COMPARATIVE ANALYSIS OF THE IMPACT OF GLOBALISATION ON HUMAN WELFARE IN SUB-SAHARAN AFRICA

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Abstract. The world has become more linked owing to the increased intensity of globalisation across regions. Sub-Saharan Africa (SSA) has become more relatively integrated into the world economy as shown by increasing degree of trade openness and foreign direct investment. Over the same period, quality of life of people in SSA in terms of access to basic necessity, monetary and non-monetary indices of poverty have been on the declining trend. This study adopted endogenous growth theory in analysing the comparative effects of globalisation between the highly and weakly globalised economies in SSA countries. Four channels of transmission of impact of globalisation were considered: trade openness, financial and capital flows labour mobility and access to telephone. Data for 16 SSA countries – 8 weakly globalised and 8 strongly globalised countries based on KOF globalisation index, were sourced from the world Development indicator for the period of 1980-2012. The feasible generalised least square (GLS) estimator was utilized to estimate the fixed and random effects panel regression models. Hausman test was used to determine the efficient estimator between fixed and random effects. All estimated coefficients were evaluated at 5% level of significance. The outcome of the comparative analysis revealed a mix result in some cases and unidirectional in some. In all, countries with higher intensity of globalisation have a greater improvement in their human welfare indicators compared to countries with weak globalisation indices. The study then recommended an improved reform in global integration to enable the region maximize the immense benefits inherent in global connections.

Keywords: Comparative Analysis, Globalisations, Human Welfare, Sub-Saharan Africa (SSA).

1 Introduction

Over the last few decades, the world has become more linked owing to globalisation across all regions. The scope of this global integration in all its ramifications has turned the world to a global village. Globalisation as a process is not limited to its economic perspective,

rather it has also profoundly shaped the socio-political, technological and cultural landscapes of countries and regional groups.

Globalisation has brought a lot of benefits such as helping countries and regions by adopting a number of programmes and policies aimed at deriving immense benefits accruable from the rapid and intensive global interactions and interconnections especially with respect to poverty alleviation and improvement in the wellbeing of the people. However, globalisation has also brought with it a variety of problems that have worsened human welfare. How the Sub-Saharan African (SSA) countries have fared in this direction remains controversial among social science scholars and policymakers *(UNDP, 2012)*.

The literature on the impact of globalisation on poverty and human welfare points to highly variable outcomes (positive and negative) as well as multiple causalities, channels and mechanisms that link globalisation with human welfare. On the one hand, are those who find that globalisation worsens well-being *(Milanovic, Squire, 2005; Ravallion, 2006; Wagle, 2007; Fosu, Mold, 2008)*. On the other hand, some authors point to evidence of human welfare improvements arising from globalisation *(Bhagwati, Srinivasan, 2002; Dollar, Kraay, 2004)*. Yet, some economists argue that there is no specific link between them *(Sylvester, 2005; Choi, 2006)*. Thus, there is no consensus on how the integration of developing economies into the global market affects the welfare of their people. Some empirical evidence confirm the submission of this school of thought that "more open economies are more prosperous and experience faster rate of progress *(Chan, Dung, 2001; Neutel, Heshmati, 2006; Hammed and Nazir, 2006; Harrison, 2006)*. On the other hand, the antagonists of globalisation argue that world poverty has been rising and human welfare deteriorating due to the forces unleashed by the same wave of globalisation *(Santarelli, Figni, 2002; Khor, 2002; Hammoris, Kai, 2004; Guordon, et al., 2006; Gold, 2009)*.

In spite of the controversies surrounding the impact of globalisation on human welfare, evidence points to a high incidence of poverty in the era of intensive globalisation among the poor nations especially in SSA. People in SSA, as well as those in South Asia, are among the poorest in the world, in terms of real income, wellbeing status and access to social services. About 48.3 per cent of the population of SSA live in poverty with an average life expectancy of 47 years *(World Bank Report, 2011)*.

Since the Second World War, SSA has been relatively more integrated into the world economy, with high trade/GDP ratios *(World Bank, 2015)*. In spite of the increasing degree of openness of the region to the global market, most of her social and human welfare indicators have recorded a downward trend *(UNDP, 2008)*. If more openness stimulates growth, as pro-globalisation advocates claim, such integration should have led to greater sustained growth in the SSA region than in Latin America as well as South and East Asia. These regions have managed to lift their people out of abject poverty, deteriorating human welfare and high income inequality, which the SSA region to a large extent, has not.

The major goals of the economic reforms in the region since the 1980s have been to reduce structural vulnerability by the integration of trade, capital flows and as well as social contacts into the world economy to ensure sustained growth, poverty reduction, and human welfare improvements. Regardless of the long period of economic reforms, in SSA, majority of the region's population are still living in abject poverty. African countries have introduced reforms in more structural matters such as market deregulation, trade liberalisation and public sector restructuring, including privatisation, but all have failed to keep human welfare crises in check *(World Bank, 2014)*.

In spite of several various programmes and policies put in place in the past four decades such as (Structural Adjustment Programmes (SAPs); Poverty Reduction Strategies (PRSs), Millennium Development Goals, (MDGs); Social Protection, and Pro-poor growth programmes), the level of decline in human welfare in SSA remains very high. For example, 46.4 percent of the people in the region were living below the one dollar per day poverty line in 2004 as against 41.6 per cent in 1981 *(Chen, Ravallion, 2004).* In 2007, the World Bank poverty database put the proportion at 48 per cent. Between 1975 and 2005, Africa recorded an overall decline of about 20 per cent in the consumption of goods and services *(UNDP Reports, 2006).* Between 1980 and 2006, SSA's private consumption per capita grew at an average of about 1.2 per cent *(UNDP, 2007).* This was the worst in the world, when compared with other regions such as Latin America and the Carribbean–1.6 per cent, South Asia–2 per cent, East Asia and the Pacific–5.6 per cent *(World Bank Report, 2007).*

The remaining part of this paper is divided into four sections. Section II presents the literature review and transmission mechanism. Section III highlights theoretical framework, model specification and Data Sources. Section IV briefs the analysis of results while Section V concludes and proffers recommendations.

2 Literature Review

Precise definitions of globalisation are elusive but it is usually interpreted as an increase in integration and interaction between countries manifested through an increase in the movement of commodities, labour, capital (financial and physical capital), communication, information and technology. Yashin *(2002)* defines globalisation as an economic revolution of the new millennium in information and communication technology (ICT). Clark *(2000),* Norris *(2000)* and Keohane and Nye *(2000)* define globalisation to be the process of creating networks of connections among actors at multi-continental distances, mediated through a variety of flows including people, information and ideas, as well as capital and goods. According to KOF Swiss Economic Institute *(2010),* globalisation is conceptualized as a process that erodes national boundaries, integrates national economies, cultures, technologies and governance as well as produces complex relations of mutual interdependence.

