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GOVERNANCE AND INCLUSIVE HEALTH SYSTEM IN SUB-SAHARAN AFRICA

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Abstract

In this paper, Inclusive Health Index (IHI) for 44 Sub-Saharan African (SSA) countries were computed using Principal Component Analysis (PCA). The impact of relevant governance indicators on inclusive health in SSA were empirically investigated. The data covers 44 SSA countries over a period of 2002 to 2013. The findings reveal that health system in most SSA countries is not inclusive: only five countries have active inclusive health system, while few have potential to attain inclusive health. It was showed that government effectiveness and control of corruption has significant positive impact on inclusive health. The analysis suggests that any model using only the traditional determinant of health outcomes (per capita income and health expenditure), omitting governance variables, would not yield adequate understanding of determinants of inclusive health. To make health care inclusive in SSA, efforts should be directed towards making formulation and implementation of government policies and programmes more effective, as well as curb public corruption at levels of governance.

Keyword: Inclusive Health, Principal Component Analysis, Government Effectiveness

JEL Classification: C43, I14

Introduction

Health occupies central place in development discuss, because of two fundamental roles health plays in the process of development. First, health is key to growth and development. Barro (1991, 1997), World Bank (1994), Barro and Lee (1994), Gallup and Sachs (2000), Sen (2002) and Schultz (2002) say that health is a fundamental determinant of economic performance at both micro and macro levels. Stuart (2011) argues that poor health compromises the acquisition of human capital development, hence affects productivity of labour. Sound health for mass of people conversely therefore, is a major requirement for socio – economic development of every society. Second, health is an important outcome variable that measures the level of development in an economy.

Inclusive health system is a concept that advances equitable opportunities for all economic groups in the delivery of responsive and high quality health care services. It emphasizes on the inclusion of everyone in health services, regardless of their economic class, gender, disability and religion. Inclusive health system provides high quality health care in sufficient quantity, and ensures broader sector of people have access to it. According to Audrey and Karagueuzian (2016), inclusive health system strives to improve quality of health services, increase health accessibility to all and reduce financial barriers to health care. It is imperative therefore, to study how inclusive the health system is and what determines it in SSA.

A study by World Health Organization (WHO) in 2002 showed that health inequalities and unfair distribution of health outcomes were growing between the rich and the poor, privileged and marginalized across different countries and regions. Inspired by WHO study, the World Health Assembly (WHA), in 2005, adopted a resolution calling on member states to pursue universal health coverage for their

population. The goal was to ensure that all people have access to the health services they needed without risk of financial ruin or impoverishment, (WHO, 2012). Since the WHA resolution, research on health inequality and investigations on out of pocket spending has proliferated in all regions of the world (Xu et al., 2003; Leive and Xu 2008; Elgazzar et al. 2010). However, Sub-Sahara Africa (SSA) is still far from attaining universal health coverage, though some countries have extended health coverage to large percentage of their population.

Most of researches on health economics mainly focus on determinants of some specific health outcomes. These studies ignore determinants of inclusive health system. The few available studies on inclusive health focus on the impact of per capita income and public expenditure without much attention given to effect of governance on inclusive health system. This paper intends to fill the gap. First, it computes a composite inclusive health index. Second, the impact of relevant governance indicators on inclusive health is empirically investigated. The goal of the paper is to find out what determines inclusive health status in an economy.

The rest of the paper is divided into five sections. Section two presents literature review; method of analysis is presented in section three, principal component analysis is in section four, while the empirical results and conclusion are in sections five and six respectively.

Brief Literature Review

Several studies have attempted to determine factors that affect performance of health system. These studies use different measurements of health outcomes such as technical efficiency of health system, infant mortality, under-five mortality, life expectancy and crude death rate. Health expenditures and per capita GDP were found to be key determinants of health outcomes, (Lawanson 2012; Farag et al 2013; Ramin et al, 2014).

