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TRADE FLOWS AND THE WELFARE
CHANGES IN LESS DEVELOPED
COUNTRIES: FOCUS ON SUB-SAHARAN
COUNTRIES (1980-2014)

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ABSTRACT

Over the last few decades, the world has become more linked owing to the increased intensity of globalisation across regions. Sub-Saharan Africa (SSA) has become relatively more integrated into the world economy as shown by increasing degree of trade openness (from 55.4% in 1980-84 to 65.3% in 2000-2012) Over the same period, the quality of life in terms of the proportion of SSA people that have access to basic necessities improved marginally (from 49% in 1980-1990 to 53% 2000-2012 for water; 61% in 1980-1990 to 62% in 2000-2012 for health care services). Marginal impact was also exerted on Human Welfare Index (HDI) (from 0.336 in 1980-90 to 0.364 in 1991-2000 and 0.387 in 2000-2012). This study therefore examines the impact of trade openness on human welfare development of SSA countries. Trade was found to exert a positive and significant impact on human development index (0.04), life expectancy (0.04), access to water (0.08) and access to health services (0.07). This implied that a 10% change in trade improved HDI by 0.4%, enhanced access to water and access to sanitation by 0.8% and 0.7% respectively. In order for the region to maximize the welfare of the people via trade interactions, appropriate guided integration in terms of flow and direction of goods and services, institutional reforms and improvement in the quality of governance are necessary.

KEYWORDS: Globalisation, Human welfare, Water, Sanitation, Health services, SSA, Trade openness.

Section I 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 well-being 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 policy makers. The major goals of the economic reforms in the region since the 1980s have been to reduce structural vulnerability by the integration of trade and capital flows and social contacts into the world economy as well as ensure sustained growth, poverty reduction, and human welfare improvements. Despite the long period of economic reforms in SSA, the 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 liberalization and public sector restructuring, including privatization, but all have failed to keep human welfare crises in check. This study aims to determine the impact of trade openness on human welfare in SSA countries between 1980 and 2012. The period represents the new wave of globalisation characterised with intensive interaction of the sub Saharan Africa to the global world.

Section II BACKGROUND TO THE STUDY

Table 1 compares SSA with other global regions in terms of trade openness (market integration) between 1980 and 2012, a period which marks the era of intensive globalisation, not only in SSA countries but globally. The table provides trade openness data covering the period when many SSA countries embarked on economic reforms and programmes. The table shows the general trend towards greater openness over the past three decades across all global regions (1980-2012) based on GDP weights. The trend is not uniform, either across regions or over time, and this is an important feature. At first sight, openness in SSA is higher than most other regions in almost all years shown, but this is potentially misleading because of region-specific factors (IMF, 2005). Average trade intensity has increased in Africa in line with the overall global increase, but not as rapidly as almost all other low-and middle-income regions.

Table 1: Global Comparison of Trade Openness: (X+M/GDP) (US \$ estimate)

| | 1980-84 | 1985-89 | 1990-94 | 1995-99 | 2000-12 |
|------------------------------|---------|---------|---------|---------|---------|
| Sub Saharan Africa | 55.4 | 53.0 | 54.8 | 60.1 | 65.3 |
| Latin America and Caribbean | 27.3 | 29.2 | 32.0 | 39.3 | 43.4 |
| South Asia | 19.2 | 17.8 | 22.4 | 27.5 | 32.6 |
| East Asia | 29.2 | 36.6 | 50.7 | 59.8 | 73.9 |
| East Europe and Central Asia | na | na | 59.1 | 67.3 | 73.9 |
| Middle East and North Africa | 57.6 | 41.5 | 59.7 | 54.0 | 56.9 |
| World Total | 37.9 | 36.6 | 38.8 | 43.9 | 48.5 |

Note na = not available

Source: World Bank (2013).



In spite of the increase in trade intensity, Africa's share of total world trade has fallen over the last three decades. This confirms the assertion that, relying solely on trade intensity as an indicator of trade liberalization is problematic and it is a misleading measure of globalisation because there are many factors that may influence the ratio besides liberalization policies. Comparing poverty among regions is usually a difficult task because it requires that an appropriate measure is

chosen and more often than not all measures have one shortcoming or another.