In terms of scope and dimension of globalisation, opinion varies from one scholar to another. Haveen *(2002)* identifies four processes in the current globalisation which he considers analytically separate but interrelated. The first is the convergence of ideas, norms and values, the second is the propagation of industrial organisation, the third is the emergence of one global market while the fourth is the erection of super national institution with a global legitimacy and reach. Musa *(2000)* identifies three basic forces driving globalisation as technology, preference and public policy while the United Nations Institute for Social Development (UNRISD) lists six key trends of globalisation as the spread of liberal democracy; the dominance of market forces; the integration of global economy; the transformation of the product system and labour market; the speed of technological change and media revolution *(UNRISD, 1995).*

This study examines the impact of major components of the 2010 KOF index of globalisation on human welfare. The index was introduced in 2002 by the Economic Research Institute *Konjunkturforschungsstelle* at ETH Zurich, Germany, it is reviewed annually. It provides the overall index which covers economic, social and political dimensions of globalisation. The index conceptualises globalisation as a process that erodes national

boundaries, integrate national economies, cultures, technology and governance with complex relations of mutual interdependence. The three dimensions of the index are:

- Economic globalisation – characterised as long distance flow of goods, capital and services as well as information and perceptions that accompany market changes;

- Social globalisation – which expresses the spread of ideas, information, images and people; and,

- Political globalisation – characterised by diffusion of government policies.

Human welfare embraces the performance of social indicators which may be positive or negative. The latter includes degree of hunger and malnutrition as a component of poverty, infant mortality and prevalence of child labour. While the former includes life expectancy at birth, access to basic social needs (sanitation, health, water, etc.), and human development index *(Todaro, Smith, 2003)*. Hunger and under nutrition retard education, human development, productivity and life expectancy. The inability of parents to provide children with their needs make them susceptible to child labour while infant mortality has been one of nature's cruel mechanism for keeping motherhood in great sorrow and grief. An increase in these negative indicators have the tendency to worsening the incidence of poverty.

Measurement of poverty has not only been difficult, it has equally being controversial. The monetary approach is the most commonly used. It identifies poverty with a shortfall in consumption (or income) from some poverty line. The approach faces the problem of how to appropriately determine the basic income level. The capability approach to the measurement of poverty, pioneered by Sen *(1985, 1999)*, rejects monetary income as its measure of wellbeing. Hence, this study adopts the use of Human Development Index (HDI) as proxy for human welfare, a composite of people's wellbeing, incidence of poverty, human development, and access to basic necessities of life. This decision is in line with evidence in the literature, for example, Henrich *(2009)*.

The HDI is the value for each country's journey covered towards the maximum possible value of one and how far it has to go to attain certain goals: an average life span of 85 years, access to education for all, decent standard of living, etc. Developed by the United Nations Development Programme (UNDP) as a composite of three dimensions-health, education and standard of living-and four indicators-life expectancy at birth, mean years of schooling, expected years of schooling, and Gross National Income (GNI) per capita. In the past, the HDI dimensions weight has been seriously questioned, this serves as its short comings. However, the HDI has been reworked and assigned equal weight to all the three dimension indices *(HDR, 2010)*. The choice of HDI in measuring human welfare in a broader scope has also been justified by Noorkbakhsh *(1998)*, Riley *(2005)*, Decanq and Lungo *(2009)*, and Maddison *(2010)*.

Prasad *et al. (2004)* begin by examining the relationship between financial integration and growth, they find no clear relationship between the two. This suggests that the impact of financial integration on human welfare-via possible growth effects- is likely to be small. They also explore another link whether financial integration has smoothed or exacerbated output and consumption volatility. They note that more macroeconomic volatility probably increases human welfare deterioration, particularly when there are financial crises. Since the poor are likely to be hurt in periods of consumption volatility, real income smoothening made possible by financial integration could be beneficial to the poor.

Prasad *et al. (2004)* argue that if financial globalisation is approached with the right set of complementary policies, it is likely to be growth-promoting and also less likely to lead to high-consumption volatility. These policies include the use of flexible exchange rate,

macroeconomic stabilisation policies, good governance and the development of strong institutions.

3 Model Specification and Data Sources

3.1 Analytical Framework and Model Specification

The model adapted for this study emanates from the Solow (1956) growth model employed in the empirical study of Heinrich *(2009)* and Rao and Vadlamannati *(2010)*. The model is stated as:

$$\ell^{HDI} = A_0 K^{\beta} \ell^{\eta \ln q + \delta nt} \tag{1}$$

Where: *q* is a vector of transmission mechanism sub-channels that explains the globalisation-growth-human welfare nexus, exogenously determined. *A* is multi-factor productivity or technological progress, *K* is physical capital, *n* is the rate of growth of output. We then consider trade (TRD), portfolio investment (PFI), foreign direct investment (FDI), labour migration (LBM), and information and communication technology (ICT) as trade openness, capital flow, technology and labour mobility transmission channels as noted by Nissanke and Thorbecke (2008; 2010) and used in Heinrich (2009) to proxy national symbols and global interactions. Nissanke and Thorbecke (2006) argue that transfer of technology and knowledge (skills and management know-how) are assumed to accompany FDI, not necessarily automatic or guaranteed in the globalisation-growth-human welfare transmission mechanism cycle.

Meanwhile, Prasad *et al. (2004)* and Harrisson *(2006)* identified good governance as a significant factor that determines the capital flow-growth-human welfare channel. Therefore, on the basis of the foregoing arguments and objectives of this study, each of the transmission channel components, and good governance index (GGI) are taken as one of the vector *q* components that influence human welfare changes. Equation (1) is extended as:

$$\ell^{HDI} = A_0 K^{\beta} \ell^{\sum \eta \ln(TRD,PFI,FDI,LBM,GGI) + \delta nt} \tag{2}$$

From equation (2), where *t=1, n* is used to proxy as population growth rate of social welfare, presumed to be equal to the exogenous growth rate of labour, and *K* is taken as the percentage share of fixed capital formation (FCF) from GDP. We then have,

$$\ell^{HDI} = A_0 FCF^{\beta} \ell^{\sum \eta \ln(TRD,PFI,FDI,LBM,ICT,GGI) + \delta n} \tag{3}$$

Therefore, equation (3) forms the exponential growth model for analysing the impact of globalisation on human welfare in SSA. For estimation, equation (3) is linearly specified in a panel model form to capture the cross-country and time observation by taking the natural logarithm of both sides, this leads to:

$$HDI_{it} = a_{i,0} + \beta \ln FCF_{it} + \eta_1 \ln TRD_{it} + \eta_2 \ln PFI_{it} + \eta_3 \ln FDI_{it} + \eta_4 \ln LBM_{it}$$
$$\eta_5 \ln ICT_{it} + \eta_6 \ln GGI_{it} + \delta n_{it} + u_{1t} \tag{4}$$

Where: $a_0 = \ln A_0 = \pi_2 \rho \ln A$. The human welfare index and indices of access to basic necessities shall be regressed on the basic components of globalisation. The specified panel regression equation (4) is estimated for SSA (pool of all selected countries in SSA).

