POST HIPC RELIEF IMPACT ON THE ECONOMIC DEVELOPMENT OF THE GAMBIA

By

TRAWALLY, Lamin

THESIS

Submitted to

KDI School of Public Policy and Management

In Partial Fulfillment of the Requirements

For the Degree of

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Committee in charge:

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ABSTRACT

The Heavily Indebted Poor Countries (HIPC) Initiative was launched in 1996 and was further enhanced in 1999 by the International Financial Institutions (IFIs) with the objective of providing debt relief to poor countries. The Gambia has benefited from the HIPC initiative, which comprises debt relief or debt cancellation from International Development Association (IDA), African Development Bank (AFDB) and the European Union (EU). The Gambia qualify for HIPC relief from the year 2000 which is regarded as the decision point, through 2007 which is regarded as the HIPC relief completion point.

The main aim of the relief was to create fiscal space through the reduction of the debt burden to a sustainable level. In the case of the Gambia, the fiscal space created by debt relief has been utilized by Government to increase its spending on poverty-reducing expenditures like education and healthcare. Given the overall objective of HIPC relief initiative, which is to create fiscal space, increase growth and to alleviate poverty, this paper, therefore, intends to specifically analyze in detail the post HIPC relief impact on the economic development of the Gambia.

The results indicated that HIPC relief together with its conditionalities has led to economic development in the Gambia. Effective implementation of prior actions to benefiting from the HIPC relief (HIPC conditionalities) leads to a sound macroeconomic stability and good governance in the country. There has also been an increase spending on poverty-reducing expenditures thereby improving the education and health sectors respectively. Improvement in health and education

sectors have undoubtedly improved the leaving conditions of the citizens thereby reducing poverty to some degree which however has not been statistically very significant.

Key Words: Debt relief, HIPC Initiative, HIPC Conditionality, Fiscal Space, poverty reduction.

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ABBREVIATION AND ACRONYMS

AFDB	African Development Bank
DSA	Debt Sustainability Analysis
EU	European Union
ESAF	Enhance Structural Adjustment Facility
HDI	Human Development Indicators
HIPC	Heavily Indebted Poor Country
GDP	Gross Domestic Product
GNI	Gross National Income
IFI	International Financial Institution
IDA	International Development Association
IV	Instrumental Variable
LIC	Low Income Country
MDG	Millennium Development Goal
MDRI	Multilateral Debt Relief Initiative
OLS	Ordinarily Least Squares
PRGF	Poverty Reduction and Growth Facility
PRSP	Poverty Reduction Strategy Paper
SSA	Sub-Saharan Africa
2SLS	two stage Least Squares

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SECTION 1

1. Introduction

1.1. Background of Study

The Heavily Indebted Poor Countries (HIPC) Initiative was launched in 1996 and further enhanced in 1999 by the International Financial Institutions (IFIs) (Mumssen, Bal-Gunduz, Ebeke, & Kaltani, 2013) aimed at providing debt relief to poor countries. "Since the debt crisis of the 1980s, the focus of the debt restructuring efforts by the international financial community has changed to providing help to debtor countries in reducing their external debt burdens to foster growth, alleviate poverty, and attain external viability" (Marcelino & Hakobyan, 2014, p.3).

Marcelino & Hakobyan (2014) further claimed that the principal objectives of the HIPC Initiative were to reduce the external debt burden of eligible low-income countries (LICs) to a sustainable level, and to promote implementation of a comprehensive poverty reduction strategy, including key structural and social reforms and a macroeconomic framework designed to promote growth. These objectives, once attained, will help the beneficiary countries in achieving the Millennium development Goals (MDGs).

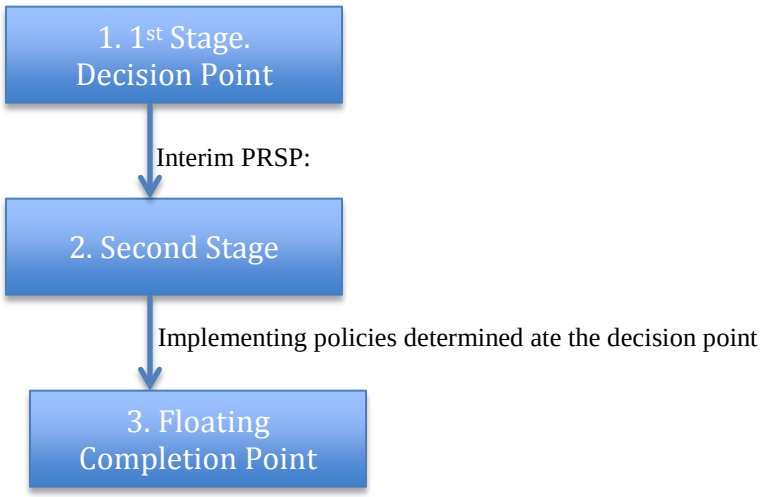
The Heavily Indebted Poor Countries (HIPC) Relief Initiative in 1999 was modified to Enhanced HIPC Initiative aimed at providing deeper, faster and wider debt relief. IMF's Enhanced Structural Adjustment Facility (ESAF) was at the same time replaced by a new Poverty Reduction and Growth Facility (PRGF) also geared towards reducing poverty to its bare minimum. Seven years after the modification, the Enhanced HIPC Initiative was complemented by the Multilateral Debt Relief Initiative (MDRI),

under which the participating multilateral creditors have been giving extra debt relief to free up more resources to help low-income countries further`` reduce poverty (Frank, 2015).