In a cross-sectional study of 28 Sub-Saharan African countries Mallaye and Yogo (2012) show that health expenditure, good governance and female education are significant determinants of life expectancy, HIV prevalence and infant mortality. Similarly, Anyanwu and Erhijakpor (2007) show that total health expenditure significantly influenced under-five and infant mortality rates in Africa. Wagstaff and Claeson (2005) find that health spending reduces under-five mortality, but significant only in countries with good governance. They also find that per capita income growth significantly leads to reduction in mortality.

Rhee (2012), in a time series study, also finds significant positive relationship between health care expenditure and health outcomes in Korea. Gupta et al (2000), on the other hand show significant negative relationship between corruption and health outcomes. Gupta et al (2000) add that the impact of corruption on the same health outcomes is reduced when mother's education, public health and education spending and urbanization are controlled for, but remains significant.

Among the few studies on inclusive health is Audrey and Karagueuzian (2016). They investigated the relationship between inclusive health index and GDP per capita. They find strong relationship between per capita GDP and inclusive health with high correlation coefficient of 0.823.

Method of Analysis

This section presents method of constructing Inclusive Health Index, specification of the empirical model, data sources and estimation technique.

Measurement of inclusive health index

Following Audrey and Karagueuzian (2016), this study compute Inclusive Health Index (IHI) made up of three dimensions and nine indicators. The dimensions are quantity of health care, quality of health care and accessibility to health care. Each of the dimensions comprises of three indicators, which totals nine

indicators (see Table 1 below for details). The study makes use of Principal Component Analysis (PCA) for the computation of the index.

The objective of PCA is to find unit-length linear combinations of variables with the greatest variance**.** Because Principal Component Analysis (PCA) is scale-dependent, this work uses the standardized variables $\mu_j(i)$, which ranges from 0 to 1. It prevents giving more emphasis to indicators that have higher variance than to those with low variances. The first and the second principal components ($\hat{Y}_1$and $\hat{Y}_2$) have the maximal overall variance and the greatest variance among all unit-length linear combinations that are uncorrelated to the first principal component. This constraint holds for all the principal components $\hat{Y}_j$:

$\hat{Y}_1 = \hat{e}_{11}\,\mu_1(i) + \hat{e}_{12}\,\mu_2(i) + \hat{e}_{13}\,\mu_3(i) + \ldots + \hat{e}_{1p}\,\mu_p(i)$

$\hat{Y}_2 = \hat{e}_{21}\,\mu_1(i) + \hat{e}_{22}\,\mu_2(i) + \hat{e}_{23}\,\mu_3(i) + \ldots + \hat{e}_{2p}\,\mu_p(i)$

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$\hat{Y}_p = \hat{e}_{p1}\,\mu_1(i) + \hat{e}_{p2}\,\mu_2(i) + \hat{e}_{p3}\,\mu_3(i) + \ldots. + \hat{e}_{pp}\,\mu_p(i)$

The coefficients maximize the variance subject to the constraints that the sums of square coefficients add up to one, and the components are uncorrelated with one another: cov ($\hat{Y}_i$, $\hat{Y}_j$) = 0. The eigenvectors ($\hat{e}_1$, $\hat{e}_2, \ldots, \hat{e}_p$), which are normalized and orthogonal (uncorrelated), describe the linear combinations of the variables with the greatest variance.

Table 1: Inclusive Health Indicators by Dimensions

Quantity of health	Quality of health	Access to health
Immunization DPT (percentage of children 12-23 months)	Maternal mortality ratio (per 100 000 live births)	Improved sanitation facilities, rural (% of rural population with access)
Density of physicians (per 1 000 population)	Tuberculosis (per 100 000 population)	Improved water source, rural (% of total population with access)
Government expenditure on health (% of total government expenditure)	Life expectancy at birth (female)	Out-of-pocket expenditures (% of total expenditure on health.

Source: compiled by authors

The Model

Although the main aim of this study is to investigate the impact of governance indicators on inclusive health, it is imperative to account for established variables in the literature. Thus, the empirical model is specified as:

$$IH_{it} = \beta_0 + \beta_1 lnPCI_{it} + \beta_2 GHE_{it} + \beta_3 PHE_{it} + \beta_4 GE_{it} + \beta_5 CC_{it} + \beta_6 VA_{it} + \varepsilon_{it}$$

Where: IH is inclusive health; $lnPCL$ is log of per capita income; GHE is government health expenditure; PHE is private health expenditure; GE is government effectiveness; CC is control of corruption; and VA is voice and accountability. While i represents individual country, t represents time and ε_{it} is the error component.