The SSA countries comprise Central Africa (10 countries), East Africa (11 countries), Southern Africa (10 countries) and West Africa (15 countries). Four (4) countries are selected from each region (Southern Africa, Central Africa, East Africa and West Africa). This is to ensure balance across regions, because the panel models will be analysed on sub-regional basis after the general analyses for the entire region (SSA) are made. Secondary data documented in the World Development Indicators (WDI) CD-ROM, January, 2014 by the World Bank were sourced and used for this study.

3.2 Estimation Techniques

A pool of cross-section and time series data is best suited to study dynamic changes and detect unobserved effects in complex behavioural models. The use of panel data analysis allows the expansion of sample size, it is also very useful when analysing dynamic effects in a region such as SSA where poverty, welfare changes and degree of integration differ substantially across countries compared to other developed regions. The ***fixed effects estimation technique*** was adopted for estimating the specified panel models in this study. The choice of this technique is because it assumes that the unobserved effects vary between countries (i.e. heterogeneous) rather than a random term as assumed using the random effects technique. The *cross section weights (a feasible GLS specification assuming the presence of cross-section heteroskedasticity)* shall be taken to correct for cross-section heteroskedasticity and autocorrelation of idiosyncratic disturbance, this is to ensure that the fixed estimator is efficient and consistent for analysing this study as used by earlier empirical studies *(Hammoris and Kai, 2004; Guordon et al., 2006; Heinrich, 2009)*. To precisely ensure the efficiency of the fixed effects estimator, the Hausman test is used to determine the best efficient estimator between fixed and random effects.

3.3 Data Description

The data required for the analysis is classified into two namely the dimensions of globalisation and the indices or measures of human welfare. The dimensions of globalisation include Trade Openness (TRD), Foreign Direct Investment (FDI), Portfolio Investment (PFI), Labour Migration (LBM), and Access to Telephone (TEL). The measures of human welfare are Human Development Index (HDI), Access to basic necessities (Sanitation, Health Services and Water), Life Expectancy at Birth (LEI), Mean Year of Schooling (MYS) and Infant Mortality Rate (IMR).

TRD is the sum of exports and imports of goods and services as a share of gross domestic product. The data is sourced from World Bank National Accounts data and OECD National Accounts data files

FDI is the net inflows of investment to acquire a lasting interest. It is the sum of equity capital, reinvested earnings, other long term capital and short term capital as shown in the balance of payment. The FDI net inflow (% of GDP) was sourced from International Monetary Fund supplemented by data from the United Nations Conference on Trade and Development and official national sources (Various editions).

PFI refers to the portfolio investment (% of GDP). It excludes liabilities constituting foreign authorities reserves in equity securities and debt securities. The data is sourced from International Monetary Fund, Balance of Payment Statistics Year book and data files (Various editions).

LBM is the Net Labour Migration per 10,000 populations. It is the number of labour immigrants minus the number of labour emigrants, including citizens and non-citizens. The data is sourced from the United Nations Population Division; World Population prospects (Various editions).

TEL is the proportion of people that are connected to telephone per thousand data of a given population. Integrated services digital network channels and fixed wireless subscribers are included. The data is sourced from the International Telecommunication Union, World Telecommunication/ICT Development Report and database and the World Bank estimates.

Access to basic necessities of life (water, sanitation and health care) is measured in terms of the percentage of the population that have access to water, sanitation and healthcare respectively. The data are sourced from the World Health Organisation, United Nations Children's Fund and Joint Measurement Programme (JMP).

HDI is a composite index measuring average achievement in three basic dimensions of human development – a long and healthy life, knowledge and a decent standard of living in terms of per – capita income. The data are sourced from UNESCO Institute for Statistics (2013) and World Bank data base.

Life expectancy at births (years) is the number of years a new born infant could expect to live if prevailing pattern of age specific mortality rates at the birth stay the same throughout the infant's life. Data is sourced from United Nations Data Base.

The Mean Year of Schooling (years) is the average number of years of education received by people age 25 and older, converted from education attainment levels using official duration of each level. The data is sourced from the UNESCO Institute for Statistics data.

Infant Mortality Rate (IMR) is the number of deaths (below age 1) recorded per 1,000 live birth in a given year. The data is sourced from the World Health Organisation and United Nation Children's Fund.

The Good Governance Index (GGI) is the incorporated control variable into the model. It reflects the perceptions of 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, adherence to the rule of law, transparency and credibility of government's commitment to such policies. The required data was sourced from the Worldwide Governance Indicators *(2015).*

4 Analysis of Results

For precise understanding, policy inference and robustness check, this study further comparatively examined the effect of the dimensions of globalisation on human welfare, other welfare measures and access to basic necessities in Sub-Saharan Africa (SSA) from 1980 to 2012 between the more and less globalised countries. The sampled SSA countries were further reclassified into more globalised (Cameroon, Gabon, Kenya, Mauritius, Botswana, South Africa, Ghana, and Nigeria) and less globalised (Central Africa Republic, Rwanda, Tanzania, Uganda, Malawi, Mozambique, Benin, and Niger) regions. Countries with KOF globalisation index less than the sub-regional average is classified less globalised while those with index higher than the sub-regional average is classified more globalised. The motivation

for the comparative analysis stemmed from the need to determine the extent to which varying degree of globalisation influence human welfare status in SSA and to investigate the influence of aggregation on the overall results (i.e. aggregation biasness). This is to give further policy clarity and guide policy simulation relative to global integration among SSA countries with the global market.

The estimated theoretical augmented fixed effects regression models of human welfare, other welfare measures and access to basic necessities for the more and less globalised SSA regions are shown on Table 1. The results indicate that TRD as an economic dimension of globalisation was found to exert positive effect on HDI, LEI, access to improved WAT and HCS, while it exerts negative effect on IMR in the more and less globalised regions in SSA. These effects conform with the expected theoretical signs and were statistically significantly at 1% critical level. In magnitude, 10% increase in TRD changed HDI, LEI, IMR, access to WAT and HCS by 0.5%, 0.5%, 1.97%, and 0.7% in the more globalised SSA region and by 0.77%, 0.71%, -3.21%, 0.53%, and 1.13% in the less globalised SSA region respectively.

The results presented further indicate a reversal effect of TRD on mean year of schooling and access to improved sanitation between the more and less globalised regions in SSA. Precisely, TRD in the more globalised region exerts positive (0.0004) effect on MYS, while it was negative (-0.001) for less globalised region. This reflects the high level development effect on human welfare in terms of access to basic education. Also, TRD was found to exert negative and positive effects on access to improved SAN respectively for more and less globalised regions by a magnitude of -0.17% and 0.13% for a 10% increase in TRD. This also indicates the effect of a high level of urbanisation growth rate in the more globalised region that accelerates environmental pollution level.

It is clear and apparent from the analysis that the economic dimension of globalisation via trade flow channels improves human welfare, other welfare status, and access to basic necessities in the more and less globalised regions. But, the size of effect is higher for the less globalised region compared to the more globalised region. This indicates that the less globalised region benefits more from trade global interactions to enhance human welfare because of the large output size with relatively low trade volumes compared to the more globalised region that has high trade volumes.