Since the late 1980s, poverty in SSA, defined by those living on less than \$1 per day, increased from 217.2 million in 1987 to 290 million in 2012 which represents over 46 percent of the total world population (Table 2). Within the same period, SSA's share of the world poor rose from less than 20 percent to close to 25% (World Bank, 2013).

Table 2 SSA Poverty in Global Context, 1987-2012

| Poverty Indices by Regions | 1987 | 1990 | 1993 | 1996 | 2012 |
|---|-----------------|---------------|---------------|-------------|-----------------|
| SSA poor population (millions) living on less than \$1 per day (% of world total in brackets) | 217.2 (18.4) | 242.3 (19) | 273.3 (21) | 289 (24) | 290.0 (24.3) |
| SSA headcount (%) | 46.6 | 47.7 | 49.7 | 48.5 | 46.3 |
| South Asia headcount (%) | 44.9 | 44 | 42.4 | 42.3 | 40.0 |
| World headcount (%) | 28.3 | 29.0 | 28.1 | 24.5 | 24.0 |

Source: The World Bank's Poverty Data Base (2013).

Table 2 and Figure 1 show that both the absolute number of people living in abject poverty (that is, less than \$1 a day) and the percentage of poor population (or headcount) in SSA increased steadily from 1987 and reached a peak in 1993 after which it declined slightly in spite of the rapid waves of globalisation during this period.

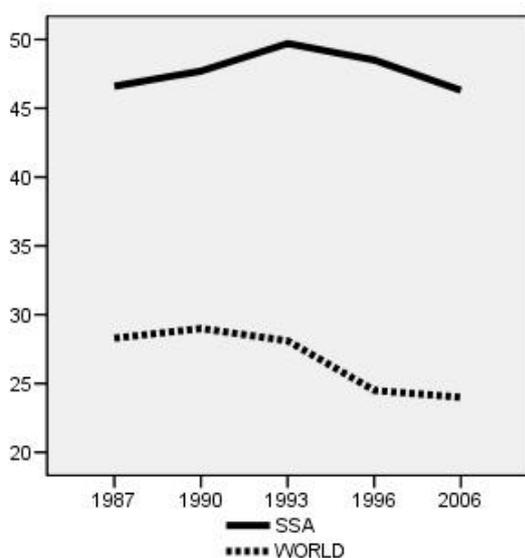


Figure 1: Plot of Poverty based on the Headcount (%)

Section III LITERATURE REVIEW

3.1 Conceptual and Measurement Issues:-

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, 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 and produces complex relations of mutual interdependence.

In terms of scope and dimension of globalisation, opinion varies from one scholar to another. Hveen (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 organization, 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) in his own perspective, identified three basic forces driving globalisation as technology, preference and public policy while the United Nation 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).

The dictionary meaning of welfare is “satisfactory state, health and prosperity, well-being, usually of person and society”. Welfare is a function of goods and services, changes in the quality and quantity of goods and services, as also how their, distribution among individuals in the society, will affect the well-being of the individuals and, through them, aggregate social welfare.

Section IV THEORETICAL FRAMEWORK AND METHODOLOGY

4.1 Theoretical Framework:-

The relevant theoretical framework for this study is rooted in the endogenous growth

theory developed for accounting for long-term steady growth rate which is exogenously determined. The endogenous growth theory is applicable in overcoming the shortcoming that arises in building macroeconomic models out of microeconomic foundations. The theory suggests that a higher long-run rate of growth of output and improvement in social welfare can result from greater openness. This can occur either through favourable impact of openness on technological change or through expansion in the size of the market for exports thereby raising returns to innovation which enhances the country’s specialization. The Solow (1956) endogenous growth model version was adopted in formulating the empirical model for this study as employed by Heinrich (2009), in order to formulate an empirical model for estimating the effects of national symbols and globalisation on the well-being of the people of 88 countries and also by Rao and Vadlamannati (2010) to investigate the precise link between globalization and growth in low-income African countries with extreme deteriorating human welfare.

