7.9 million during the same period. The reduction in extreme poverty is also partially attributable to a period of economic growth combined with a series of redistributive measures carried out by the government of the day. The number of people benefiting from social grants increased five times. During the period, there was a variety of pro-poor investments in services such as sanitation, housing and others.

It is important to note that economic growth alone cannot eradicate extreme poverty. Nigeria, the largest economy in Africa, between 1992 and 2012 reduced its extreme poverty ratio by 46 percent. Yet Nigeria is among the African countries that achieved high GDP growth rates during the period, for the most part higher than South Africa and Botswana between 2000 and 2012. According to the World Bank, the number of poor Nigerians remained at 58 million. The degree to which gains from such economic growth is channeled to efforts to reduce extreme poverty is important.

Also another important factor is the magnitude of the per capita income. For example, the Gross National Income (GNI) per capita for South Africa was \$7,640 in 2012 and \$7,410 in 2013. Compare this with the GNI per capita \$1,310 in 2012 \$1,470 in 2013 for Sao Tome and Principe.

Fluctuating Economic Growth is also a factor. Generally in Sub-Sahara African countries good GDP growth rates prevailed in the last decade or more. For example between 2000 and 2001, Mozambique's GDP growth rates exceeded 6 percent and was 11.9 percent in 2001; Angola's GDP growth rate in 2007 was 23.2 percent, Sudan's GDP growth rate 10.4 in 2008 and Sierra Leone GDP growth rate was 32.8 percent in 2003. Unfortunately many countries in Sub-Sahara Africa did not achieve stability in GDP growth rates as the GDP growth rates of many countries were low in some years and negative in many. See Table 5 below. Figure 2 below illustrates some Sub-Saharan African countries that achieved high GDP growth rates between 2000 and 2012.

C. Sub-Sahara African Countries that Experienced Increase in Extreme Poverty

An examination of the extreme poverty trend in 34 Sub-Sahara African countries between 1992 and 2012 (or for the period data is available within the period) reveals that six of these countries, namely, Sao Tome and Principe, Côte d'Ivoire, Madagascar, Zambia, Kenya and Benin experienced increases in extreme poverty during the period. For example, during the period, Sao Tome and Principe and Côte d'Ivoire experienced an increase in extreme poverty ratio of about 84 percent 32 percent respectively. Table 5 below contains the list of Sub-Saharan African countries that experienced increase in extreme poverty levels, the percentage increase and the relevant period.

Table 5: Sub-Saharan African Countries that Experienced Increase in Extreme Poverty

Country	Period	Percentage Increase	Trend in Extreme Poverty Level
Benin	2003 to 2011	9	Increase
Côte d'Ivoire	1993 to 2008	32	Increase
Kenya	1992 to 2004	13	Increase
Madagascar	1997 to 2012	22	Increase
Sao Tome and Principe	1994 to 2011	84	Increase
Zambia	1993 to 2010	14	Increase

This Table shows the Sub-Saharan African countries that experienced increase in extreme poverty (by International Standards), Those Living

on Less than \$1.25 a day as a percent of Total Population between 1992 and 2012. The percentage reduction in extreme poverty was calculated

$$C = \text{Percentage change in extreme poverty rate is represented by: } \left[\frac{(ERT_i - ERT_o)}{ERT_o} \right] \times 100$$
 where ERT_o = Extreme Poverty rate at beginning of the period; and ERT_i = Extreme Poverty rate at end of the period.

D. Factors Responsible for Increase in Extreme Poverty

The easiest verifiable factor that contributed to increase in the level of extreme poverty in the countries named above, in general, relates to paucity in economic growth. For example the GDP growth rates in Côte d'Ivoire declined by -3.7 percent in 2000; -1.4 percent in 2002; -1.6 percent in 2003; -4.7 percent in 2011. The other countries either experienced negative, low or modest GDP growth rates. Table 5 below contains the GDP growth rates for selected Sub-Sahara countries 2000 to 2012. Figure 2 demonstrates the GDP growth rates for Botswana, Nigeria, Sao Tome and Principe, South Africa and Côte d'Ivoire 2000 to 2012.