Similarly, the results presented on Table 1 further indicate that at 1% critical level, the share of economic active population of total (n) in more and less globalised regions significantly enhanced HDI, reduced IMR, MYS, and access to improved sanitation between 1980 and 2012. These conform with the theoretical expectations. In magnitude terms a 1% change in working age population share (n) enhanced HDI, reduced IMR, MYS, and access to improved SAN by 0.78%, -0.95%, 0.03%, and 2.08% for the more globalised region and by 1.12%, -0.88%, 0.03%, and 1.62% for the less globalised region, respectively. Also, differential effects were reported for the effect of economic active population share on other welfare measures. At 1% critical level the share of economic active population (n) was found to be significantly but negatively related to LEI and access to improved HCS for more globalised region (-0.71% and -0.88% for 1% change in n), while it was significantly and positively related to LEI and HCS for the less globalised region (0.37% and 0.86% for 1% change in n) in SSA. Similarly, at 1% critical level, economic active population share (n) had significant positive effect on access to improved water for the more globalised region, and had an insignificant reversal effect for the less globalised region.

Table 1

Fixed Effects Regression of Human Welfare and Transmission Channel of Globalization between More and Less Globalised SSA Countries

	HDI		LEI		IMR		MYS		WAT		SAN		HCS	
	MG	LG	MG	LG	MG	LG	MG	LG	MG	LG	MG	LG	MG	LG
Constant	-0.009 (-0.01)	-36.66 (-15.90***)	90.77 (93.97***)	24.18 (13.25***)	132.43 (51.64***)	193.80 (20.51***)	-0.90 (-43.67***)	-1.42 (-25.35***)	-87.70 (-51.62***)	35.19 (9.80***)	-73.26 (-67.59***)	-67.83 (-19.76***)	92.65 (60.40***)	-10.77 (-3.64***)
CFC	-0.002 (-0.16)	0.074 (8.14***)	0.037 (4.56***)	0.031 (4.70***)	-0.032 (-1.20)	-0.487 (-12.70***)	-0.003 (-12.33***)	0.005 (28.06***)	-0.074 (-3.02***)	0.128 (9.95***)	0.028 (2.24**)	0.033 (2.90***)	0.223 (16.48***)	0.045 (4.43***)
TRD	0.050 (12.75***)	0.077 (18.91***)	0.050 (20.57*)	0.071 (25.90***)	-0.179 (-20.92***)	-0.321 (-19.57***)	0.0004 (5.19)	-0.001 (-10.81***)	0.197 (29.70***)	0.053 (8.19***)	-0.017 (-5.16***)	0.013 (2.04**)	0.070 (16.71***)	0.113 (24.73***)
PFI	-0.004 (-1.45)	-0.695 (-11.61***)	-0.015 (-5.55***)	-0.558 (-13.38***)	-0.014 (-3.03***)	0.520 (2.58**)	0.0003 (6.33***)	-0.010 (-5.29***)	0.028 (6.39***)	-0.689 (-6.66***)	0.014 (2.78***)	0.118 (1.19)	-0.010 (-3.48***)	-0.718 (-9.63***)
FDI	0.377 (16.33***)	0.585 (34.84***)	0.111 (7.04***)	0.297 (24.37***)	-0.203 (-4.21***)	-3.555 (-48.45***)	-0.004 (-7.33***)	0.014 (32.36***)	-0.069 (-1.55)	0.576 (23.45***)	-0.166 (-8.91***)	0.572 (24.35***)	0.522 (20.28***)	0.492 (26.09***)
LBM	-0.056 (-1.35)	-0.003 (-0.49)	-0.231 (-7.06***)	-0.014 (-2.02*)	0.671 (8.06***)	0.223 (6.99***)	-0.001 (-1.50)	-0.001 (-5.39***)	1.154 (17.35***)	0.050 (5.20***)	0.607 (15.55***)	0.038 (3.43***)	-0.184 (-4.02***)	0.089 (8.97***)
GGI	-0.043 (-23.34***)	-0.019 (-16.24***)	-0.010 (-11.26***)	0.017 (18.50***)	0.069 (15.52***)	0.052 (12.27***)	-0.001 (-27.53***)	-0.001 (-34.48***)	-0.048 (-18.32***)	-0.091 (-40.13***)	0.014 (8.57***)	-0.030 (-15.99***)	-0.033 (-19.33***)	0.002 (1.34)
TEL	0.046 (40.75***)	0.885 (49.93***)	0.034 (38.14***)	0.632 (44.36***)	-0.033 (-16.02***)	-4.132 (-54.74***)	0.0002 (7.91***)	0.022 (41.36***)	-0.001 (-0.65)	2.163 (46.54***)	0.009 (5.79***)	0.558 (19.43***)	0.058 (50.51***)	0.912 (43.49***)
n	0.780 (34.73***)	1.118 (24.88***)	-0.709 (-38.87***)	0.371 (10.51***)	-0.947 (-19.87***)	-0.880 (-4.82***)	0.029 (76.09***)	0.030 (27.10***)	2.574 (83.12***)	-0.016 (-0.22)	2.079 (102.85***)	1.617 (23.97***)	-0.876 (-30.27***)	0.861 (14.96***)
Adj. R2	0.927	0.858	0.931	0.793	0.948	0.810	0.828	0.941	0.964	0.878	0.988	0.924	0.950	0.790
S.E of Reg	3.231	2.995	2.243	3.594	8.075	13.767	0.089	0.076	6.460	5.603	3.130	4.260	3.669	4.429
F-Statistic	3564.1***	1703.1***	3790.8***	1079.8***	5133.6***	1204.2***	1352.9***	4505.6***	7511.1***	2024.9***	22253.6***	3411.0***	5358.1***	1062.5***
Obs	4224	4224	4224	4224	4224	4224	4224	4224	4224	4224	4224	4224	4224	4224
Cross-Section	8	8	8	8	8	8	8	8	8	8	8	8	8	8

Note: [1] MG and LG represent More and Less Globalised models respectively; [2] Model is the augmented theoretical model with control variables; [3] *** denotes significant at 1%; ** denotes significant at 5%; * denotes significant at 10%. [4] All regressions use the fixed cross-section effects cross-section weights standard errors and covariance (d.f corrected)

Source: - Authors' Computation.

The estimated theoretical augmented fixed effects regression models of human welfare, other welfare measures and access to basic necessities for the more and less globalised SSA regions indicate that FDI as capital dimension of globalisation was found to exert positive effect on HDI, LEI, and access to improved HCS, while it exerted negative effect on IMR in the more and less globalised regions in SSA. These effects conform with the expected theoretical signs and statistically significantly at 1% critical level. In magnitude terms, 10% change in capital dimension of openness enhanced HDI, LEI, but reduced IMR, and access to improved HCS by 3.77%, 1.11%, -2.03%, and 5.22% in the more globalised SSA region; and by 5.85%, 2.97%, -35.6%, and 4.92%% in the less globalised SSA region respectively. The reported estimates further reveal evidence of reverse effects. It indicate that the impact of capital flow channel of globalisation (FDI) on MYS, access to improved WAT, and SAN between 1980 and 2012 was negative in the more globalised region (by magnitude of -0.04%, -0.69%, and -1.66% for 10% change in FDI) and positive in the less globalised region (by a magnitude of 0.14%, 5.76%, and 5.72% for 10% change in FDI) respectively. The reported effects on human welfare development of the less globalised SSA region were found in tandem with the theoretical expectations alone. Also, the effects for the two subregions in SSA were found statistically significant at 1% critical level excluding for the negative effect on access to improved WAT for more globalised region.