Following Heinrich (2009) and Rao and Vadlamannati (2010), based on the work of Myrdal (1968), Blaug (1970), Cohn (1979), Schultz (1981), and Becker (1996), H_1 as one of the components that determine endogenous long-run steady growth rate, and H_2 are elements of the human capital (H) component of the economically-active population (N). Thus, human welfare indexed by N can be stated as

$$[N \cdot \ell^{HDI}] = (H_1 + H_2)^{\pi_1} Y^{\pi_2} \quad (1)$$

Where $H = H_1 + H_2$

$$[N \cdot \ell^{HDI}] = H^{\pi_1} Y^{\pi_2} \quad (2)$$

Since the key assumption of the endogenous growth model is that human capital development (H , Y) is subject to diminishing returns. We then hold that

$$\pi_1 + \pi_2 < 1 \quad (3)$$

In the short run, in that the rate of growth slows as diminishing returns takes effect and human well-being converges to a constant “steady-state” rate of growth that is constant returns. For the long-run steady growth, we then claim that

$$\pi_1 + \pi_2 \leq 1, \quad (4)$$

Where π_1 and π_2 are weights. Moreover, Heinrich (2009) argues that basing H on the quality of labour (L) alone overestimates its importance. Also, Solow (1959) postulated that the long-run steady growth rate (alternatively and preferably measured as HDI) is exogenously determined by a set of factors. Therefore, we rather specify,

$$H = f(X) \quad (5)$$

such that we can claim,

$$H = \ell^{\phi \ln q} N \quad (6)$$

Where q is a vector of globalisation transmission mechanism forces schematically illustrated in the previous section and attributable to N . Now from equation (2), we assure that the material conditions (Y) of growth evolve according to the Cobb-Douglas transformation as modelled by the endogenous growth theorist. This is expressed as

$$Y = (AL)^{\rho} K^{1-\rho} \quad (7)$$

Where A = multi-factor productivity or technological progress, L = labour, and K = physical capital, and that L grows exogenously at the rate n equal to the rate of growth of output, which is noted in the Solow growth model as

$$L_{(t)} = nL_{(t)} = \ell^{nt} N, \quad n \geq 0 \quad (8)$$

Then, substituting (6), (7) and (8) into (2) gives

$$[N \cdot \ell^{HDI}] = [\ell^{\phi \ln q} N]^{\pi_1} [(AL)^{\rho} K^{1-\rho}]^{\pi_2} \quad (9)$$

Simplifying,

$$[N \cdot \ell^{HDI}] = [\ell^{\phi \ln q} N]^{\pi_1} \left[(A \ell^{nt} N)^{\rho} K^{1-\rho} \right]^{\pi_2} \quad (9)$$

$$[N \cdot \ell^{HDI}] = [\ell^{\pi_1 \phi \ln q} N^{\pi_1} \left[(A^{\pi_2 \rho} \ell^{\pi_2 \rho nt} N^{\pi_2 \rho}) K^{\pi_2 (1-\rho)} \right]] \quad (9)$$

$$[N \cdot \ell^{HDI}] = A^{\pi_2 \rho} K^{\pi_2 (1-\rho)} \ell^{\pi_1 \phi \ln q + \pi_2 \rho nt} N^{\pi_1 + \pi_2 \rho} \quad (10)$$

Set $A^{\pi_2 \rho} = A_0$, $\pi_2 (1-\rho) = \beta$, $\pi_1 \phi = \eta$, $\pi_2 \rho = \delta$ and $\pi_1 + \delta = 1$ to intensify the expression for estimation purposes, then

$$[N \cdot \ell^{HDI}] = A_0 K^{\beta} \ell^{\eta \ln q + \delta nt} N \quad (11)$$

Then, dividing equation (11) by N , gives

$$\ell^{HDI} = A_0 K^{\beta} \ell^{\eta \ln q + \delta nt} \quad (12)$$

Equation (12) represents the theoretical model for this study to investigate the effect of globalization on human welfare changes.

