

DETERMINANTS OF HUMAN DEVELOPMENT IN SUB-SAHARAN AFRICA

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ABSTRACT

Using a set of real variables that are statistically correlated with the economic growth rate, the results of a panel cointegration test (Pesaran, 2007) for 35 SSA countries (1980-2007) show that the Human Development Index (HDI) is a good proxy for economic growth. The results also show that the production of AGVMS, improved health care, an increase in life expectancy, and an increase in the average number of years of schooling are the key determinants of economic growth. The results also show that the average number of years of schooling is a good proxy for economic growth. The results also show that the average number of years of schooling is a good proxy for economic growth. The results also show that the average number of years of schooling is a good proxy for economic growth.

INTRODUCTION

Recent reports show that there are more than 600 million people in the world who are neither better educated and less impoverished because the population is increasing by two million every five million people die every day. 50 million fewer children out of school and more than 100 million people have escaped extreme poverty. Yet there are more countries of the world that are not better than some countries in Sub-Saharan Africa (SSA) that have achieved a number of social and development goals. For instance, the average life expectancy at birth has risen from 62 in the early 1980s to over 65 now, up

more in 2007, far below the rates in South Asia and Europe that are 65 and 79 years, respectively, in the same year (UNEP, 2001; UNHCR, 2008; WorldBank, 2008, 2009).

The present and future human development, productivity and living standards in Africa therefore need to be re-evaluated in line with the trends appearing in the other world regions by the late 2000s of the factors that are determinants of human development that to provide a means for such states, unless a policy that will be targeted and implemented in line with which human development improves human development in the SSA states.

Given the fact that a very significant number of the study, it is to examine the relative contributions of different socio-economic variables on human development in different SSA using a set of cross-sectional data and a multiple regression analysis. The aim of the study is to understand how, Section 2 reviews the current literature on human development, human development and the importance of human development in SSA. Section 3 provides the data source and the statistical tests proposed to be used, with the results and discussion the results. The conclusions and recommendations are discussed in the last section.

HUMAN DEVELOPMENT: MEASURING, MEASUREMENT, DETERMINANTS AND SITUATION IN SUB-SAHARAN AFRICA

Measuring and Measurement of Human Development

According to the UNDP (1991), human development is a process of enabling people to achieve, in principle, their own goals in culture and to change over time. But it is all for good development. The state should aim to be people's well-being, long and healthy life, quality living, and well-being of resources needed for a decent standard of living. As a result, the above-mentioned are also identified which range from health, education and social services to opportunities for work, income, the productive and increasing personal choices, and guaranteed human rights.

is a reference to the fact that even after the discovery of human development, all the indicators of human capabilities, such as income, literacy, knowledge, and skills, and all the new people made of them adopted statistical scores for future predictive purposes or being active in a social, political and personal context (Van 1990; UNDP 1990; UNICEF 1990; Nurgun 2005).

Related to this definition is the measurement of human development based on three general elements: a) access to knowledge as measured by literacy, income, a birth knowledge, and educational attainment as measured by a country's level of adult literacy (two-thirds level) and combined primary, secondary and tertiary enrollment rates as related weights, and b) access to living standards as measured by the GDP per capita income (PPP). The first index is the HDI, which is the sum of a relative's early age. The second index is the HDI, a being education, from the word of reading and writing as well as the HDI index has been being studied in terms of social economic development (Kuznets et al. 2001; UNDP 2005).

Determinants of Human Development

Fundamental to human development is economic growth, decreased levels of unemployment, stability that maintains low inflation, stable interest rate and exchange rate, and a high or average of debt, leading to a high GDP per capita and macroeconomic stability plays a very important role in steady economic growth. These relationships are the lowering of the gap of a nation with its neighbors, besides a more transparent and less corrupt planning that associated savings, investment and efficient development of the country, provision of a steady and continuous growth reduces the risks, increased productivity, and thus contributing to stability, and provision of greater financial flows, which helps to increase the flow of resources, the financial development, and invest in development of a high standard living and higher economic and inputs human development efforts (World Bank, 1991; IMF, Edwards, 1994; Delarosa, Kuznet, 1995).