Also, the reported estimates of PFI as financial dimension of globalisation indicate a negative effect on HDI, LEI, and access to improved HCS, while a positive effect on access to improved SAN in the more and less globalised regions. These effects do not conform with the theoretical expected signs expect for SAN, and these effects were statistically significant at 1% critical expect for HDI and access to SAN parameter estimates for more and less globalised region in SSA, respectively. For 10% change in financial dimension of globalisation (PFI), HDI, LEI, and HCS lowered, while SAN was enhanced by -0.04%, -0.15%, -0.10%, and 0.14% in the more globalised region; and by -6.95%, -5.58%, -7.18%, and 1.18% in the less globalised region, respectively. Similarly, a differential effect between the more and less globalised region of PFI on IMR, MYS, and access to improved WAT were reported on Table 1. The estimates indicate that in tandem with the expected signs at 1% significance level, PFI exerts negative effect on IMR in the more globalised sub region, while positive effect on IMR in the less globalised regions. Further, at 1% critical level and in tandem with the expected signs, PFI exerted positive and significant effect on MYS, and access to improved WAT supply, in the more globalised region by a magnitude of 0.003% and 0.28% for a 10% change. Contrarily, at 1% critical level and not in tandem with the expected signs, PFI exerts negative effect on MYS and access to WAT supply by a magnitude of -0.1% and -0.689% respectively for a 10% change in the less globalised region.

In conformity with theoretical expected signs and at 1% critical level, gross fixed capital stock as a measure of domestic capital formation exerted positive effect on LEI, SAN, and HCS, while it exerted a negative effect on IMR in the more and less globalised regions. In magnitude terms, a 10% change in domestic capital formation (fixed capital stock), enhanced LEI, SAN, HCS, but reduced IMR correspondingly by 0.37%, 0.28%, 2.23%, and -0.32% in the more globalised region; and by 0.31%, 0.33%, 0.45%, and -4.87% in the less globalised region. Although, a reversal effect was reported for the effect of fixed capital stock on HDI, MYS and access to improved WAT supply between the more and less globalised region. Contrary to the expected theoretical signs, fixed capital stock exerts negative and significant effect on HDI, MYS and access to improved WAT supply, by a magnitude of -0.02%, -0.03%, and -0.74%, respectively in the more globalised region between 1980 and 2012 for a 1%

change. Also, in the less globalized region, at 1% critical level and in conformity with the theoretical expectations, fixed capital stock exerted positive and significant effects on HDI, MYS, and access to improved WAT supply by a magnitude of 0.74%, 0.05%, and 1.28%, respectively.

The empirical analysis indicates that domestic capital formation and capital dimension of globalisation were human welfare enhancing in the more and less globalized regions between 1980 and 2012. Nonetheless, in terms of magnitude, the effects sizes were more intensive and highly significant in less globalised region, particularly in cases of differential effects. In addition, it was only financial dimension of globalisation via PFI that was found to deteriorate human welfare in both regions, while the effect sizes were higher in terms of magnitude for the less globalised region. Also, PFI was more welfare enhancing in the more globalised region compared to the less globalised sub region.

The reported estimates of net LBM as a labour mobility dimension of globalisation on the same Table 1 indicate negative effects on HDI, LEI, and MYS, while positive effects on IMR, access to improved WAT and SAN in the more and less globalised regions. These effects do not conform with the theoretical expected signs except for HDI, LEI, IMR, and MYS; these effects were statistically significant at 1% critical except for HDI parameter estimates for more and less globalised regions in SSA respectively. For 10% change in labour mobility flow dimension of globalisation (LBM), HDI, LEI, and MYS lowered, while access to improved WAT, SAN, and IMR were enhanced by -0.56%, -2.31%, -0.01%, 11.54%, 6.71%, and 6.07% in the more globalised region; and by -0.03%, -0.14%, -0.01%, 0.50%, 0.38%, and 2.23% in the less globalised region, respectively. Similarly, differential effects between the more and less globalised regions with respect to the effects of LBM on access to improved HCS were reported on the table.

The estimates indicate that in tandem with the expected signs and 1% significance level, LBM exerted negative effect on HCS in the more globalised sub region by a magnitude of -1.84%, while positive effect on HCS in the less globalised regions by a magnitude of 0.89%.

Similarly, the results indicate that access to telephone (TEL) as information dimension of globalisation was found to exert positive effects on HDI, LEI, MYS, access to improved SAN, and HCS, while it exerted negative effects on IMR in the more and less globalised regions in SSA. These effects conform with the expected theoretical signs and statistically significantly at 1% critical level. In magnitude terms, 10% change in access of people to telephone lines (TEL) as information dimension of openness enhanced HDI, LEI, MYS, and access to SAN, HCS, but reduced IMR: by 0.46%, 0.34%, 0.002%, 0.09%, 0.58%, and -0.33% in the more globalised SSA region; and by 8.85%, 6.32%, 0.22%, 5.58%, 9.12%, and -41.32% in the less globalised SSA region, respectively. The reported estimates further reveal evidence of reverse effects. It indicates that the impact of information flow channel of globalisation (TEL) on access to improved WAT between 1980 and 2012 was negative in the more globalised region (by magnitude of 0.01% for 10% change in TEL) and positive in the less globalised region (by a magnitude of 21.63% for 10% change in TEL) respectively. The reported effect on human welfare development in the less globalised SSA region was in tandem with the theoretical expectation alone. Also, the effects for the two categories in SSA were found statistically significant at 1% critical level except for the negative effect on WAT for more globalised region.

The reported estimates for GGI as institutional and governance quality have negative effects on HDI, MYS, and access to improve WAT, while a positive effect on IMR in the

more and less globalized regions of SSA. These effects do not conform with the theoretical expected signs but they are statistically significant at 1% critical for more and less globalised regions in SSA. For 10% change in GGI, HDI, MYS, and access to improved WAT lowered by -0.43%, 0.69%, -0.01% and 0.48% in the more globalised region; and by -0.19%, 0.52%, -0.01%, and -0.91% in the less globalised region respectively. Similarly, differential effects between the more and less globalised regions with respect to the effect of GGI on LEI, access to improved SAN and HCS as reported in the table. The estimates indicate that in tandem with the expected signs and at 1% significance level, GGI exerted positive effect on access to SAN in the more globalised subregion by a magnitude of 0.14%, while negative effect on access to sanitation (but this does not conform with the expected sign) in the less globalised regions by a magnitude of -0.30%. Also, at 1% critical level, the effects of GGI on LEI and HCS were respectively: negative and significant (though this does not confirm with the theoretical expectation) in the more globalised region by magnitude of -0.10% and -0.33% for 10% change in GGI; and positive and significant in the less globalised region by magnitude of 0.17% and 0.02% for 10% change in GGI.