Table 6: GDP Growth Rates for Selected Sub-Sahara Countries 2000 to 2012

Countries	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012 €
Angola	3	4.2	13.8	5.2	10.2	20.9	19	23.2	13.8	2.4	3.4	3.9	7.9
Benin	4.9	6.2	4.4	3.9	3.1	2.9	3.8	4.6	5	2.7	2.6	3.5	3.6
Botswana	2	0.3	6.1	4.6		4.8	8.3	8.9	3.7	-7.9	8.1	8	5.8
Burkina Faso	1.8	6.6	4.4	7.8	4.5	8.7	6.3	4.1	5.8	3	8.4	4.4	8
Burundi	-0.9	2.1	4.4	-1.2	4.8	0.9	5.4	3.5	4.9	3.8	4.8	4.2	4.3
Cape Verde	14.3	2.2	5.3	4.2	4.3	6.5	10.1	8.6	6.7	-1.3	1.5	2.1	2.4
Chad	-0.9	11.7	8.5	14.7	na	7.9	2.7	8.4	3.4	4.1	14	1.6	7.2
Congo Dem. Rep.	-6.9	-2.1	2.9	5.6	6.6	7.8	5.6	6.3	6.2	2.8	7.2	6.9	7.2
Côte d'Ivoire	-3.7	0	-1.4	-1.6	1.6	1.8	0.7	1.6	2.3	3.8	2.4	-4.7	8.6
Djibouti	0.4	2	2.6	3.2	3	3.2	4.8	5.1	5.8	5	3.5	3.5	4.5
Ethiopia*	6.1	8.3	1.5	-2.2	13.6	11.8	10.8	11.5	10.8	8.7	12.7	11.2	6.9
Gabon	-1.9	2.1	-0.3	2.5	1.4	3	1.2	4.8	5.3	-2.7	6.9	7	5.6
Gambia	5.5	5.8	-3.3	6.9	7	-0.9	1.1	3.6	5.7	6.4	6.5	-4.4	1
Guinea-Bissau	5.4	2.2	-1	0.6	2.2	4.3	2.3	3.2	3.2	3.4	4.5	5.3	-1.5
Kenya	0.6	3.8	0.5	2.9	5.1	5.9	6.3	7	1.5	2.7	5.8	4.4	4.2
Lesotho	5.1	4.2	0.5	4.7	2.3	2.7	4.3	4.7	5.7	3.6	7.9	3.7	3.8
Liberia	25.7	22.1	31.9	-32.8	-5.1	5.9	9.1	13	6.2	5.4	6.1	8.2	8.9
Madagascar	4.8	6	-12.7	9.8	5.3	4.6	5	6.2	7.1	-4.1	0.4	1.6	1.9
Malawi	1.6	-5	1.7	5.5	5.4	2.6	7.7	5.5	8.6	7.6	6.5	4.3	2
Mali	3.2	12.1	4.2	7.4	2.3	6.1	5.3	4.3	5	4.5	5.8	2.7	-1.5
Mauritania	1.9	2.9	1.1	5.6	5.2	5.4	11.4	1	3.5	-1.2	5.1	3.9	6
Mozambique	1.1	11.9		8.8	7.9	8.4	8.7	7.3	6.8	6.3	6.8	7.3	7.4
Namibia	3.5	1.2	4.8	4.2	12.3	2.5	7.1	5.5	3.4	-0.4	6.6	4.9	4.7
Niger	-1.4	7.1	3	5.3	-0.8	7.2	5.8	3.4	9.6	-0.7	8.2	2.1	13.1
Nigeria	5.3	4.4	3.8	10.4	10.5	6.5	6	6.4	6	7	8	7.4	6.6
São Tomé & Príncipe	na	3.2	2	6.7	4.5	1.6	12.6	2	9.1	4	4.5	4.9	4
Seychelles	1.5	-2.3	1.2	-5.9	-2.9	9	9.4	10.1	-1.9	-0.2	5.6	5	2.8
Sierra Leone	6.7	-7.1	26.3	9.4	7.4	7.3	7.4	6.4	5.5	3.2	5.3	6	16.7
South Africa	4.2	2.7	3.7	2.9	4.6	5.3	5.6	5.5	3.6	-1.5	3.1	3.5	2.5
Sudan	6.3	6.5	6.4	7.7	6.5	3.7	11.9	12.2	2.3	4.6	2.2	2.7	-0.6
Swaziland	1.8	1.2	1.8	2.2	2.9	2.5	3.3	3.5	2.4	1.2	1.9	0.7	-0.3
Tanzania	4.9	6	7.2	6.9	7.8	7.4	6.7	7.1	7.4	6	7	6.4	6.4
Togo	-0.8	-1.6	-0.9	5	2.5	1.2	3.9	2.1	2.4	3.4	4	4.9	5
Uganda	3.1	5.2	8.7	6.5	5.8	10	7.1	8.1	10.4	4.1	6.2	5.9	4.4
Zambia	3.9	5.3	4.5	6.9	5.4	5.3	6.2	6.2	5.7	6.4	7.6	6.8	7.3