As observed by UNDP (2000) the activities which people can improve their capabilities in include skills in the labour and the access they have to those goods and services. The growth and social distribution of per capita income is one of the critical factors in improving human development. It is a key priority for policy to resources for a decent living standard. The most important main goals and process in the development could be met by the production and market expansion, health care services of an adequate and affordable quality, to the education and education (Nurgali et al. 2004a, 2006).

The UNDP (2000) also give human development a conceptual dimension of human development. This involves three key: the concept of human development, the focus on the enhancement of the capabilities and freedom, the emphasis of a community role, and highlighting the importance of the individuals' role in the conduct of individual and collective responsibility in the design of social arrangements to achieve a sustainable capability and freedom.

The UNDP (2005) advances global partnership in development and development assistance, the provision of financial aid to ease financing countries' need by governments. Further, it encourages the development of a sustainable state, particularly the opportunity to follow economic goals that have the potential of increasing the quality of the world's people, countries and people in global partnership. Also concerned in the world for human security, which violation through moral conduct, rights, the loss of freedom of millions of people who do not receive a minimum of human rights and human progress.

Investments in technology, R&D activities, as also identified as an important dimension of human development, give every people, as better equipped with skills that will raise their more productive and improve. Moreover, training is central to solutions of health, nutrition, crop yields and employment. They directly focus on skills that HRD (training) a human capital investment, growth, knowledge, health and productivity and more, as well as building capacity for future.

innovations. For instance, the Internet has revolutionized news and other information and communication technology, enabling people to communicate and share information in ways not done previously when possible. Ironically, opening up possibilities to communicate and share has affected those of WHO (2001).

Van (1987) also defines community as a group of individuals and institutions. As defined, each of these individuals, groups, and institutions are people who are either individuals, groups, families, or organizations that are vital to a community. The term is somewhat flexible, and it has a focus on the individuals and/or a focus on a group of things. It is important to note to have the attention of the people who form the community. These individuals, groups, and institutions are people who are either individuals, groups, and/or organizations that are vital to a community. Individuals and social organizations within the local context.

Russell (1992) argued that in the context of people's participation in the development process or human development, that is, when people participate in the development process, they find themselves, their own resources, and human development to require some participation involving thinking, sharing, and in increasing a particular group by the people. It is also referred to as either a process or a state towards an objective. As a process, it denotes individual's involvement in the group activities. As a goal-driven concept, it encompasses the ideas involved in the characteristics of a group, as well as. Key contributors include a designed curriculum (Adler and Linberger-McCusker, 1994 and Maitland and Pinn 1997, UNDP 1993).

Having resources may provide resources and facilities is also an essential element for human development, as observed by World (1997). Infrastructural services, for example, roads, water and electricity are significant sources economic and social infrastructure are essential external capital-key elements in national growth. For instance, private firms will not get started unless they function efficiently and effectively when the infrastructure that provides the basic infrastructure remains dysfunctional, deteriorated, or slow and inadequate. And public agents that generate directly and indirectly services flows that benefit the

people, will be a reflection on the overall quality of life of the people (Lippman, 1994).

The existence of good government in a society is also a precondition for improved human development. For during (2004) Office of Human Government Institutionalized the responsibilities of the good citizen to contribute to the development and well-being and affect their lives. Further, the government's responsibility is to ensure accountability, openness, and transparency for their actions. Citizens are not passive machines and people are making the people (2004, 2005).

As indicated by Lawrence (1991), Bergquist (1991), Linnell-Miller and Saragolida (1991) and Johnson (1992), good government involves respect and economic, human, and civil liberties, such as the freedom of individual expression and a pluralistic and free media. The absence of government corruption and freedom of citizens and citizens are also a good example of good families, since they have high political trust, solid and influence more effective government action on development. On the other hand, economic liberalism would favor a government that creates a stable and economic growth for the improvement of human development in the state since there would be least regulation and free obstacles to trade and economic opportunities.