In summary, the empirical analysis indicates that information and communication dimensions of globalisation were human welfare enhancing in the more and less globalised regions between 1980 and 2012. But the effect sizes were more intensive and highly significant in less globalised region than the more globalised region. Also, it was found that labour mobility dimension of globalisation via net LBM was found to deteriorate human welfare in both regions, while the effect sizes were higher in terms of magnitude for the more globalised region. Similarly, institutional and governance quality was more human welfare deteriorating in the less globalised region, compared to the more globalised sub region.

5 Conclusion

This study investigates the comparative effects of globalisation between the highly and weakly globalised economies in sixteen SSA countries. We used four globalisation channels of transmission which were trade openness, financial and capital flows, labour mobility and access to telephone. The SSA classification of weakly globalised (8) and strongly globalised (8) countries was based on KOF globalisation index which was sourced from the world Development indicator for the period of 1980-2012. The feasible generalised least square (GLS) estimator was utilized to estimate the fixed and random effects panel regression models. Hausman test was used to determine the efficient estimator between fixed and random effects. The result revealed a mix result in some cases and unidirectional in some. Thus, countries with higher intensity of globalisation have a greater improvement in their human welfare indicators compared to countries with weak globalisation indices. We suggest that an improved reform in global integration to enable the region maximize the immense benefits inherent in global connections.

References

Abbott, P. A. and Coenen, A. (2008). Globalisation and advances in information and communication technologies: the impact on nursing and health. Nursing Outlook 56(5), 238-246.

Afaha, J.S. and Njogo, B. O. (2012). Trade openness and its effect on the Nigerian economy (1970-2010). Arabian Journal of Business and Management Review (OMAN Chapter) Vol. 2(1), 50-73.

Afonja, B and Ogwumike, F.O. (2003). Poverty, meaning, measurement and causes: Integrating Poverty Alleviation. Strategies into Plans and Programmes. Obadan, M.I, Fajingbesi, A. A and Uga, E. O (Eds) NCEMA, Ibadan 55-76.

Ahmad, F. (2014). Turkey: the quest for identity. Oneworld Publications.

Atoyebi.O. K., Adekunjo, F. O., Edun, O. and Kadiri, K. I. (2012). "Foreign Trade and Economic Growth in Nigeria an Empirical Analysis" IOSR J. Humanities Social Sci. (JHSS) ISSN: 2279- 0837, ISBN: 2279-0845. Volume 2, Issue 1 (Sep-Oct. 2012), PP 73-80 www.iosrjournals.org

Baltagi, B. H. (2005). Econometric analysis of panel data. John Wiley & Sons, West Sussex.

Bardhan, P. (2005). Institutes matter, but which ones? Economics of Transition 13(3), 499-532.

Barro, R. and Lee, J. (2010). Barro-Lee Educational Attainment Dataset. Available: www.barrolee.com/

Becker, G. (1996). Human capital, 3rd edition. University of Chicago Press, Chicago.

Beine, M., Lodigiani, E. and Vermeulen, R. (2012). Remittances and financial openness. Regional Science and Urban Economics 42(5), 844-857.

Bernanke, B. S. and Gurkaynak, R. S. (2002). Is growth exogenous? Taking Mankiw, Romer, and weil seriously. In: NBER Macroeconomics Annual 2001 MIT Press, Volume 16, 11-72.

Benarroch, M. And Pandey, M. (2012). The relationship between trade openness and government size: does disaggregating government expenditure matter? Journal of Macroeconomics 34(1), 239-252.

Bhagwati, J. and Srinivasan, T.N. (2002). Trade and poverty in the poor countries American Economic Review 92: 180-183.

Blaug, M. (1970). Introduction to the economics of education. London, Allen Lane, Penguin Press.

Blouin, C., Chopra, M. And Van der Hoeven, R. (2009). Trade and social determinants of health. The Lancet, 373/9662, 502-507.

Chan, N. and Dung T.K. (2001). Development of CGE model to evaluate tariff policy in Vietnam. MIMAP Modelling Meeting, Singapore.

Chen, S. and Ravallion, M. (2004). How have the world's poorest fared since the early 1980s? World Bank Resaerch Observer – WORLD BANK OBSERVER RES OBSERVER, 19(2), 141-169.

Choi, C. (2006). Does foreign direct investment affect domestic income inequality? Applied Economic Letters 13: 811-814.

Clark, D. and McGillivray, M. (2007). Measuring human well-being: key findings and policy lessons. unu.edu/publications/brief%policy-briefs/2001/pb03-07.pdf.

Clark, W. (2000). Environmental Globalisation, in: Joseph S. Nye and J. D. Donahue (Eds.), Governance in a Globalizing World Brookings Institution Press, Washington, D.C.: 86-108.

Clupper, R. (2002). Approaches to Globalisation and inequality within the international system. Paper prepared for UNRISD project on Improving Knowledge on Social Development in International Organisation, September.

Cohen, E. (1979). The economic of education. Cambridge, Ballinger Publishing Company.

Decanq, K. and Lugo, M. A. (2009). Weights in multidimensional indices of well-being. OPHI Working Paper, No. 18.

Dekimpe, M., Parker, P. and Sarvary, M. (2000). "Globalization: Modelling technology adoption timing across countries". Technological Forecasting and Social Change 63, 25–42.

Department for International Development (2012). DFID Annual Report and Accounts 2012 to 2013.

Dollar, D and Kraay A. (2004). Trade, growth and poverty. Economic Journal 114: 22-49.

Dreher, A, and Gaston N. (2006). Has globalisation increased inequality? KOF Swiss Institute for Business Research, Working Papers No. 140, June 2006.

Dreher, A. Gaston, N. and Martens, P. (2008). Measuring globalisation: gauging its consequence. New York, Springer.

Dreher, A. (2006). Does globalisation affect growth? Empirical evidence from a new Index. Applied Economics 38, 10: 1091-1110.

Elgin, C., Goksel, T., Gurdal, M. and Orman, C. (2013). Religion, income inequality, and the size of the government. Economic Modelling Elsevier, Vol.30 (C), 225-234.

Faber, B. and Gerritse, l. (2012). Trade integration, market size and industrialisation: evidence from China's National Trunk Highway System. The Review of Economic Studies rdu010.

Faber, B. and Gerritse, l. (2014). Trade integration, market size, and industrialisation: evidence from China's National Trunk Highway System. The Review of Economic Studies, rdu010.

Fosu, A.K. and Mold A. (2008). Gains from trade: implication for labour market adjustment and poverty reduction in Africa. African Development Review/Reme Africaine de Development 20 (1). 20-48.

Geda, A. and Shimeless A. (2005). Openness, inequality and poverty in Africa. Addis Ababa: Department of Economics, University of Ethiopia. Mimeo.

Gindling, T. H. and Terrell, K. (2010). Minimum wages, globalization, and poverty in Honduras. World Development, 38(6), 908-918.