1.2. HIPC RELIEF PROCEDURE

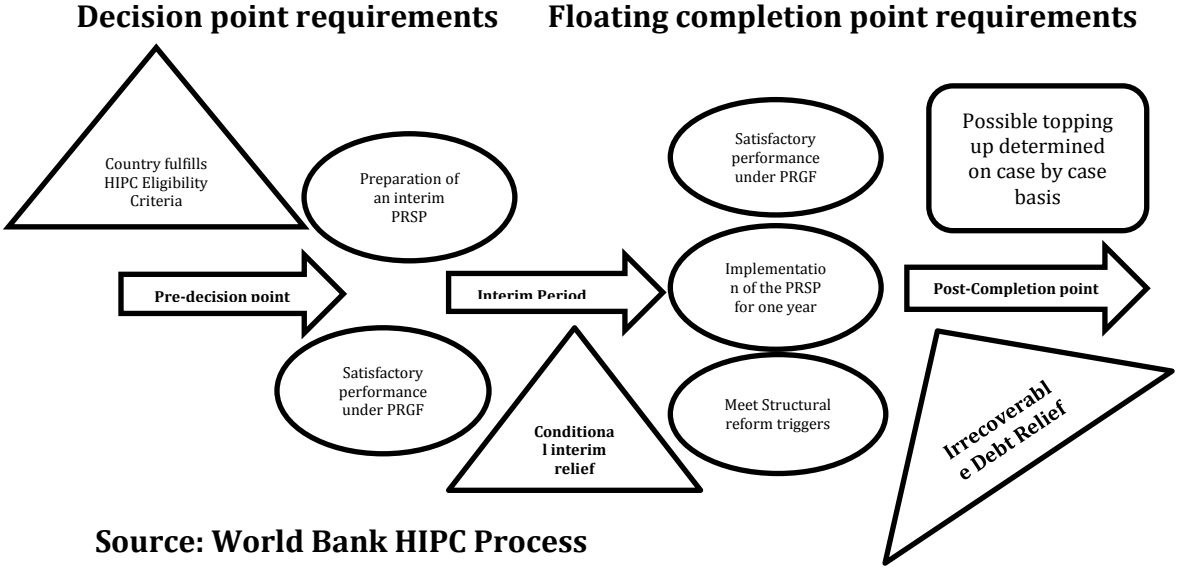
Benefitting from the relief is not an automatic process; it requires some formal assessment procedures set by the World Bank and the IMF. Given that not all low income or indebted countries can be eligible for the initiative, a set of criteria's needs to be met for a country to be considered eligible for HIPC debt relief.

HIPC DEBT INITIATIVE FLOW CHART



1. Established track record of excellent performance and develops together with civil society a Poverty Reduction Strategy Paper (PRSP); in early cases, an interim PRSP may be sufficient to reach the decision point.
2. Country establishes a second track record by implementing the policies determined at the decision point (which are triggers to reaching the floating completion point) and linked to the (interim) PRSP.

3. Completion point is tied to the implementation of policies determined at the decision point.



Source: World Bank HIPC Process

Conditions for HIPC Eligibility

- A country first and foremost needs to be eligible to borrow from the World Bank's International Development Agency and IMFs Poverty-Reduction, which provides interest-free loans, grants and subsidized interest rate to poor countries.
- A country must also face a debt level that is unsustainable and cannot be addressed by the usual debt relief mechanism. With the aid of a Debt Sustainability Analysis, this could be determine by the World Bank and or IMF.
- A country should as well establish a track record of policies and reforms put forward by the World Bank and IMF.
- A country must also develop a Poverty Reduction Strategy Paper (PRSP) through a broad-based participatory process in the country.

  Source:(Fund & Bank, n.d.)

To receive the full HIPC debt relief i.e. completion point, a country must meet certain criteria's. First, the country needs to establish a further track record of excellent performance under programs supported by loans from the IMF and the World Bank. Addition to that, a country needs to implement satisfactorily key policies and reforms agreed to at the decision point of the debt relief; and finally, adopt and implement its PRSP for at least one year. Once all these criteria's have been met, a country will benefit from the full package of the relief committed at the decision point, however, if the above criteria's are not fulfilled, a country will not benefit from the full package.

In the case of the Gambia, the under listed specific conditions needs to be fulfilled before reaching the completion point. One key condition is maintaining a stable macroeconomic environment as evidenced by satisfactory performance under a program supported by the IMF-supervised Poverty Reduction and Growth Facility (PRGF) arrangement. Furthermore, the government needs to establish progress reported in public expenditure management as could be evidenced by the issuance of reports annually produced on the implementation of the overall budget and semi-annual reports. Last but not the least, the government also needs to establish a functional and effective multi-sector regulatory institute and equally making improvements in the implementation of set strategies in both health and education sector. (World Bank report, 2007).

Given the above criteria's, it is worth noting that the above conditionality's imposed by the International Financial Institutions (IFIs) under the enhanced HIPC initiative were critical towards achieving good governance, macroeconomic stability, and debt sustainability, thereby sending a positive signal to the creditors that HIPCs were committed to sustainable growth as inline with the core

objective of the initiative.

1.3. Problem Statement

The Gambia has benefited from HIPC initiative, which comprises debt relief or debt cancellation from International Development Association (IDA), African Development Bank (AFDB) and the European Union (EU). The Gambia qualify for the decision point at the year 2000 through 2007 during which is regarded as the period covered by the HIPC debt relief. The main aim of the relief was to create fiscal space through the reduction of the debt burden to a sustainable level. According to the IMF and World Bank definition, a country's debt level is sustainable if it "allows these countries to service their debt through export earnings, aid, and private capital inflows without compromising long-term, poverty-reducing growth" (IMF website, 2001). The debt relief is, therefore, a way of reducing the debt burden of the country for the government to shift its spending to more productive ventures that will yield future returns and enhance the economic well-being of the nation.

These initiatives, mainly comprising the HIPC Initiative, the Multilateral Debt Relief Initiative (MDRI), and Paris Club debt rescheduling, have committed over $100 billion dollars in the form of non-payment of current and future debt obligations to more than 40 countries, 33 of which are African Countries. About 85 billion out of the total $100 billion has been deliver to African economies including the Gambia. A discursion paper by the World Bank Group on how clean is the slate looked in detail the post effects of HIPCs relief initiative (Stucka, 2015). The paper reveals that despite major efforts to make recipient countries maintain a sustainable debt portfolio and borrow prudently, some of the countries are still borrowing at an alarming rate. In the case of The Gambia,

the government is considered to be borrowing at a moderate rate, but with the current debt level and various debt sustainability ratios coupled with a weak macroeconomic framework I do believe there is still a cause for concern.