Related to the above, a fundamental characteristic of a qualitative in human development. As proposed by UNICEF (2002), democracy is a state where decisions are based on voluntary consent or people decisions regardless of culture, political, social or economic differences. As an idea, democracy seeks to protect and promote the equity and fundamental rights of the individual, inter alia social, economic, labor concerns and social development. Democracy is a political system that enables people to freely choose an effective, honest, transparent and accountable government. The meaning of the term, in this case, principles: participation and accountability. Everyone has the right to participate in the management of public affairs. However, everyone has the right to access, transparency in government activities, to political accountability and to work reform through internal administration and judicial mechanisms. Democracy is also the one who would start human rights and founded on the potency of the

low. The social (political, economic and cooperation) impact of Africa's drought conditions on achieving success in HDMP, ADF.

The Situation of Human Development in Sub-Saharan Africa

Available data on human development indicates the gaps in human development have been less impressive in Sub-Saharan Africa (SA) compared to other regions of the world (Table 1). This data is also consistent to gaps in the impact of the recovery experienced in social and development products of the time has led to increase in child mortality and malnutrition, reduction in life expectancy at birth and reduction in GDP per capita. When viewed from the social Human Development Index (HDI) a composite welfare that covers three dimensions of human welfare (income, education and health), it is observed that most countries in SA have suffered a significant decrease which are likely to contribute negatively to the progress in education, as well as health (e.g. chronic conflicts, high rate of corruption and the spread of HIV/AIDS). Another striking scenario for some of the indicators can be for gender (GINIADP = 44.6) or places for South Africa. It places for Sub-Saharan and its places for Africa (GDP: D 2004) and UNDP (2007).

Table 1. Human Development Index in Sub-Saharan Africa and other Ranking of the World

Region	2004	2005	2006	2007
World	0.68	0.70	0.72	0.74
East and South Asia	0.74	0.76	0.77	0.78
Latin America and the Caribbean	0.78	0.80	0.81	0.82
Europe	0.82	0.83	0.84	0.85
North America and the Central and Eastern Europe (excl. Russia)	0.84	0.85	0.86	0.87
Sub-Saharan Africa	0.48	0.49	0.50	0.51

Source: UNDP (2007)

DATA SOURCE AND METHODOLOGY

Data Source

A cross-country data source from 44 countries is used for the period 1980–1999 via Compustat. The variables considered for the study are the logarithm of domestic credit in development, as well as indicators of macroeconomic stability, access to international financial markets, literacy level, access to tele-communications, health care services, access to electricity, familiarity, the level of economic growth, the extent of external debt, the extent of external investment and international trade, the extent of foreign direct investments (FDI), the level of technological progress, the presence of democracy, and the degree of corruption (see, e.g.,

The data were obtained from Africa Development Bank, Central Finance and Environmental Indicators in African countries for the year 1980; United Nations Development Programme; Human Development Index for the year 1980; the World Bank Atlas, Demography and Statistics for the year 1985; the World Bank Development Indicators also for the year 1985; and the Global Database for Africa 1980–1999 from the same source.

Methodology

The Model

In order to study the macroeconomy as a point equilibrium, the following model is considered as a representation of the international development in SSA:

Having stated that, the model is then formalized as

$$\begin{aligned} \text{DC} &= f(\text{GDP}, \text{L}, \text{Debt}, \text{MFDI}, \text{Money}, \text{and} \text{DocR}, \text{FDI}) \\ \text{FDI} &= f(\text{FDI}^{\text{net}}, \text{FDI}^{\text{gross}}, \text{FDI}^{\text{stock}}, \text{and} \text{FDI}^{\text{flow}}) \\ \text{L} &= f(\text{L}^{\text{net}}, \text{L}^{\text{gross}}, \text{L}^{\text{stock}}, \text{and} \text{L}^{\text{flow}}) \end{aligned} \quad (1)$$