Gold, K. (2009). Globalisation and poverty: comparative analysis of Bangladesh and Nigeria ASBBS annual conferences: Las Vegas, February.

Greiner, M., Regal, C. A. and Jin, D. S. (2004). Observation of resonance condensation of fermionic atom pairs. Physical Review Letters 92(4), 040403.

Gries, T. and Redlin, M. (2012). Trade openness and economics growth: a panel casuality analysis. Centre for International Economics, Working Paper Series, (2011-06).

Guordon, J. Maystre, N. and Melo J. (2006). Openness, inequality and poverty: endowment matter. EUND/WP 2006-12

Gwartney, J. and Lawson, R. (2009). Economic Freedom of the World: 2009 Annual report (Vancouver, B.C.: Economic Freedom Network) Retrieved from http://www.freetheworld.com/2009/reports/world/EFW2009_BOOK.pdf

Hai.S. Minhaj A. R. and Mujahid Y. (2006). Impact of globalisation, liberalization on growth, poverty and income inequality: A case of Pakistan.

Hammed. A. and Nazir, A. (2006). Economic globalisation and its impact on poverty and inequality: evidence from Pakistan. NBER Working Paper 427.

Hammoris, S. and Kai H. (2004). Globalisation, financial depth and inequality in Sub-Saharan Africa. Working Paper Series 67, Department of Economics, University of Ethiopia.

Harrison, A. (2006). Globalisation and poverty. NBER Working Paper No. 12347, June 2006. Retrieved from http://www.nber.org/papers/w12347.

Haveen, H. (2002). Globalisation politics: international investments, production and trade.

HDR. (2010). Human Development Report 2010. Oxford: Oxford University Press

Heckscher, E. F. and Ohlin, B.G. 1991. Heckscher-Ohlin trade theory. The MIT Press.

Heinrich. A. (2009). National symbol, globalisation and the well-being of nations. MPRA Paper No 14882 posted 28 April 2009. Also available online at http://mpra.ub.uni-muenchen.de/14882/

Heshmati, A. (2003). The relationship between income inequality and globalisation. MPRA Paper No. 3897.

Hismmangolu, M. (2012). The impact of globalisation and information technology on language education policy in Turkey. Procedia-Social and Behavioural Sciences 31, 629-633.

IMF (2005). Government finance statistics yearbook. Washington DC.

IMF (2011). Government Finance Statistics Yearbook Washington DC.

Jalil, A. (2012), Modelling income inequality and openness in the framework of Kuznets curve: new evidence from China. Economic Modelling 29(2), 309-315.

Jeffery. I.R. (2007). Globalisation, growth, inequality and poverty in Africa. United Nations University. UNU-WIDER. World Institute for Development Economics Research.

Jones, T. M. (1995). Instrumental Stakeholder Theory. Academy of Management Review 20, 404-437.

Karras, G. (2003). Trade openness and economic growth can we estimate the precise effect? Applied Econometrics and International Development 3(1).

Keohane, R. O. and Nye, J. S. (2000). Introduction, in: Governance in a globalizing world, Joseph S. Nye and John D. Donahue (Eds.), Brookings Institution Press, Washington, DC.: 1-44.

Khor, M. (2001). Globalisation and the south: some critical issues. UNCTAD Discussion Paper.

Khor, M. (2002). A perspective of globalisation and its implications for developing countries. Paper presented to the CSGR conference on Globalisation Growth (In) Equality. University of Warwick March (2002) (http://www.warwick.ac.uk/fac/soc/CSGR/pkhor.pdf)

KOF Swiss Economic Institute. (2010). KOF globalisation index press release. Retrieved from http://www.kof.ethz.ch

KOF Swiss Economic Institute. (2013). KOF globalisation index press release. Retrieved from http://www.kof.ethz.ch

Korcherlkota, L. and Yi, K. (1996). A simple time series test of endogenous vs exogenous growth models: an application to the United States. The Review of Economics and Statistics 78(1), 126-134.

Kumar, S. and Pacheco, G. (2012). What determines the long run growth rate in Kenya? Journal of Policy Modeling, 34(5), 705-718.

Lee. E and Vivarelli, M. (2006). The social impact of globalisation in the developing countries. discussion paper No 1925. January.

Lucas, R. E. (1988). On the mechanics of economic development. Journal of Monetary Economics, 22, 3-42.

Maddison, A. (2010). Historical Statistics of World Economy: 1-2008 AD. Paris: Organisation for Economic Cooperation and Development.

Maertens, M. Colen, L. and Swinnen F. M. (2009). Globalisation and poverty in Senegal: a worst case scenerio?" UNDP Working Paper Series.

Mankiw, N. G., Romer, D. and Weil, D. N. (1992). A contribution to the empirics of economic growth (No. W3541). National Bureau of Economic Research.

Martin, M. (1992). Prognoza vyvoje kursu es. Koruny na rok 1992 (Predicition of Czechoslovak Crown Exchange Rate Developement in 1992). Finance a uver- Czech Journal of Economics and Finance 42(2), 79-90.

McCulloch R. (2005). Protection and rural wages: the Stopler-Samuleson Theorem. Samulesonain economic and 21st century. Micheal Szenberg Report. Geneva: United Nations

Milanovic, B. and Squire L. 2005 Does tariff liberalisation increase wage inequality? Some empirical evidence. World Bank Policy Research working Paper No 3571, World Bank Washington, DC.

Musa, M. (2000). Factors driving global economic integration. In: Global economic integration: opportunities and challenges. Federal Reserve Bank of Kansas City Economic Review 85 (4).

Myrdal, G. (1968). Problem of population quality in Asian drama. an inquiry into the poverty of nations Vol 3, chapter 29, pp1531-1551.

Neculita, M. and Neculita, V. (2012). Romania's competitiveness and competitive position in global context. Economics and Applied Informatics (2), 115-122.

Neculita, M. and Moga, L. M. (2012). The regionalisation, commercial policies and the trade liberalization impact on national economy. Procedia Economics and Finance 3, 1049-1054.

Neutel. M and Heshmati A. (2006). Globalisation inequality and poverty relationship: a cross country evidence. Discussion Paper No 2223, July

Nissanke M. and Thorbecke E. (2008). Introduction: globalisation-poverty channels and case studies from Sub-Sahara Africa. Africa Development Bank, 2008. UK: Blackwell Publishing Ltd.

Nissanke, M. and Thorbecke E. (2005). The impact of globalisation on the world's poor: the transmission mechanisms. Basingstoke: Palgrave Macmillan for UNUWIDER

Nissanke, M. and Thorbecke E. (2006). Channels and policy debate in the globalisation-inequality-poverty nexus. World Development Vol. 34, No. 8, 1338-1360.

Nissanke, M. and Thorbecke E. (2010). Globalisation, poverty and inequality in Latin America: findings from case studies. World Development Vol. 38, No. 6, 797-802.

Niyongabo, J. (2005). Where sustainable agriculture means agricultural productivity? The case study of Gikongoro in Southwestern Rwanda. Unpublished Master's Thesis, Department of Economic History, Lund University, Lund.