The log of per capita income is included to capture the impact of economic development on inclusive health, the two expenditure variables capture the effect of accessibility on inclusiveness; while government effectiveness, control of corruption, and voice and accountability are governance indicators, which have bearing with this study.

Data source and estimation technique

This research work utilizes a panel data covering 44 countries in Sub-Sahara Africa[1] over 12 years (i.e. 2002-2013). The criterion for selecting the 44 countries is solely based on availability of data. Data for the study was obtained from the World Bank development indicators and world government indicators. PCI is measured as per capita GDP, GE, VA and CC are measured on a scale of 0 to 100. While 100 is peak of good governance, 0 is the worst governance system. The government effectiveness index measures the quality of public services, the quality of civil service and the degree of its independence from political pressures, the quality of policy formulation and implementation, and the credibility of the government commitment to such policies. The closer to 100, the more effective the government is in providing fundamental public services, the more the voice of people are heard by government actors and the lesser the level of corruption in public offices. GHE is measured as government health expenditure, as percentage of total health expenditure; and PHE is out-of-pocket health expenditure, as percentage of total health expenditure.

This study employs a one-way error component model and two estimation methods viz, fixed effect and random effect GLS (Generalized Least Squares) are considered for the estimation. The Hausman specification test is used to choose between the two alternative methods.

Principal Component Analysis

This section gives a peek into the computation of the inclusive health index, using principal component analysis. The section is divided into three sub sections. The first sub section gives the summary statistics of the variables used for the computation of the IH index, while the second sub-section discusses the construction of Inclusive Health Index (IHI), and the third discusses the state of inclusive health across SSA countries.

Summary statistics of IHI indicators

Table 2 below presents the summary statistics of the variables used for the principal component analysis, which capture the indicators of the three dimensions of inclusive health system. The table displays the mean, standard deviation, the range of these variables, that is; the minimum and the maximum values. The statistics suggests that approximately 75.7% of children between the ages of 12 to 23 months were immunized against DPT with minimum and maximum values of about 3% and 99%, respectively. Government expenditure on health, as percentage of total government expenditure, recorded a mean of about 10.8% with standard deviation of 4.3, as well as 1.8% and 32.6% minimum and maximum values, respectively. Generally, SSA has made reasonable progress in immunizing children against DPT, but the public health expenditure is on the average too low to make health system inclusive.

With regards to the health system quality variables, the statistics shows that mean incidence of tuberculosis (per 100 000 population) is about 321.5, with 21 and 1354 as minimum and maximum values, respectively. The number of deaths from pregnancy related causes or within 42 days of pregnancy termination per 100,000 live births, is about 587 with minimum and maximum values of 35 and 2390 respectively. Life expectancy at birth for females over the period was about 57 years, with minimum and maximum values of approximately 42 and 78 years. The standard deviation of maternal mortality and incidence of tuberculosis

[1] The following countries were included in the study: Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Central African Republic, Chad, Comoros, Congo, Congo Democratic Republic, Cote d'Ivoire, Equatorial Guinea, Eritrea, Ethiopia, Gabon, Ghana, Guinea, Guinea Bissau, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, , Sao Tome, Senegal, Sierra Leone, South Africa, Sudan, Swaziland, Tanzania, The Gambia, Togo, Uganda and Zambia.

is 315.205 and 292.557 respectively. These two values are too large which indicate wide gap across SSA on the achievement on these two indicators.

Approximately, only 23.6% of the rural population have access to improved sanitation facilities while 57.6% of the rural population have access to improved water sources. Mean out-of-pocket expenditures as percentage of total expenditure on health, is about 39.16%, with standard deviation of 18.4 minimum and maximum values of approximately 3.2% and 79.4%, respectively.