1.4. Research Objectives

The Gambia has reached the completion point of the debt relief and given that the principal objective of the relief is to increase growth, reduce poverty, and attain external viability it is worth looking into the actual realization of these goals. Although considerable research has been devoted to the post effect of the HIPCs relief on Sub-Saharan Africa (SSA) on generic terms and some studies were specific to other beneficiary countries, to the best of my knowledge, no studies have specifically dealt with Gambia's case. This paper, therefore, intends to specifically analyze in detail the Post-HIPC relief impact on the economic development of the Gambia.

1.5. Research hypothesis/Assumption

Given that a good amount of the country's debt is forgiven, it is very likely that this should be reflected positively on other economic variables like economic growth and poverty reduction. The above argument can be supported by the debt overhang theory. Krugman (1988) and Sachs, (1989) (cited by Sandra R. and Ivetta, 2014,p.4) states that reducing the debt overhang fosters growth through the provision of better incentives to invest and potential new capital inflows as well. The crowding out theory also supports the assumption given that debt relief will encourage productive investments than just servicing debt, which could crowd out investment and deter growth. According to Presbitero (2008), debt relief could only foster economic growth in nations with a good

economic and political institution so for the above theories to work; it will not only stop at the economic outlook but will assess the political will as well.

Contrarily to the above assumptions, it is also possible that debt relief may not bring about economic growth or reducing poverty. This assumption is as well supported by several theories, one of which is the reputational effect theory. This theory states that debt relief will not bring about economic growth because of the country's reputation as a heavily indebted country and whether they can have access to international financial markets given the risk of default. According to (Serven 1997), debt relief can affect the credibility of a country in honoring future debt obligations and as such dampens investment efforts in the country.

The research will look into this two hypothesis;

i. Debt relief can translate to economic growth and reduce poverty.
ii. Debt relief cannot bring about economic growth or reducing poverty.

Based on the above, this paper will like to address the following questions:

1. How does the HIPC relief contribute to the economic development of the Gambia?
2. How does the relief contribute to reducing poverty in the Gambia?

1.6. Organization of the Study

The rest of the research paper is organized as follows. Chapter II gives an overview of the theoretical and empirical evidence obtained from the literature review. In chapter III, the methodology and data used are described. Analysis of the empirical findings and detailed information on the robustness of the results are discussed in chapter IV. Finally, Chapter V concludes the paper and provides recommendations.

SECTION 2

2. Literature Review

Various studies have been conducted on the impact of HIPC relief initiative, but until now there has been no conclusive evidence from both the theoretical and empirical literature on its impact on economic development. This chapter will therefore critically review various theories on the impact of debt relief on economic development.

The theoretical literature will cover four main theories; the debt overhang theory, the crowding out theory, the fiscal space theory and the reputational effect theory.

2.1. The debt overhang theory

The idea of canceling the debt of Heavily Indebted Poor Countries (HIPCs) to a sustainable level is premise of various theories, one of which is the debt overhang theory developed by Myers (1977). He stated that a high debt burden has an enormous negative impact on the affected country's creditworthiness on both domestic and foreign investments, as well as on the ability and willingness of these affected governments to undertake drastic and painful institutional and economic reforms. Myers further argues that if a firm has a high amount of debt, its potential returns from new investments would be exhaustively used for debt servicing, which will certainly deter growth and hence can lead to fewer prospects for investment as well. In his theory of the firm, Myers concluded that new investments of a country would only benefit new creditors; henceforth, indebted countries are not encouraged to make new investments or borrowings.

Myers' main argument is centered on the ground that high debts might not induce high growth. He backed his argument with some empirical findings that high debt might

scare new creditors, and that debtor countries might not get access to the finance needed to support future investments even though it is a good and viable investment. However, his argument mainly focused on advanced economies that are highly indebted, (and the model he used actually focused on advanced economies), not Low-Income Countries (LICs). Koeda (2008) criticized that Myers' model might not be best suited for LICs given that the model did not capture key features of LICs. He further went on supporting his point with specific evidence that the majority of loans to LICs are highly concessional and are provided by official creditors whose main goals are not to maximize profit. Koeda argues that "this may generate a unique lending pattern—for example, contrary to the existing models, large debt may not discourage new official lending" (2006. P,5).

Debt relief, debt cancellation or even debt rescheduling free government resources from serving debt. The debt overhang theory tries to explain how debt relief actually free budget resources and perhaps shift Governments expenditure on more viable and poverty-reducing expenditure. The amount that could have been used in debt servicing could be better redirected to other pressing matters.

2.2. The crowding out theory

The crowding out theory stresses that rapid growth of government expenditure translates to a transfer of scarce productive resources from the private to the public sector, where productivity might be comparatively lower. A government running a huge budget deficit could lead to selling of securities to a private sector and possibly other institutions and even to private individuals, which may obviously require higher interest rates. A rise

in interest rates may then crowd-out private investment and consumption, offsetting the fiscal balance.

A case in point here is that debt relief increases growth by freeing resources used for productive investments (Cohen 1993). S. R. Marcelino & Hakobyan (2014) also argue that in the case of Heavily Indebted Poor Countries (HIPCs), payments of debt services eventually crowd out investment and thereby deter growth. Under such situations, debt relief increases public investment and therefore growth by easing the government budget constraint. S. R. Marcelino & Hakobyan (2014) further argued that resources are only freed if and only if the country in question has previously been honoring its debt obligations. According to Bird & Milne (2003), debt relief has to be provided in addition to aids because if not, the debt relief will not be able to ease out government budget constraint given that the relief will only be playing the role of a substitute for aid. It is argued that debt relief be directed to public spending's such as primary level education and basic health care to reduce poverty (Gupta, Clements, Guin-Siu, & Leruth, 2002).

2.3. The fiscal space theory

According to Heller (2005), fiscal space "is room in a government´s budget that allows it to provide resources for a desired purpose without jeopardizing the sustainability of its financial position or the stability of the economy". The focus point is that there must be a fiscal space in order to carry out any additional government activities. Governments can create fiscal space through borrowing, increasing taxes and cutting down less prioritized expenditures. However, despite the critical need for a fiscal space,

the government should not compromise macroeconomic stability, and it must be in a position to meet its obligations both domestic and international.