With multiple linear relationships of the form

$$\begin{aligned} \text{DC} &= \beta_0 + \beta_1 \text{GDP} + \beta_2 \text{L} + \beta_3 \text{Debt} + \beta_4 \text{MFDI} + \beta_5 \text{Money} + \beta_6 \text{DocR} + \beta_7 \text{FDI} \\ \text{FDI} &= \beta_8 \text{FDI}^{\text{net}} + \beta_9 \text{FDI}^{\text{gross}} + \beta_{10} \text{FDI}^{\text{stock}} + \beta_{11} \text{FDI}^{\text{flow}} \\ \text{L} &= \beta_{12} \text{L}^{\text{net}} + \beta_{13} \text{L}^{\text{gross}} + \beta_{14} \text{L}^{\text{stock}} + \beta_{15} \text{L}^{\text{flow}} \\ \text{and} \text{DocR} &= \beta_{16} \text{FDI} + \beta_{17} \text{L} + \beta_{18} \end{aligned} \quad (2)$$

Where:

HC = total health expenditure over two years, the first financial year of data available (generally, starting in 1980 or 1981) and the second financial year (1982-83) in each country.

Cl = log of country's total number of years and days of life expectancy, average of countries receiving data on life expectancy.

Gov = log of government expenditure, country's financial year for primary, country's first financial year for secondary, country's first financial year for tertiary expenditure.

Ind = log of industrial output in the last three years (1980, 81, 82) in countries that have not submitted any official data and figure 1 for other developing countries.

Inf = log of international stability index by UNCTAD (1982-83) for all countries which includes both the effect of domestic price changes and the effect of exchange rate movements in each country.

Ind = log of index of economic growth provided by the World Bank's periodic reports (1978).

Inf = log of industrial value added expressed as a percentage of actual principal investment by manufacturing (1982).

Inf = log of average industrial value added by the residents of a country to acquire a living, or level of employment in which they obtain a standard of living comparable to that country (1982).

IT = International trade product, the value added in the monetary value of the difference between exports and imports of goods and services (1982).

Inf = log of industrial value added by the private capital sector in the primary sector (1982).

Inf = log of industrial value added provided by the number of people in 1981 employed in industry in each country (1981).

Inf = log of the value added by the private sector in industry and services (1982).

- $\ln(\text{GDP}_{it})$ = log of the percentage of the population aged 15-64, where GDP_{it} is the real GDP in year t for country i .
- $\ln(\text{POP}_{it})$ = log of the percentage of the population that are aged 15-64, where POP_{it} is the real population in year t for country i .
- $\ln(\text{GDP}_{it}/\text{POP}_{it})$ = log of real GDP per capita in year t for country i .
- $\ln(\text{GDP}_{it}/\text{AT}_{it})$ = log of the real population aged 15-64 per unit of real GDP in year t for country i .
- $\ln(\text{GDP}_{it}/\text{FDI}_{it})$ = log of foreign direct investment received from foreign governments and private sources by each country i in year t .
- $\ln(\text{GDP}_{it}/\text{GDP}_{it-1})$ = log of percentage change in real GDP in year t for country i .
- $\ln(\text{GDP}_{it}/\text{GDP}_{it-1})$ = log of percentage change in real GDP in year t for country i .

2.4. Empirical tests

To estimate the model, a nonlinear regression analysis is used to determine the explanatory power of the variables. To verify the validity of the model, we first estimate it with a fixed effect for the year of export, which is based on the usual assumption of the coefficients of the variables, and we estimate and test structural effects based on statistical theory, such as the Hausman test, as presented in the Panel Data User's Guide (see notes at the beginning of Part 2 of the *Stata* Software User's Guide) (see also Hausman, 1977, for the Hausman test) and the Hausman test χ^2 comparison with the overall explanatory power of the variables. In the *Stata* manual, we are relating the overall explanatory power of the original variables and the fixed effect to a way that individual variables contribute to the independent variable (Duncan, 1991).

However, from the model, one of which depends on the dependent variables of the independent variables on the dependent variable, it is a model that is a function of the dependent variable, which is a function of the dependent variable, which is a function of the dependent variable, which is a function of the dependent variable.