Table 2: Summary Statistics of Principal Component Analysis Variables

Variable	Description	Mean	Standard Deviation	Range	
				Minimum	Maximum
Immunization	Immunization DPT (percentage of children 12-23 months)	75.6534	18.4056	3	99
Health expenditure	Government expenditure on health (% of total government expenditure)	10.8157	4.3324	1.8317	32.6361
Maternal mortality	Maternal mortality ratio (per 100 000 live births)	586.6174	315.2045	35	2390
Tuberculosis	Tuberculosis (per 100 000 population)	321.5182	292.5566	21	1354
Life expectancy	Life expectancy at birth (female)	57.4411	6.8437	41.823	78.03
Sanitation	Improved sanitation facilities, rural (% of rural population with access)	23.5981	20.3180	2.9	92.6
Water	Improved water source, rural (% of rural population with access)	57.6455	18.4005	22.8	99.8
Out of pocket	Out-of-pocket expenditures (% of total expenditure on health)	39.1567	18.3604	3.2414	79.4402

Source: computed by authors

Construction of the inclusive health index

The Kaiser-Meyer Olkin (KMO) measure of sampling adequacy was used to detect multicollinearity in the data, so that the appropriateness of carrying out a principal component analysis (PCA) can be determined. KMO measure compares the magnitudes of the observed correlation coefficients to the magnitudes of the partial correlation coefficient. KMO measure varies between 0 and 1 and values closer to 1 are better. A value of 0.6 is a suggested minimum for good PCA. For our data, it is 0.647, as shown in Table 3, signaling that we can proceed to PCA.

The Bartlett's Test of Sphericity is conducted with the null hypothesis that the variables in the population correlation matrix are uncorrelated. The result of the analysis shows a significant level of 0.00, a value that is small enough to reject the null hypothesis. These diagnostic procedures indicate that principal component analysis is appropriate for the data.

Table 3: KMO Measure of Sampling Adequacy and Bartlett's Test of Sphericity.

KMO Measure of Sampling Adequacy	Bartlett's Test of Sphericity		
	Chi-Square	Df	sig
0.647	1483.658	28	0.000

Source: computed by authors

The selection of the number of components to retain is based on the Kaiser criterion of eigenvalue rule. Using this criterion, the data reveal that two components are relevant for the analysis. Two components accounted for 58.79% of the total variance in the data. Loading of the two components as reported by Varimax Rotation Component Matrix result is presented in Table 4. In the first component, immunization DPT (percentage of children 12-23 months), life expectancy at birth (female), improved sanitation facilities (percentage of rural population with access) and improved water source (percentage of rural population with access) show positive loadings. Maternal mortality ratio (per 100 000 live births) and incidence of tuberculosis (per 100 000 population) show negative loading. The first component accounts for 37.26% of the total variation. This component is a reasonable representation of the health system outcomes. It means that better health system outcomes are associated with high immunization coverage, high life expectancy years, high improved sanitation facilities and water source, low incidence of tuberculosis and low maternal mortality ratio.

For the second component, government expenditure on health (% of total government expenditure) shows strong positive loading. Out-of-pocket expenditures (% of total expenditure on health) shows negative loading. The second component accounts for 21.53% of the total variance. This factor is interpreted as a measure of the affordability of the health system. This implies that health system will be affordable with high government health expenditure and low out-of-pocket expenditures.

The study also uses the Scree test. After examining the scree plot as shown in Figure 1, only two components were extracted for analysis. A reliability test was conducted using Cronbach's Alpha Coefficient. With 0.850 Cronbach's Alpha Coefficient, scores from the administration of the test yields reliable results and can be used for further analysis. Thereafter, the first principal component scores for each country for the time period were used as Index of Inclusive Health System.