Implementing policies that will encourage macroeconomic stability is critical to HIPCs given that it is one fundamental requirement for a country to be considered to benefit from the full package of the debt relief. From Heller's point of view, fiscal space can as well be brought about by policies that could increase the growth potential of a country, which is in line with the policy conditions put forward by World Bank and IMF that needs to be met in order for a country to benefit from the full package of the HIPC relief. The argument here is that debt relief together with sound economic policies could lead to the creation of fiscal space, which could, in turn, bring about macroeconomic stability and growth.

2.4. The reputational effect theory

This theory puts emphasis on the effects a country's reputation has on its future dealings with creditors. S. Marcelino & Hakobyan (2014) argued that debt relief does not bring about high growth or greater investment, given the negative impact of debt relief on HIPCs reputation to potential creditors because of uncertainty regarding payments of future debt services. Once a country benefitted from HIPC relief, its ability to obtain future credit from commercial creditors might be difficult or may be too expensive factoring in the credit risk. Based on their reputation, creditors might be reluctant to provide credit facilities for fear of default, or some creditors might still take the risk of providing loans but at a very expensive cost to cater for the credit risk.

In a study by Bulow & Rogoff (1989), the reputation of a debtor country will be

negatively affected by debt relief as it is a way of reflecting or confirming an unsustainable debt situation. (Serven, 1997) argued that debt relief increases the risk or uncertainty related to the government's ability to meet its future debt service obligations, which lowers investment efforts in the country. It is also argued that the channel of investment that plays a key role in the debt overhang theory does not apply to low-income countries (Henry, 2004). Henry concluded that without a vibrant and active private sector with potential investment projects, it is very likely that debt relief will not enhance new investments, high growth and capital inflows in HIPCs.

2.5 Empirical Evidence

Debt relief provided to HIPC countries significantly reduces their stock of debt and debt burden. Despite significant debt reduction provided by the HIPC debt relief, many researches have shown that long-term debt sustainability still remains a key concern. (Easterly, 2013) argued that many of the countries that have reached the completion point of the HIPC relieve initiative have been assessed to have a high degree of debt distress. This is believed to have been as a result of structural weaknesses and weak macro economic management. Debt relief gave rise to new creditors that capitalize on the situation and provide new credits to poor countries that lead to a rapid increase in debt stock of a country.

SECTION 3

3. Methodology and Data Description

3.1. Methodology

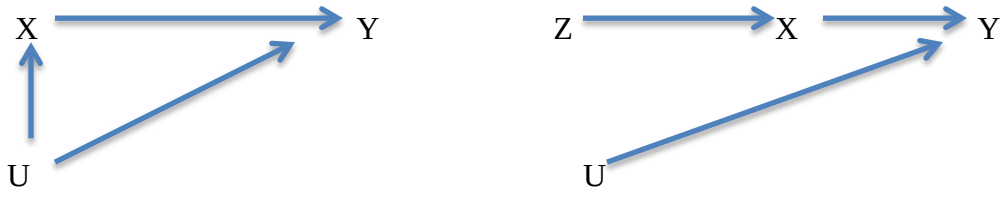
Given that the research is entirely based on the post HIPC relief impact of the Gambia which is very specific, the method of analyzing the data will be in two-fold; one is by the use of simple regression analysis and the second one will be by the use an Instrumental variable (IV) analysis. Regression analysis normally establishes the magnitude of association between variables, but not the magnitude and direction which the IV does. In analyzing the impact of policy, IV estimator is very crucial.

In the first stages, the analysis will look into the impact of the conditions set forth by the international financial institutions which require the government to increase its spending on poverty-reducing expenditures like education and health care. The above two expenditures are key and importantly quantifiable which is why they are selected among other variables which are not quantifiable and secondary conditions. A simple linear and multiple regressions will be conducted to establish the impact or effects each of those expenditures has on growth and poverty reduction. However, there could exist the possibility of an endogenous variable that could result to a bias in the OLS estimator.

With the presence of an endogenous variable, then the OLS regression could be prone to inconsistency parameters. Once there exists an association or correlation between the regressor and the error term the OLS estimator will be biased and hence the need for an Instrumental Variable (IV). The IV is a technique used for eliminating the bias or error correlation. IV control the impact of unobserved characteristics by predicting new values for the endogenous variable (Fjelstad & Rose, n.d.).

Endogeneity between the regressor and the error term. $y = xb + u$ This equation shows

a correlation between x and U indicating OLS inconsistent (Baum, 2007)



In the case of the OLS regression, the independent variables will be Government Expenditure on Education, and Government Expenditure on health and the predictable variable will be GDP/GDP Per capita, GNI and or GNI Per capita. Given the above variables, there exist a correlation between the Independent variables and the error term, which could be any other variable that could as well predict the dependent variables like increase government revenue. Two instruments will be used i.e. HIPC and Post HIPC. HIPC relief could serve as a good instrument given that it is correlated with the endogenous variables Expenditure on Education and Health and uncorrelated with the error term and exogenous variable.

The second method to employ will be the instrumental variable (IV) approach. There is the need to have HIPC and post HIPC as dummy variables, which could as well play the role of an instrumental variable. This will help establish the impact of growth and poverty reduction at different time intervals notably before and after HIPC. The use of the instrumental variables could as well assist in quantifying the impact of which both expenditures on education and health have on growth and poverty reduction before and after the HIPC relief initiative.

3.2. Data Description

Data: the research will involve the use of time series data of some macroeconomic indicators from 1995 through 2014 which will be detailed enough to reflect the effect of HIPC relief by comparing years before the relief, during the period of the relief and years after. The data consist of both development and poverty indicators, which would help ascertain the impact of the relief on both economic development and poverty reduction. Expenditure on health and Education will be used as independent variables in the regression, which will be used to predict the dependent variables like GDP PER CAPITA, GNI, and HDI. Establishing the relationship between increase spending on poverty-reducing expenditures like education and health care and its impact on economic development and poverty reduction will clearly show the level of association or impact of HIPC relief, and its conditionality's on economic growth and poverty alleviation.