RESULTS AND DISCUSSION

The results of the ordinary regression and fixed effects regression, the percentage of variance explained are presented in Table 2.

Table 2: Regression Results of the Determinants of Human Development in Sub-Saharan Africa

Variable	Coefficient (standard error) of β (t-stat)
Age (years)	2.74 (0.17)
Gender (m)	-0.50 (0.13)
Sex (m)	1.52 (0.17)
Married (m)	-1.18 (0.05)
Employed (m)	-0.59 (0.13)
Income (R ²)	1.73 (0.14)
Health (m)	-1.85 (0.05)
FDI (m)	0.04 (0.00)
FDI (f)	-5.29 (0.11)
Trade (m)	0.29 (0.13)
Trade (f)	0.64 (0.13)
Trade (m)	-0.70 (0.13)
Trade (f)	0.40 (0.12)
Trade (m)	0.40 (0.12)
FDI (m)	-2.14 (0.03)
FDI (f)	-2.54 (0.13)
R ²	0.71
R ² adjusted	0.65
F	2.55
No. of observations	41

t-statistics in parentheses

The regression results of the model above that the 47% of the variance, which is the variance, which the variable can be explained by the explanatory variables, while the rest is unexplained the variance of 53 percent, which are recorded in the study that can be explained in the model because of unexplained features. At one percent level of significance, it is worth noting that the variables, FDI in domestic and

social goals and objectives, from which the high level of accountability and transparency in social services delivery. A major challenge is to make public works, roads, electricity, health, education and income poverty and the services a more – and more – mutual benefits by utilizing a cost-effective approach to the people away from the traditional welfare approach and thought.

- (ii) Provision of social empowerment and opportunities that will improve the living and capabilities to participate in economic and political, social and health development activities, but not responsible for the provision of social services, economic incentives for development.
- (iii) Provision of sectoral policies, especially agriculture, education and health policies that will aid the people development but create the income and welfare. Incentives required to be used to be a human development.
- (iv) Provision of a stable macroeconomic environment that will attract domestic savings and investments, help to ease the flow of international for production investment and facilitate the involvement of foreign investors.
- (v) Provision of foreign assistance in a way that will support the domestic contribution and the domestic government and its citizens who share responsibility for developing their national development strategy in partnership between the government and the citizens, with the citizens designing their national development strategy for the government's strategy, in order to create economic situation of funds raised for a development.
- (vi) In addition to the above is the need for a legal system and the implementation of the rule of law, to develop political stability equally in the areas of infrastructure development that will aid to the economic development.
- (vii) The legal system is one of the factors that determine the success of most countries in the world, especially in the area of economic

understand families and their role in child care arrangements in many states directly to benefit the child.

- (vi) Prevention, maintenance and treatment of HIV/AIDS should be the primary public health activity in the view that this disease has to be a top priority. The disease should be placed on the programme of health care for susceptible public and government employees and other persons. Interventions, if possible, will obstruct harmful activities, use of condoms and ensuring the safety of blood and blood products to be used to reduce the incidence.

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TABLE 1. THE UNIVERSITY OF CHICAGO PRESS

Year	1950	1955	1960	1965	1970
Total	1000	1200	1500	1800	2200
Science	200	250	300	350	400
Humanities	300	350	400	450	500
Medicine	100	120	150	180	220
Law	150	180	220	250	300
Business	100	120	150	180	220
Engineering	50	60	80	100	120
Life Sciences	100	120	150	180	220
Mathematics	50	60	80	100	120

The data in this table are based on the following assumptions:
 1. The total number of books published by the University of Chicago Press in 1950 was 1000.
 2. The number of books published in each category in 1950 is as follows:
 Science: 200
 Humanities: 300
 Medicine: 100
 Law: 150
 Business: 100
 Engineering: 50
 Life Sciences: 100
 Mathematics: 50
 3. The number of books published in each category in 1955 is 1200.
 4. The number of books published in each category in 1960 is 1500.
 5. The number of books published in each category in 1965 is 1800.
 6. The number of books published in each category in 1970 is 2200.