Table 4: Varimax Rotation Component Matrix

Variables	Component	
	1	2
Immunization	0.692	
Health expenditure		0.514
Maternal mortality	–0.811	
Tuberculosis	–0.548	
Life expectancy	0.812	
Sanitation	0.565	
Water	0.753	
Out of pocket		–0.759

Source: computed by authors

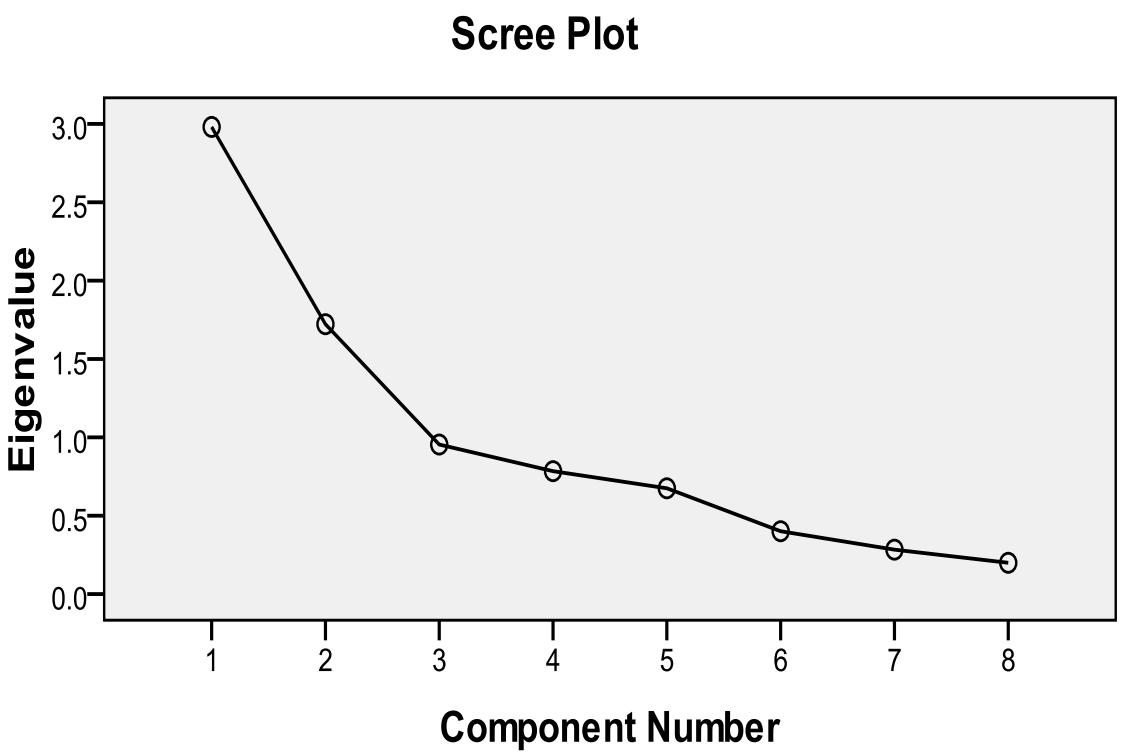

Figure 1: Scree Plot of Eigenvalues of Components

The State of Inclusive Health System in Sub-Sahara Africa

This section presents the analysis of the state of inclusive health system across Sub-Saharan African countries. The Inclusive Health System Index has an average of 1.89e–08 and standard deviation of 0.999998. However, the study employs an average value of zero, so as to calculate the percentage of deprived countries in terms of inclusive health system. Figure 2 displays the average inclusive health system of SSA countries. On the average, about 52% of countries are deprived of inclusive health system. Countries with values below zero are considered to have exclusive health system. Furthermore, about 16 countries are less deprived (countries with values between zero and one), while 5 countries have active inclusive health system (countries with values between one and above).

This statistic indicates clearly that, on the average, the state of inclusive health system in Sub-Saharan Africa is very poor. Countries with positive values of IHI are likely to improve on inclusive health system more quickly than countries with negative values.

Table 5 below gives a summary of the average inclusive health system of top ten countries and bottom ten countries in SSA. Mauritius has the most inclusive health system, follow by Cape Verde, Botswana, Sao Tome and Principe, Rwanda, The Gambia, South Africa, Comoros, Namibia and Ghana in that order. On the other hand, Sierra Leone has the worst exclusive health system in SSA, followed in this direction are Chad, Central African Republic, Nigeria, Congo Democratic Republic, Niger, Angola, Guinea, Cote d'Ivoire and Ethiopia.