Because of inconsistency in the parameters with the presence of an endogenous variable, two dummy variables will be introduced which will be *pre-HIPC* and *post HIPC*. From 1995 to 2000 is regarded pre HIPC, from 2000 through 2007 is regarded the relief period, whiles the post HIPC period starts from 2008 onwards. The dummy variables will be doubled as instrumental variables (IV). ***HIPC*** is a treatment dummy taking 1 for the HIPC Period and 0 for periods before and after HIPC. ***POST HIPC*** is a time dummy taking 1 for years after 2007 representing the period after HIPC and 0 otherwise.

In the IV regression, the independent variables will be HIPC Dummy and Post HIPC dummy, whereas GDP per capita, GNI, HDI and other control variables will be regarded as the dependent variables.

Table 1: Data Description and source:

Label	Description	Source
GDP Per capita	Gross Domestic Product Per Capita	World Development Indicators
GNI per capita	Gross National Income per capita	
Exp Edu	Government Expenditure Education (% of GDP)	World Development Indicators
Exp Health	Government Expenditure on Health (%of GDP)	World Development Indicators
HIPC Dummy	taking 1 for the HIPC Period and 0 for periods before and after HIPC.	Author classification
Post HIPC Dummy	taking 1 for years after 2007 representing the period after HIPC and 0 otherwise	Author classification
HDI	Human Development Indicators	World Development Indicators
GDP	GDP per capita annual growth (%)	
External Debt	External debt stocks	
External Debt	Debt forgiven during the Period of HIPC	

3.3. Definition of variables

The time series data on GDP per capita and GNI Per capita from 1995 to 2014 will be used as the dependent variables, which will be predicted by the independent variables government expenditures on Education (% of GDP) and health (% of GDP). The independent variables were informed based on the conditions accompanied by the debt relief.

HIPC Dummy as represented by 1 (one) from 2001 through 2008 and 0 (zero) otherwise. *Post HIPC* Dummy followed the same coding 1 (one) taking for *post HIPC* and 0 (zero) otherwise. There is a 3 (three) years data lag on Government expenditure on education.(% of GDP) for the period 1997, 1998 and 2014. This is as a result a limitation to the

research.

Table 2: Data used for the analysis

Year	GDP (GMD Millions)	GDP PER CAPITA	GDP GROWTH Annual %	GOVERNMENT EXPENDITURE(Education % of GDP)	GOVERNMENT EXPENDITURE (Health Care% OF GDP)	External Debt Stock (M)	Debt Forgiven(M)	HIPC	PostHIPC	GNI Per capita
1995	786	738	0.88	2.55	3.26	426	0.0	0	0	740
1996	848	774	2.22	2.57	3.37	452	0.0	0	0	750
1997	804	713	4.90		3.11	425	0.0	0	0	730
1998	840	725	3.50		3.54	460	0.0	0	0	710
1999	815	683	6.40	1.57	3.56	472	0.0	0	0	690
2000	783	637	5.50	1.47	3.61	490	0.0	0	0	670
2001	687	543	5.80	1.16	3.71	494	-4.1	1	0	600
2002	578	442	-3.25	1.44	3.75	584	-4.0	1	0	480
2003	487	361	6.87	1.36	4.22	643	-3.9	1	0	420
2004	579	415	7.05	1.03	4.35	681	-2.3	1	0	420
2005	624	433	-0.94	1.14	4.97	667	-0.7	1	0	400
2006	655	440	1.12	1.21	5.52	718	-0.2	1	0	410
2007	799	520	3.63	1.31	5.76	700	-14.4	1	0	450
2008	966	609	5.73	3.53	5.95	373	-228.4	1	0	520
2009	901	550	6.45	3.07	5.85	501	0.0	0	1	580
2010	952	563	6.52	4.15	5.75	512	0.0	0	1	590
2011	904	517	-4.33	3.90	6.24	476	0.0	0	1	520
2012	913	505	5.86	4.09	6.12	513	0.0	0	1	520
2013	904	484	4.78	2.77	6.49	519	0.0	0	1	500
2014	851	441	0.88		7.34	500	0.0	0	1	460

Table 3: Poverty Indicators

Poverty Indicators				
Years	**HDI Value**	**Life Expectancy**	**Expect Yrs of Schooling**	**Mean Yrs of Schooling**
1990	0.33	52.1	5.1	1.2
1995	0.351	53.4	5.4	1.8
2000	0.384	55.5	6.8	2
2005	0.417	57.9	8.1	2.4
2010	0.441	59.3	8.8	2.8
2011	0.437	59.5	8.8	2.8
2012	0.44	59.8	8.8	2.8
2013	0.442	60	8.8	2.8
2014	0.441	60.2	8.8	2.8

For the poverty indicators, the research would focus more on the Human Development Indicators from the three set of available periods; pre HIPC period of 1990, 1995 and 2000; HIPC period of 2005 and then post HIPC periods of 2010, 2011, 2012, 2013 and 2014 respectively. The poverty indicators are not as detailed as the development indicators, which is also a limitation of the research.

SECTION 4

4. Result Analysis and Discussion.

This section provides a detailed account of the regression results generated using the OLS and 2SLS regression. Time series data from 1995 to 2014 is used in the analysis.

4.1. Results of the OLS Regression and interpretation With GDP/GDP Per Capita

	(1) Log GDP	(2) GDP Per Capita	(3) Log GDP HIPC Relief	(4) GDP Percapita HIPC Relief
eduexp	0.136***	74.23**		
	(0.03)	(20.96)		
healthexp	0.00838	-80.08**		
	(0.03)	(21.07)		
hipc			-0.210*	-241.3***
			(0.08)	(34.49)
posthipc			0.107***	-201.7***
			(0.02)	(26.14)
_cons	20.10***	763.1***	20.52***	711.6***
	(0.14)	(90.68)	(0.01)	(19.07)
N	17	17	20	20
R^2	0.62	0.53	0.53	0.77

Table 4

Standard errors in parentheses

In the Stata regression shown above in model 1 of Table 4, the prediction equation is ***log of GDP = .1361626 (expedu) + .0083769 (exphealth) + 20.10253***. This tells you that GDP is predicted to increase by .13% when the expenditure on education goes up by one (1) percent, also increase by .008% when expenditure on health goes up by one (1) percent. Given that the p.value of exphealth is 0.814 greater than the 0.05 thresholds and also a coefficient very close to zero, its impact on GDP is statistically insignificant. The R^2 of 0.62 indicates a high level of association between the predictors (expenditure on education & expenditure on health) and predictable variable.