Source: AFDB Statistics Department, Various domestic authorities and AFDB estimates. * na means not available

This Table shows the GDP Growth Rates for Selected Sub-Sahara Countries from 2000 to 2012. The data for 2012 is estimated. It shows that except for the countries that experienced political and military conflicts such as Liberia, most of the Sub-Sahara African countries achieved impressive GDP growth rates between 2003 and 2008.

Figure 2: The GDP Growth Rates for Botswana, Nigeria, Sao Tome and Principe, South Africa and Côte d'Ivoire 2000 to 2012

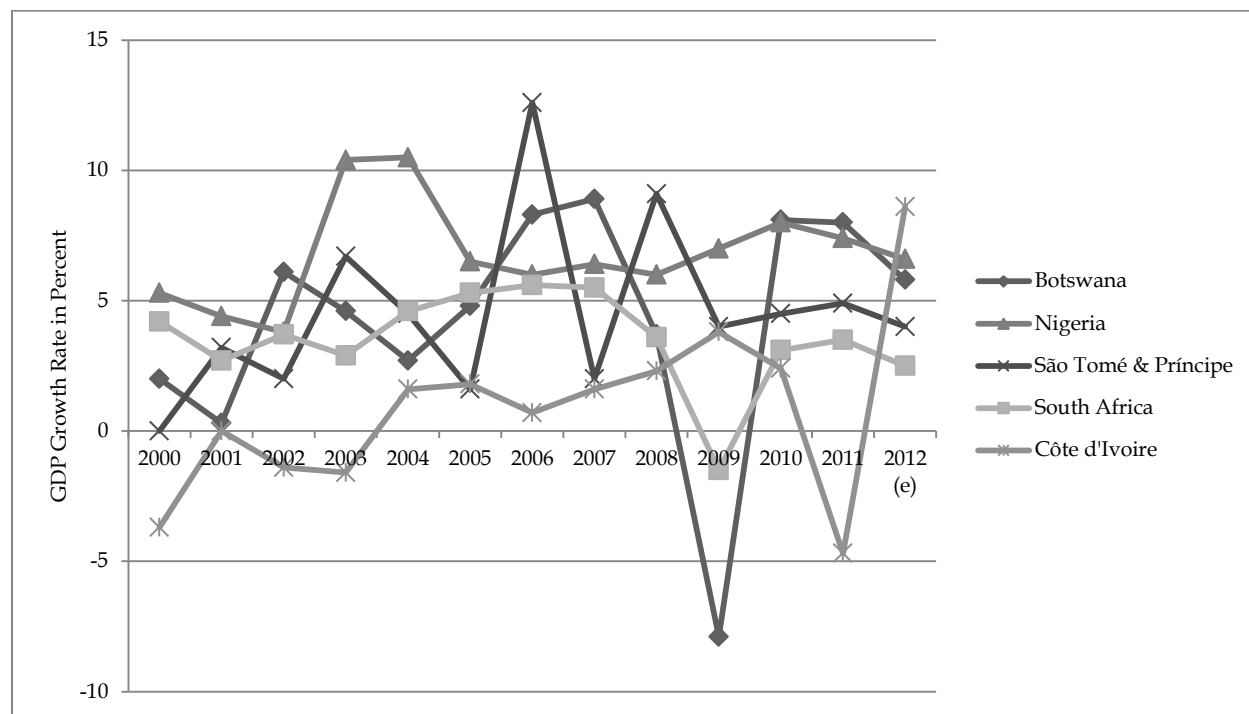


Figure 2 shows the GDP Growth Rates for Botswana, Nigeria, Sao Tome and Principe, South Africa and Côte d'Ivoire from 2000 to 2012. It demonstrates the instability in the GDP growth rates. Even though most of the countries achieved good GDP growth rates during the period, São Tomé & Príncipe achieving the highest rate of 12.6 percent in 2006 while a previously high performing Sub-Saharan economy like Botswana achieved a negative 7.9 percent GDP growth rate in 2009.