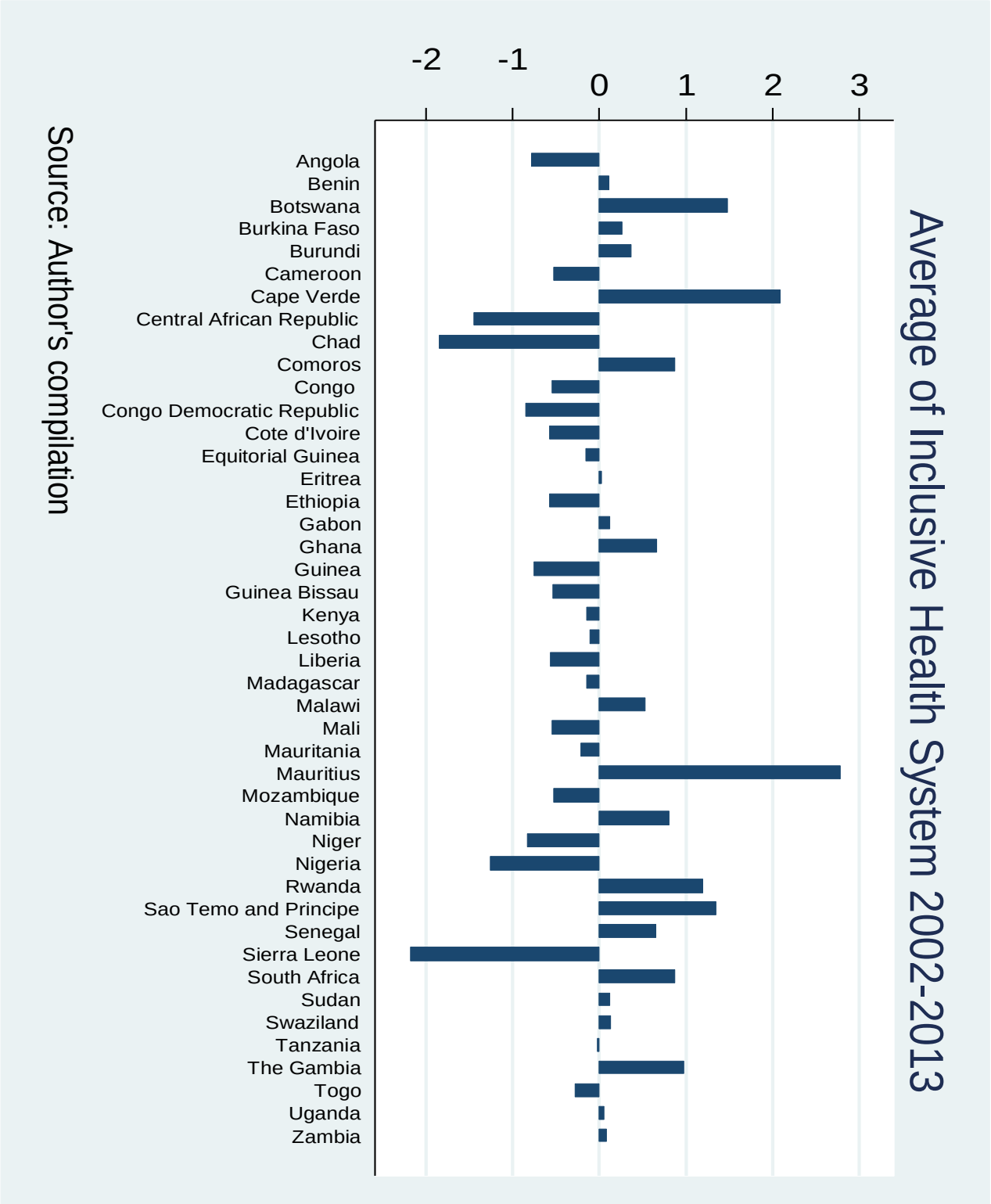

Figure 2: Inclusive Health System across SSA

Table 5: Top Ten and Bottom Ten Average Inclusive Health System Index

10 Top Countries		10 Bottom Countries	
Country	Average Score	Country	Average Score
Mauritius	2.77927	Sierra Leone	–2.19092
Cape Verde	2.08592	Chad	–1.86049
Botswana	1.48144	Central African Republic	–1.45003
Sao Tome and Principe	1.34704	Nigeria	–1.25412
Rwanda	1.19182	Congo Democratic Republic	–0.85055
The Gambia	0.97857	Niger	–0.84402
South Africa	0.87110	Angola	–0.78751
Comoros	0.86868	Guinea	–0.75842
Namibia	0.80309	Cote d'Ivoire	–0.58331
Ghana	0.66439	Ethiopia	–0.57219

Source: computed by authors

Empirical Results

This section is structured in two sub-sections. The first gives the summary statistics of variables in the model, while the second presents the panel data regression analysis**.**

Summary Statistics

This section presents the summary statistics of the data used in the econometrics analysis. The summary statistics is presented in Table 6. As shown in the Table, IHI records a mean of 1.89e–08, with a standard deviation of 0.9999998, minimum value of –3.25958 and maximum of 2.85915. The mean of Voice and Accountability is about 32.07, standard deviation of about 19.76 and 0.47, and 76.53 as minimum and maximum values respectively. GE has a mean of approximately 27.18, with standard deviation of about 20.00; minimum and maximum values are about 0.96 and 77.51 respectively. Mean of CC is about 31.59, with 21.28 standard deviation, minimum value of 0.00 and maximum value of 85.85. Generally, on the average, governance is below moderate level of good governance. However, there is wide gap in the three indicators of governance across SSA countries, as indicated by large standard deviation.

The mean log of per capita income is 6.74, standard deviation of 1.10, with minimum and maximum values of 4.66 and 10.06 respectively. The mean of private health expenditure, as percentage of total health expenditure is 3.14. This is slightly higher than the mean of public health expenditure, as percentage of total health expenditure which is about 2.63. The minimum and maximum values of these two variables also show significant variation in favour of private health expenditure as percentage of total health expenditure. Private health expenditure ranges from 0.52 to 10.82, with about 3.14 standard deviation. Public health expenditure ranges from 0.16 to 9.55, with about 1.33 standard deviation.