Noorkbakhsh, H. (1998). The human development index: some technical issues and alternative indices. Journal of International Development 10, 589-605

Norris, P. (2000). Global Governance and cosmopolitan citizens, in: Governance in a globalising world Joseph S. Nye and John D. Donahue (Eds.), Brookings Institution Press, Washington, DC.: 155-177.

Obadan, M. and Elizabeth, H. (2012). "An empirical analysis of the impact of trade on economic growth. Journal of Economics.

Oduh, M. (2012). Trade openness and output variability in Nigeria: implication for EU-ACP Economic Partnership agreement Developing Country Studies 2(7), 73-84.

Ogwumike,F. O. and Maku, O. (2012). Globalisation and economic growth in Nigeria: a multi-dimensional analysis. Pakistan Journal of Social Sciences 9(2), 89-95.

Ohlin, B. (1933 and 1977). Some expansion policy problems in cases of unbalanced domestic and international economic relations. American Economic Review American Economic Association, Vol. 83(6), 10-17.

Osabuohie, E. S. (2007). Trade openness and economic performances of ECOWAS members – Reflection from Ghana and Nigeria. Extracted from http://eprintscovennatuniversity.edu.ng/3961/Trade_and_Openness_IN_ECOWAS.pdf.

Parante, S. (2001). The failure of endogenous growth, knowledge. Technology and Policy 13(1), 49-58.

Popkin, B. M. (2006). Technology, transport, globalisation and the nutrition transition food policy. Food Policy 31(6), 554-569.

Prasad, S. Kenneth R. Shang-Jin, W. and Kose M. A. (2004). Effects of financial globalisation on developing countries: some empirical evidence. In. Harrison A. 2006. Globalisation and poverty. NBER Working Paper No. 12347, June 2006. Retrieved from http://www.nber.org/papers/w12347

Rao, B. B. and Vadlamannati, K.C. (2010). Globalisation and growth in the low income African countries with the extreme bounds analysis. Economic Modelling 28(3), 795-805.

Ravallion, M. (2006). Looking beyond averages in trade and poverty debate. World Development 34 (8): 1374-92.

Rebelo, S. (1991). Long run policy analysis and long run growth. Journal of Political Economy 99 (3), 500-521.

Riley, J. C. (2005). Poverty and life expectancy. Cambridge, UK: Cambridge University Press

Roine, J.,Vlachos, J. and Waldenstrom, D. (2009). The long run determinants of inequality: what can we learn from top income data? Journal of Public Economics 93(7), 974-988.

Romer, P. M. (1986). Increasing returns and long run growth. The Journal of Political Economy, 1002-1037.

Santarelli, E. and Figni P. (2002). The accelerating effect of globalisation on poverty. evidence from developing countries. DFID Project Paper.

Schultz, T.W. (1981). Investing in people: the economics of population quality. Berkeley: University of California Press.

Segal, A. (2008). Autonomy, security, and inequality: China, India, the United States, and the globalization of science and technology. Technology in Society, 30(3), 423-428.

Sen, A. K. (1985). Commodities and capabilities. Amsterdam, North-Holland.

Sen, A. K. (1999). Development as freedom (DAF). Oxford, Oxford University Press.

Shahbaz, M. (2012). Does trade openness affect long run growth? Cointegration, causality and forecast error variance decomposition tests for Pakistan. Economic Modelling 29(6),.2325-2339.

Sidikat, L. A., Garfar, T. I, Mukaila, A. I, and Samsudeen, D. K. (2006). Determinants of human development in Sub-Sahara Africa. Africa Journal of Economic Policy Vol. 13, No. 2

Solow, R. M. (1956). A contribution to the theory of economic growth. The Quarterly Journal of Economics Vol. 70(1), 65-94.

Solow, R. M. (1959). Competitive valuation in a dynamic input-output system. Econometrica: Journal of the Econometric Society, 30-53.

Solow, R. M. (2000). Toward a macroeconomics of the medium run Journal of Economic Perspectives. American Economic Association, 14(1), 151-158, Winter.

Solow, R. M. (2000). Growth theory: an exposition. OUP Catalogue.

Stopler, W. F. and Samuelson, P. A. (1941). Protection and real wages. The Review of Economic Studies 9(1), 58-73.

Sylvester, K. (2005). Foreign direct investment growth and income inequality in less developed countries. International Review of Applied Economic 19: 289-300.

The Worldwide Government Indicators (2011). Why Should World Governance Be Evaluated, and for What Purpose? Proposal Paper Series.

Todaro M. P. and Smith S. C. (2003). Economic development. Pearson Education Inc. New York.

UNCTAD. (2002). World Investment Report.

UNCTAD. (2003). Economic development in Africa: Trade performance and commodity dependence. Geneva: United Nations.

UNCTAD. (2005). World Investment Report 2005, Trend and Determinants New York, USA.

UNCTAD. (2006). World Investment Report 2006, Trend and Determinants New York, USA.

UNCTAD. (2013). World Investment Report.

UNDESA. (2011). The Great Green Technological Transformation. World Economic and Social Survey 2011.

UNDP. (2006). Human Development Report. New York: Oxford University Press.

UNDP. (2007). Human Development Report. New York: Oxford University Press.

UNDP. (2008). Human Development Report. New York: Oxford University Press.

UNDP. (2012). Assessing Progress in Africa towards the Millennium Development Goals: MDG Report.

UNDP. (2013). Human Development Report. New York: Oxford University Press

UNESCO. (2011). Financing Education in Sub-Saharan Africa Meeting the Challenges of Expansion, Equity and Quality. Montreal: UNESCO Institute for statistics.

United Nations Commodity Trade Database (2012). United Nations Commodity Trade Database.

United Nations Commodity Trade Database (2013). United Nations Commodity Trade Statistics Database. Department of Economic and Social Affairs/Statistics Division.

United Nations Population Division (2008). World Population Prospects 2008

United Nations Statistics Division (2013). Population and Vital Statistics Report.

UNRISD (1995). States of Disarray: The Social Effects of Globalisation. London: UNISRD.

Wagle, U.R. (2007). Are economic liberalisation and equality compatible? Evidence from South Asia. World Development 35(11): 1836-1857.

Watts, H. W. (1997). An economic definition of poverty. In: Improving measures of economic well-being. Academic press, U.S.A

World Bank (1990). World Poverty Report, 1990. Washington DC, The World Bank.

World Bank (2002 a). Global Economic Prospects and Developing Countries: Making Trade Work for the Poor. Washington, DC: World Bank.

World Bank (2002 b). Globalization, Growth and Poverty. Building and Inclusive World Economy. Oxford: Oxford University Press.

World Bank (2015). World Development Indicators, CD-ROM. Washington DC, The World Bank.

Yashin, E. (2002). Globalisation on subversive to Africa's development. Trust News Paper, Nigeria.

Yeboah, O. A., Naanwaab, C., Saleem, S. and Akuffo, A.S. (2012). Effects of trade openness on economic growth: the case of African countries. In 2012 Annual Meeting, February 4-7, 2012, Birmingham, Alabama (no. 119795). Southern Agricultural Economics Association.