From the above result in model one, it will be important to denote that GDP has a positive correlation to both spending on education and expenditure on health. This means if Government increases it's spending on education and health, there will be a corresponding increase in GDP but with a different magnitude.

From the Stata regression shown above in model 2 of table 4, the prediction equation is ***GDP Per Capita = 74.23187 (expedu) + -80.07604 (exphealth) + 763.1249.*** From the prediction equation, one could denote that GDP Per capita is predicted to increase by 74.23187 when the expenditure on education goes up by one percent, but decrease by -80.07604 when expenditure on health goes up by one, and is predicted to be 763.1249 when both expenditure on education and health are zero. It is evident from this result that expenditure on health is negatively correlated to GDP Per capita. This could be explained with the fact that GDP per capital is a function of countries population, an increased GDP as a result of Governments' increasing its spending on healthcare may contribute to increasing population because of a corresponding increase in birth rate and life expectancy of the country. With a higher increase in population, which serves as the denominator in computing GDP Per Capita, an increase GDP may not lead to a higher GDP per capital because of rapid population growth brought in by improved medical sector.

In the Stata regression shown above in model 3 of table 4, the prediction equation is ***log of GDP = -.2098758 (HIPC) + .1065861 (POST HIPC) + 20.51532***. The equation denotes that GDP is predicted to decrease by .21% during the period of *HIPC*, but increase by .11% after fully benefitting from the *HIPC* relief i.e. *post HIPC*. It is evident from this result that *HIPC* relief has a positive impact on GDP but its impact is

not quite significant considering a P.value of 0.2 which is above 0.05 threshold and also a coefficient very close to 0.

After reaching HIPC relief completion point in 2008, Governments GDP increased by a marginal .11% as opposed to a decrease of .21% before fully benefitting from the debt relief. This could be explained with the fact that once a substantial Government budget resources are freed from servicing debt, then Government increase its spending pattern on development related expenditures that translated positively on the country's GDP.

In model 4 of the regression table 4 above, the prediction equation is ***GDP Per Capita= -241.3 (HIPC) + -201.7 (post HIPC) + 711.6***. The above equation indicates that GDP Per Capita is expected to decrease by 241.3 during the period of the HIPC relief and also expected to decrease by 201.7 during the post HIPC period. From the above, we understand HIPC Relief has a positive impact on the Country's GDP which might be expected to translate to a higher GDP Per capita, but the results prove otherwise. Instead, the GDP per capita continue deteriorating even after reaching HIPC Relief completion point. This could be partly explained by the rapid increase in the country's population and increase dependency ratio which is why increase GDP does not translate to an increase GDP Per capita.

4.2. Results of the IV Regression and interpretation with GDP/GDP Per capita

With the prevalence of endogenous variables in the OLS Regression that could lead to biases and inconsistency in some parameters, the research also employs the IV regression to minimize the effect of endogeneity.

IV Regression
Table 5

	(1) 2SLS Model For GDP	(2) 2SLS Regression For GDP Per Capita	(3) GDP 1st State Model	(4) GDP Per Capita 2nd State Model
Eduexp	0.205***	111.6**		
	(0.05)	(34.92)		
healthexp	-0.0741	-135.7***		
	(0.05)	(32.48)		
hipc			-0.514	-514
			(0.45)	(0.45)
posthipc			1.56**	1.56**
			(0.49)	(0.49)
_cons	20.10***	763.1***	2.04***	711.6***
	(0.14)	(90.68)	(0.36)	(0.36)
N	17	17	17	17
R^2	0.45	0.26	0.65	0.65

Standard errors in parentheses

the results from the IV regression appeared to be more bias-free than the OLS above. With the IV regression result, GDP increases by .21% when expenditure on education goes up by 1%. The IV regression shows a higher percentage increment in GDP with a percentage change in spending on education, however, it shows a negative correlation between GDP and expenditure on health as opposed to the result shown in the OLS regression. R^2 of 0.45 indicates a weaker level of association in model 1 of the IV regression compared to R^2 of 0.62 in model 1 of OLS regression. This difference could be as a result of the correlation that exists between the regressor and error term in OLS regression.

In model 3 of table 5, the IV regression indicated that GDP decreases by .51% during the period of HIPC but increases by 1.56% after benefiting from the HIPC relief. Again the IV regression result shows a higher percentage increase in GDP than the OLS.

From this result it could be argued that HIPC relief leads to economic growth in the Gambia, however, this growth does not significantly reflect on other economic variables like GDP per capital, which has a marginal increment after fully benefiting from the HIPC relief.

4.3 Results of the OLS regression with GNI/GNI Per capita

In table 4 and 5, GDP and GDP per capital are used as the predictable variables and the outcomes are undoubtedly useful for this paper, however, there still exists the need to evaluate the impact on GNI and GNI Per capita using both OLS and IV regression. It will be interesting to compare the results and give a fair association of HIPC relief and economic development in the Gambia.

Table 6

	(1) Log GNI	(2) GNI Per Capita	(3) GNI HIPC Relief	(4) GNI Percapita HIPC Relief
eduexp	0.152***	0.150***		
	(0.03)	(0.02)		
healthexp	0.00344	-0.165***		
	(0.03)	(0.03)		

hipc			-0.232**	-0.444***
			(0.08)	(0.05)
posthipc			0.117***	-0.305***
			(0.02)	(0.04)
_cons	20.06***	6.743***	20.49***	6.572***
	(0.14)	(0.13)	(0.01)	(0.02)
N	17	17	20	20
R^2	0.65	0.69	0.57	0.78

In model 1 of table 6, the prediction equation is log of ***GNI = .152 (expedu) + .003 (exphealth) + 20.50.*** This indicates that GNI is predicted to increase by .15% when the expenditure on education goes up by one (1) percent, also increase by .003% when expenditure on health goes up by one (1) percent. This result almost mimic that of the model one of table 4 indicating a similar positive correlation between GNI and Governments Expenditure on education and health as compared with GDP.