Table 6: Summary Descriptive Statistics of Variables in the Model

Variables	Observation	Mean	Standard Deviation	Minimum	Maximum
IH	528	1.89e–08	0.9999998	–3.25958	2.85915
VA	528	32.07069	19.76121	0.4694836	76.52582
GE	528	27.17869	19.99995	0.9569378	77.51196
CC	528	31.5935	21.27685	0	85.85366
InPCI	528	6.743129	1.100761	4.663599	10.05825
PHE	528	3.135067	1.729811	0.5168763	10.8183
GHE	528	2.631232	1.326332	0.1600804	9.546106

Source: computed by authors

Regression results

The regression results are presented in Table 7, the first column displays regression result for all the variables in the model. The second column presents regression for only governance variables, and the third column contains only the traditional determinants of health outcomes. Based on the a priori expectation, we expect that all the coefficients should be positive except coefficient of private health expenditure (PHE). It means we expect health system to become more inclusive as society makes improvement in the area of government effectiveness (GE), voice and accountability (VA), control of corruption (CC), and as per capita income (InPCE) and as government health expenditure (GHE) increases. On the other hand, the level of inclusive health (IH) decreases as value of PHE increases. In other words, more people would be excluded from the health system as amount individuals pay for health rises.

In the first model, all the variables are statistically significant, except voice and accountability, and all the significant variables have the expected signs. From the result in column one, a point increase in government effectiveness (say from 30 to 31) increases IH by about 0.0092 points. Also, a point increase in control of corruption adds approximately 0.014 points to IH. Similarly, a percentage increase in the per capita income induces 0.0022 points increase in IH. Conversely, a point increase in percentage of public health expenditure to total health expenditure reduces IH by about 0.05 points. However, IH increases by 0.11 points if percentage of public health expenditure to total health expenditure increases by a point.