However, 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 (12) is extended as

$$\ell^{HDI} = A_0 K^s \ell^{\sum y \ln(TRD, PFI, FDI, LBM, GGI) + un} \quad (13)$$

From equation (13), where $t=I$, n is proxied as population growth rate for social welfare, which is 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,

$$\ell^{HDI} = A_0 FCF^s \ell^{\sum y \ln(TRD, PFI, FDI, LBM, ICT, GGI) + un} \quad (14)$$

Therefore, equation (14) forms the exponential growth model for analyzing the impact of globalisation on human welfare in SSA.

For estimation, Equation (14) is linearly specified in a panel model form to capture the cross-country and time observation by taking the natural logarithm of both sides and this leads to

$$HDI_{it} = a_{i,0} + s \ln FCF_{it} + y_1 \ln TRD_{it} + y_2 \ln PFI_{it} + y_3 \ln FDI_{it} + y_4 \ln LBM_{it} + y_5 \ln ICT_{it} + y_6 \ln GGI_{it} + un_{it} + u_{1t} \quad (15)$$

where $a_0 = \ln A_0 = f_2 \dots \ln A$

The human welfare index and indices of access to basic necessities shall be regressed on the basic components of globalisation.

Section V PRESENTATION AND DISCUSSION OF RESULTS

5.1 Panel Unit Root and Cointegration

Analyses:-

The fixed and random effects methods were employed in estimating the panel regression models that examines the impact of trade openness on human welfare, other welfare measures and access to basic necessities. The estimated coefficients between the fixed and random effect models were compared using the Hausman test with the null hypothesis “random effects are uncorrelated with the explanatory variables”.

The Hausman test result presented in Table 8 revealed that we do reject the null hypotheses for all the considered models at

different (1%, 5% and 10%) significance level based on the calculated Chi-Square values. The fixed effect model was found more consistent and efficient for the purpose of this study. Also, two forms of estimated panel regression models were reported. First, the augmented theoretical model [1] that incorporates human welfare development effects of fixed capital stock (CFC), trade openness (TRD), portfolio investment (PFI), foreign direct investment (FDI), net labour migration (LBM), good governance index (GGI), telephone access (TEL), and working population growth rate (n). The second model [2] is the main theoretical baseline model that captures the effect of trade openness (TRD) on human welfare development indicators while controlling for incorporated theoretical factors such as fixed capital stock (CFC) and economic active population growth rate (n).

Table 3.: Fixed Effects Regression of Human Welfare and Transmission Channel of Trade Globalization