Another factor that contributed to the inability of some Sub-Sahara African countries to achieve extreme poverty reduction is the presence of political conflict. Some of the countries that recorded high GDP growth rates in some years were at some time during the period involved in military conflict. War disrupts economic activities and growth as it destroys lives, assets and often results in displacements of citizens who become refugees. This compounds the extreme poverty situation.

Another factor that contributed to this malady of increase extreme poverty is the poor capital base. Even where the Sub-Sahara African countries achieved high economic growth, this growth did not have a great positive impact on the reduction of extreme poverty because of the paucity of the financial effect on the poor. This is because of the poor economic base that prevails in Sub-Sahara Africa as most of the countries' economies are agrarian in nature.

Furthermore, a reliable social welfare system is absent in most Sub-Sahara African countries. In 2011, 415.8 people in Sub-Sahara Africa were extremely poor and living on less than \$1.25 a day.

This represents 46.8 percent of the population. China and South Africa are among the countries in the world that achieved more than 50 percent extreme poverty reduction. In the case of China, great economic growth enable the creation of job opportunities, entrepreneurship support; increase in the provision of educational and health facilities; increase in infrastructural facilities such as good roads and constant power supply. South Africa achieved similar things through economic growth but also increase in social assistance such unemployment support, engagement in a series of redistributive measures such as, subsidized education, housing and health services. This situation is absent or marginally exists in most of the Sub-Sahara African countries.

Increasing population in the absence of adequate resources is devastating to the effort to reduce extreme poverty. The population of Côte d'Ivoire in 1992 was 11.776 million and it was 22.717 in 2014 representing an increase of about 93 percent. Even with increases in the GDP growth, such a huge increase in population will bring pressure on available resources which is not much to start with. Even though Nigeria with a GDP of U.S. \$ 521.8 Billion in 2013, is the largest economy in Africa, it has a huge population of 168.8 million in 2012 and 173.6 million in 2013. Between 1992 and 2012, Nigeria achieved only 46 percent reduction in extreme poverty.

V. CONCLUSION

This paper examined the decline or increase in extreme poverty situation in 34 countries in Sub-Sahara Africa during the period 1992 to 2012 or for the years in the period where data is available. I used data available primarily at the World Bank's Poverty and Equity Data Base and from other relevant sources cited to identify the degree of extreme poverty in the region, determine the degree to which Sub-Sahara African countries reduced their extreme poverty levels during the period and evaluate the factors leading to decrease or increase in extreme poverty in selected countries.

The evidence indicates that reduction in extreme poverty occurred generally in countries with robust GDP base especially where accelerated economic development occurred. Evidence also indicates increase in social assistance through budgetary means resulted in reduction of extreme poverty.

The main drawback to extreme poverty reduction in Sub-Sahara Africa was paucity of capital in many countries national budgets. Even though some Sub-Sahara Africa countries experienced impressive GDP growth rates, this did not significantly impact their extreme poverty situation. Other factors that impede the reduction of extreme poverty include military and political conflicts, non-existence or minimal presence of a social welfare system and increasing population in the absence of adequate resources to support it.

There is need for the global network of institutions engaged in the effort to reduce global extreme poverty to rethink their strategies. Relying on NGOs will not effectively reduce extreme poverty in this region of Africa. Funding activities that will accelerate economic development will contribute to poverty reduction. Some international organizations are doing that. For example in 2015, World Bank approved two International Development Association (IDA) credit and grant amounting US\$115 million for Côte d'Ivoire to strengthen the economy and

eliminate long-standing disparities aggravated by a decade of multifaceted crisis and another US\$100 million strengthening public confidence in government by improving budgetary transparency and the accountability of public officials; building investor confidence through rapid, highly visible improvements in the business climate; and boosting economic opportunity by focusing on potential sources of growth and employment, particularly labor-intensive exports.

In addition, significant amounts of grants should be provided by many international organizations to fund a social welfare system in Sub-Sahara African countries. The Sub-Sahara African countries cannot do this on their own because of paucity of capital. Any attempt to ignore this factor would amount to paying lip service to this grave situation of extreme poverty in Sub-Sahara Africa.

A. Limitations to this study

The limitation to this study is that data was not available for the whole period from 1992 to 2012 for all the countries. A second limitation is that the study relied on data that was provided by the host countries to the World Bank.

B. Recommended Direction of Future Research

Future research should focus on identifying specific development challenges for Sub-Sahara African countries and developing policy strategies to enhance economic development that will lead to poverty reduction in Sub-Sahara Africa.

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