The result in the second column shows that GEI and CCI are statistically significant, while VA is not. All variables in the third estimate are significant with expected signs. Comparing the three results, a number of issues come to limelight. First, any regression on inclusive health with only traditional variables without controlling for governance variables would underfit the model. Similarly, model with only governance variables would also underfit the model. Second, the model with governance variables perform better than the model with only the traditional variable. Third, the effect of per capita income and government health expenditure on inclusive health decline when governance variables are controlled for. Similarly, the negative impact of private health expenditure reduces after controlling for governance.

Table 7: Regression Result for IH Model

Variables	Estimate 1	Estimate 2	Estimate 3
VA	0.0040	0.0015	
	(0.0025)	(0.0026)	
GE	0.0092***	0.0164***	
	(0.0033)	(0.0034)	
CC	0.0139***	0.0165***	
	(0.0028)	(0.0028)	
InPCI	0.2175***		0.3474***
	(0.0308)		(0.0343)
PHE	– 0.0459**		–0.0608***
	(0.0194)		(0.0219)
GHE	0.1085***		0.2843***
	(0.0264)		(0.0272)
R^2	0.5298	0.4562	0.3352
HAUSMAN TEST	22.85***	27.39***	36.35***
Number of Countries: 44, Number of Observations: 528			

Source: computed by authors, Standard error in parenthesis,
NB: ***, **, and * indicate statistical significance at 1%,5% and 10% respectively

Conclusion and Policy Implication

This study examined the impact of governance on inclusive health system in Sub-Saharan Africa. Principal component analysis was used to compute inclusive health index, which is then regressed on three relevant governance indicators. The traditional determinants: public and private health expenditure; as well as income per capita were controlled for. A one-way error component model was specified and the model was estimated using random effect GLS, based on Hausman specification test result. The findings from the principal component analysis revealed that the health system in most SSA countries is not inclusive. However, some countries have potentials to attaining inclusive health system, while few countries such as Botswana, Mauritius, Cape Verde, Sao Tome and Principe, and Rwanda have achieved inclusive health system. The regression results showed that government effectiveness, control of corruption, per capita income and government health expenditure have significant positive relationship with inclusive health. Private health expenditure on the other hand showed negative relationship.

We therefore conclude that the capacity of government to effectively formulate and implement sound policies and programmes as well as to curb public corruption are critical to the attainment of inclusive health system in SSA. The way a country finances its health system is also a pivotal determinant for reaching an inclusive health system, because it determines whether the health services that are available would be affordable to those that need health care. If health spending in a country is more from out-of-pocket expenditure, majority of people in the economy will be excluded from the health system; consequently, the country will be far from achieving inclusive health system. Equally, general economic development that guarantee higher per capita income is key to reaching inclusive health system.

To achieve inclusive health system in SSA, it is therefore recommended that efforts should be directed to make government more effective and less corrupt. The following actions are necessary in order to achieve effective government: (i) improve the quality of public service, (ii) eliminate excessive bureaucratic red

tape, (ii) improve the capacity of budget agents to manage government finances, and (iv) better the provision of public infrastructure. It is also important to reduce corruption to the barest minimum. All forms of bribery and corruption, including petty corruption as well as public officers using public power for private gains need to be curbed.

There is equally the need to review the system of financing health systems and ensure that resources are used more efficiently while at the same time removing financial barriers to access by shifting focus from out-of-pocket spending to other sources of financing. Health systems financing strategies must be able to mobilize resources for health services. It is also imperative to ensure that health services are affordable and of high quality, and that essential health materials are adequately provided for. The financing structure should also allow adequate investment in health-related infrastructure, particularly in rural areas, because this is crucial for the vulnerable to have better access to health. Public private financing partnership could be a supporting funding strategy. Health insurance schemes for both formal and informal workers can also go a long way in improving accessibility of people to health care. Varieties of micro-insurance plans can equally be created to cover the poor and unemployed people, to enable them access health services. Policies that would ensure general economic development should be pursued to increase income per head.

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