| | Human Welfare | | Other Welfare Measures | | | | | | Access to Basic Necessities | | | | | |
|----------------------|--------------------------|-------------------------|--------------------------|-------------------------|----------------------------|---------------------------|----------------------------|-----------------------------|-----------------------------|-------------------------|----------------------------|---------------------------|--------------------------|--------------------------|
| | HDI | | LEI | | IMR | | MYS | | WAT | | SAN | | HCS | |
| | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 | 1 | 2 |
| <i>Constant</i> | -7.286 (-6.79*) | -32.20 (-33.4*) | 71.177 (87.58*) | 65.20 (80.7*) | 139.647 (47.12*) | 162.48 (-73.3*) | -1.112 (-54.61*) | -1.158 (-70.9*) | -76.888 (-48.65*) | -89.58 (-71.9*) | -67.229 (-62.84*) | -85.05 (-99.9*) | 63.717 (46.31*) | 41.98 (29.50*) |
| <i>CFC</i> | 0.131 (16.51*) | 0.248 (27.7*) | 0.090 (16.05*) | 0.122 (19.9*) | -0.826 (-28.38*) | -1.047 (-34.2*) | 0.005 (27.84*) | 0.005 (30.7*) | 0.222 (17.25*) | 0.200 (14.3*) | 0.150 (27.23*) | 0.167 (28.23*) | 0.165 (19.36*) | 0.252 (25.99*) |
| <i>TRD</i> | 0.044 (15.18*) | 0.059 (17.5*) | 0.043 (22.94*) | 0.055 (26.6*) | -0.099 (-11.00*) | -0.146 (-14.8*) | -0.001 (-11.47*) | -0.00003 (-0.50*) | 0.082 (16.50*) | 0.165 (30.9*) | -0.051 (-20.71*) | -0.047 (-18.6*) | 0.068 (22.00*) | 0.103 (28.81*) |
| <i>PFI</i> | -0.006 (-2.01**) | | -0.014 (-8.22*) | | -0.013 (-1.39) | | 0.0004 (5.74*) | | 0.029 (4.54*) | | 0.015 (2.57**) | | -0.010 (-3.84*) | |
| <i>FDI</i> | 0.586 (41.99*) | | 0.316 (31.03*) | | -2.192 (-41.52*) | | 0.011 (28.15*) | | 0.676 (26.83*) | | 0.268 (22.19*) | | 0.540 (35.35*) | |
| <i>LBM</i> | 0.041 (4.54*) | | 0.009 (1.151) | | 0.184 (4.99*) | | -0.0003 (-1.7***) | | -0.056 (-5.63*) | | 0.123 (10.58*) | | 0.067 (5.62*) | |
| <i>GGI</i> | -0.037 (-33.08*) | | 0.004 (5.26*) | | 0.075 (24.68*) | | -0.001 (-46.56*) | | -0.088 (-48.08*) | | -0.015 (-19.49*) | | -0.022 (-18.01*) | |
| <i>TEL</i> | 0.044 (42.35*) | | 0.022 (35.55*) | | -0.033 (-10.66*) | | 0.0001 (6.252*) | | 0.019 (9.22*) | | 0.028 (15.89*) | | 0.045 (43.963*) | |
| <i>n</i> | 0.738 (36.142*) | 1.205 (67.6*) | -0.435 (-27.61*) | -0.329 (21.4*) | -0.554 (-9.750*) | -0.980 (23.9*) | 0.028 (71.95*) | 0.029 (92.7*) | 2.332 (76.96*) | 2.557 (107.9*) | 1.824 (88.93*) | 2.175 (136.2*) | -0.437 (16.51*) | -0.051 (1.9***) |
| <i>Adj. R2</i> | 0.957 | 0.925 | 0.952 | 0.866 | 0.926 | 0.890 | 0.937 | 0.933 | 0.927 | 0.943 | 0.982 | 0.984 | 0.952 | 0.870 |
| <i>S.E. of Reg.</i> | 3.562 | 4.057 | 3.580 | 3.771 | 14.758 | 15.965 | 0.102 | 0.121 | 7.417 | 8.391 | 4.529 | 4.667 | 5.108 | 5.455 |
| <i>F-Statistic</i> | 8112.6* | 5767.9 | 7261.4* | 3025.5 | 4574.4* | 3798.9 | 5483.0* | 6500.2 | 4673.4* | 7730.3 | 20596.9* | 28785.1 | 7331.7* | 3138.1 |
| <i>Hausman Test</i> | 25.653* | 3.010 | 56.741* | 36.54* | 32.187* | 4.845 | 16.333** | 0.455 | 17.683** | 1.386 | 22.675* | 2.446 | 42.870* | 18.40* |
| <i>Obs</i> | 528 | 528 | 528 | 528 | 528 | 528 | 528 | 528 | 528 | 528 | 528 | 528 | 528 | 528 |
| <i>Cross-Section</i> | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |

Note: [1]. Model 1 is the augmented theoretical model with control variables; [2]. Model 2 is the theoretical baseline model. [3]. * denotes significant at 1%; ** denotes significant at 5%; *** denotes significant at 10%. [4]. Absolute t-statistics are in parentheses. [5]. All regressions use the fixed cross-section effects cross-section weights standard errors and covariance (d.f. corrected) [6]. Hausman test is based on Chi-Square Statistic