In model 2 of table 6, the prediction equation is ***GNI Per Capita = .1512 (expedu) + -.165 (exphealth) + 6.743***. The prediction equation indicates that one percent increase in Governments expenditure on education; GNI per capita will as well increase by .15%. On the other hand, a percentage increase in expenditure on health leads to a .165 decrease in GNI Per capita. With this, it is clear that both GDP per capita and GNI Per capital are positively correlated with an Increase Government expenditure on education, but negatively correlated with an increase Government spending on health. From the above, it could be argued that the improvement in GNI per capita is as a result of the HIPC relief and as a result, contributes to improving the livelihoods of the citizens holding all other factors constant.

In the Stata regression shown above in model 3 of table 6, the prediction equation is log of ***GNI = -.232 (HIPC) + .117 (POST HIPC) + 20.51532***. The equation could be interpreted that GNI is predicted to decrease by .23% before benefiting from the HIPC relief, but increase by .12% after fully benefitting from the *HIPC* relief i.e. *post-HIPC*. It is evident from this result that *HIPC* relief has a positive impact on GNI but its impact is not quite significant as in the case of its impact on GDP.

4.4. Result of 2SLS regression with GNI/GNI Per capita

Table 7

	(1) 2SLS Model For GNI	(2) 2SLS Regression For GNI Per Capita	(3) GNI 1st State Model	(4) GNI Per Capita 2nd State Model
eduexp	0.227***	0.232***		
	(0.06)	(0.05)		
healthexp	-0.0824	-0.241***		
	(0.05)	(0.05)		
hipc			-0.514	-514
			(0.45)	(0.45)
posthipc			1.56**	1.56**
			(0.49)	(0.49)
_cons	20.30***	6.926***	2.04***	711.6***
	(0.20)	(0.18)	(0.36)	(0.36)
N	17	17	17	17
R^2	0.49	0.52	0.65	0.65

In model 1 of table 7, it could be interpreted that with a percentage increase on expenditure on education, GNI is expected to increase by .227% as compared to a .152% increase in OLS regression. With this, it could be argued that the output of the 2SLS appeared to establish a stronger relationship and a better correlation than the output from

the OLS. In model 3 of the same table, GNI is predicted to decrease by .514 before benefiting from HIPC, However, increase by 1.56% after benefiting from HIPC relief. The above result almost mimic that of the impact of the relief on GDP and GDP per capital as previously seen in table 5.

4.5. Discussion

Debt relief frees budgetary resources that would be no longer use for servicing debt, and hence one would eventually expect a positive impact on a country's development and poverty alleviation. The results above partly agree to the general expectation, however, the magnitude and or the statistical significance say otherwise in some macroeconomic variables.

From the OLS regressions, there exists a positive correlation between HIPC conditionality's i.e. Governments increasing its expenditures on education and healthcare and that of both GDP and GNI. With a percentage increase in either of the two poverty-reducing expenditures (Expenditure on Education & Expenditure on Health) translated to a marginal increase in both GDP and GNI of the country. It has a similar effect on both GDP per capita and GNI per capita, except for the fact that Expenditure on Health is negatively correlated to both of the indicators above.

The 2SLS regressions appear to indicate more consistent parameters; there exists a stronger relationship between the regressor and the predictable variable. We have seen that with a percentage increase on Governments expenditure on education, GDP and GNI both increase with .205 and .227 percentage points respectively as compared to a .136 and .152 from the OLS output. Both GDP and GNI increase during the post HIPC period

as indicated in the 2SLS and both were trending downwards prior to benefiting from the relief.

In table3, there appeared to be an improvement in the Country's HDI value in 2010 onwards, which represents the post HIPC period. The HDI value of the Gambia prior to benefiting from HIPC relief was 0.384 in the year 2000, but increased to 0.441 in 2010 after when the country fully reached the completion point in 2008. With this, it could be argued further that HIPC relief has not only improve the economic condition of the country, but contributes to the wellbeing of its citizenry and combat poverty.

SECTION 5

5. Conclusion and Recommendation

This section concludes the paper and put forward some key recommendations and also highlighted arrears for further research considering some limitations to this research.

5.1. Conclusion

The aim of the research is to determine the impact of debt relief on the economic development of the Gambia. The relief, however, comes along with conditionality's, which could not be treated in isolation; key of which is to increase spending on poverty-reducing expenditures like education and basic health care, which plays a critical role in the analysis component of the research. The results have indicated a positive impact on both education and health sector thereby boosting the GDP of the country. However, the magnitude of the impact is not statistically significant which could be partly associated

with low GDP Per capita as a result of a rapid population growth.

With the aid of the debt relief, The Gambia government has a set of new policies; one of which is the new Education Policy, which is expected to run from 2006 through 2015. This policy focuses on enhancing and improving the quality of education. As a result of the HIPC Conditionality of increasing Governments expenditure on poverty-reducing expenditure, Education sector benefits from being the ministry with the largest budget among all other ministries coupled with massive support from various donors which includes IDA's education project and funding from the EFA FTI Catalytic Grant. Government has introduced programs on expanding infrastructure of education, training of teachers and better learning materials (www.afdb.org)

As a result, series of infrastructure were constructed with the assistance of the World Bank education project. Vast number of the populates, especially those in the rural areas were privileged to have access to free primary education with an enrollment rate of over 76 percent, which would have increases to more than 88 percent if Arabic school enrollments are to be included. The education ministry do not only stop at recruiting quality staff, but also instituted good retention policies to retain its qualified and experienced staff.

Health sector also benefit immensely from the HIPC relief and as a result expanded significantly over the years. Just as in the case of education, the health sector also benefited from series of health policies that includes the National Health Policy, a National Drug Policy, and a National Nutrition Policy as evidenced in the afdb working paper retrieved from (www.afdb.org). As a result of HIPC conditionality of increasing

spending on poverty-reducing expenditure, the health sector benefited from being the third largest budget among other ministries. Both Primary and secondary health care has significantly improved with the intervention of Government coupled with the support from donors. Access to basic health service especially at provincial level has increased with more than 80 percent of the population living within an hour travel to a health center. The sector also benefited from recruiting well-trained staffs across the country with good retention policies to retain the staff.

From the above findings, the research concludes that the HIPC relief together with its conditionality's has lead to economic development in the Gambia, which is clearly represented by the results above. HIPC conditionality's also lead to a sound macroeconomic stability and good governance in the country. There has also been an increase spending on poverty-reducing expenditures thereby improving the education and health sectors respectively. Improvement in health and education sectors have undoubtedly improved the leaving conditions of the citizens thereby reducing poverty to some degree which however has not been statistically very significant.

5.2. Policy recommendation

In view of the above results and conclusion, the positive impact of debt relief on the economic development of the Gambia should be embraced by the Government and use it as a platform to continue implementing sound macroeconomic policies and good governance for greater economic development

and poverty reduction. With good macroeconomic policies, the Governments debt might not reach a point where it will be regarded unsustainable, but unless and until the government develops good macroeconomic framework the country could still go back to the pre HIPC debt level or even worse off.

Fiscal discipline is another dimension to maintaining a sound macroeconomic stability. That is Government prioritizing spending and always put emphasis on poverty-reducing expenditures. Ensuring the effective use of public funds by putting up controls to minimize corruption and improve productivity. Strengthen accountability within civil service and focus all efforts on value for money to minimize irrelevant expenditures.

Ensuring effective monitoring of public enterprises actions in order not to frustrate the efforts of Government by shifting their liabilities on to government as the mother agency. Public enterprises need to be profitable and be paying a dividend to Government and not the reverse. Moral hazard needs to be avoided at all cost in order for Governments debt to remain within sustainable limits.

With significant improvement in both the education and health sector, the government needs to continue investing in both sectors especially education given its impact on economic development and poverty reduction as evidenced by the regression analysis. The government needs to continually improve the quality of education programs and also to ensure that health centers are properly equipped and staffed with well-trained medical personnel.

5.3. Areas for further research

Given the significant role played by the HIPC Conditionality's in improving the Macroeconomic stability through good governance, it will be recommended to look into the role played by the HIPC conditions and the Debt forgiven independently and determine the one with the highest impact on economic development and poverty reduction.

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External debt stocks	Debt service on external debt	Net transfers on external debt	External debt service arrears	Growth in external debt (%)	External debt to GDP	GDP growth (annual %)

APPENDIX

EVOLUTION OF EXTERNAL DEBT AND GDP GROWTH

1970	5.08	0.13	0.70	-		9.7	6.2
1971	5.48	0.19	0.07	-	7.9	9.8	-0.1
1972	7.36	0.28	2.34	-	34.4	12.4	0.2
1973	8.86	0.33	1.47	-	20.3	11.8	9.3
1974	12.23	0.42	3.23	-	38.0	12.8	5.9
1975	13.42	0.42	2.39	-	9.7	11.6	12.4
1976	15.43	0.37	3.32	-	15.0	13.8	7.4
1977	25.83	0.64	8.82	0.02	67.4	18.7	3.4
1978	24.53	0.41	14.55	0.04	-5.0	14.3	6.3
1979	47.54	0.50	22.35	-	93.8	23.0	-1.3
1980	97.33	0.77	50.46	0.28	104.7	40.4	6.3
1981	132.27	2.62	37.29	0.60	35.9	60.5	3.3
1982	147.41	10.52	18.92	1.44	11.4	68.2	-0.8
1983	151.73	6.67	7.06	4.90	2.9	71.1	10.9
1984	151.70	4.71	9.02	10.55	0.0	85.5	3.5
1985	176.70	0.89	12.84	19.48	16.5	78.3	-0.8
1986	212.13	8.23	27.02	14.48	20.1	114.3	4.1
1987	265.49	13.46	23.48	11.64	25.2	120.3	2.5
1988	276.98	14.02	7.93	9.77	4.3	103.9	4.5
1989	288.97	16.44	12.43	11.04	4.3	101.7	5.9
1990	308.45	30.31	-6.77	1.48	6.7	97.3	3.6
1991	322.45	23.32	6.10	2.15	4.5	46.7	3.1
1992	346.23	25.36	30.03	2.20	7.4	48.5	3.4
1993	350.16	24.43	1.03	4.51	1.1	46.4	3.0
1994	368.07	25.41	-2.71	6.35	5.1	49.3	0.2
1995	385.47	20.74	2.23	2.84	4.7	49.0	0.9
1996	411.86	19.33	38.76	2.05	6.8	48.6	2.2
1997	401.19	19.15	4.82	1.15	-2.6	49.9	4.9
1998	433.60	19.98	-3.76	0.87	8.1	51.6	3.5
1999	431.19	16.52	5.12	1.43	-0.6	52.9	6.4
2000	437.96	18.66	2.00	2.15	1.6	55.9	5.5
2001	435.38	13.08	10.60	4.10	-0.6	63.3	5.8
2002	507.40	14.20	38.97	8.44	16.5	87.7	-3.3
2003	568.09	19.92	20.00	17.68	12.0	116.6	6.9
2004	621.43	25.39	25.98	21.52	9.4	107.4	7.0
2005	616.54	25.42	28.89	20.69	-0.8	98.8	-0.9
2006	674.42	25.03	26.39	22.67	9.4	103.0	1.1
2007	664.04	28.86	11.00	15.62	-1.5	83.1	3.6
2008	336.81	16.12	21.17	15.82	-49.3	34.9	5.7
2009	387.61	18.37	15.14	22.40	15.1	43.0	6.4
2010	390.96	22.35	20.88	26.12	0.9	41.1	6.5
2011	394.37	24.79	-0.53	20.15	0.9	43.6	-4.3
2012	395.78	23.95	1.29	29.14	0.4	43.4	5.9