The fixed regression results of human welfare, other welfare measures and access to basic necessities models were reported on Table 3 The estimated aggregated [1] and disaggregated model [2] indicated that trade openness as economic dimension of globalization has positive effect on human development index (HDI), life expectancy index (LEI), access to improved water (WAT), and health care services (HCS) in Sub-Saharan Africa (SSA) between 1980 and 2012. These effects in terms of signs conform with theoretical expectations. On the basis of the impact intensity, 10% change in

trade openness (TRD) respectively enhanced human welfare development (HDI), access to improved water (WAT) and health care services (HCS) by 0.44%, 0.82% and 0.68% for the augmented theoretical model [1]; and by 0.59%, 1.65%, and 1.03% for the theoretical model controlled for trade integration only. The corresponding t-statistic values indicated that at 1% significance level, trade openness (TRD) was found to statistically significant enhance human welfare development (HDI), access to improved water (WAT) and health care services (HCS) in SSA region.

Also, trade openness (TRD) was found to exert negative effect on infant mortality rate (IMR, per 1,000 live births), mean year of adult schooling (MYS), and access to improved sanitations (SAN) as reported for the estimated augmented theoretical model [1] and theoretical baseline model [2]. These effects are not in tandem with the theoretical expectations excluding for infant mortality rate (IMR). For the effect size, 10% increase in percentage share of total trade to GDP (TRD), deteriorated access to improved sanitations (SAN) by 0.51% and 0.47%, while it reduced infant mortality rate (IMR) as a welfare measure by 0.99% and 1.46% in SSA for model [1] and [2] respectively. The reported t-statistic indicated that trade openness (TRD) at 1% critical level significantly reduced infant mortality rate (IMR) and access to improved sanitations (SAN) in SSA between 1980 and 2012 as reported for model [1] and model [2]. But the deteriorated effect of trade openness on mean year of adult schooling (MYS) was insignificant at for the theoretical baseline model [2], though significant at 1% critical level for the aggregated model [1].

The result is in tandem with the empirical conclusions of Bhagwati and Srinivasan (2002), Dollar and Kraay (2004), Lee and Vivarelli (2006) and Harrison (2006) that trade foster economic growth, enhances poverty alleviation and welfare development. Similarly, this result does not agree with Hai, Minhaj, Ahmed and Mujahid (2006), Osabuohien (2007), Gold (2009), Obadan and Elizabeth (2009), Maetens, Colen and Swinnen (2009), Igberaese and Diania (2012), and Oduh (2012) which established a strong link and reported that the globalization through trade relations is an effective means of generating employment, enhancing human welfare, reducing poverty, and income inequality. Using fixed effect

method like ours, Karras (2003) established positive relationship between trade openness and per capita income growth rate for 105 and 56 panel countries respectively in 1960-1997, and 1951-1998. In a study of 38 African countries as sample by Yeboah, Naanwaab, Saleem and Akuffo (2012), trade openness is found to enhance growth rate of per capita gross domestic product as a measure of income inequality.

However, not in tandem with our findings that trade openness as a channel of globalization enhances human welfare, life expectancy, and access to improved water and health care services in SSA, some of the studies that reported contrary findings include Milanovic and Squire (2005), Ravillion (2006), Neutel and Heshmati (2006), Guordon, Maystre and Melo (2006), Wagle (2007), Fosu and Mold (2008), and Afaha and Njogo (2012). Also, in a single equation analysis, Heshmati (2003) found that trade globalization index explains 7 to 11 percent in human welfare deterioration among developing countries. However, this study established that in a much higher magnitude using the same disaggregated approach, trade openness explains 93% of changes in human welfare development and lack of access to infrastructure facilities like health care services in SSA region respectively. In addition, using national symbols and trade openness as globalization measure simultaneously, Heinrich (2009) revealed strong negative effect of economic globalization via trade flows on human well-being (proxy as human development index).

Section VI POLICY IMPLICATIONS AND RECOMMENDATIONS

The findings from the study discussed yields various policy implications for policy makers in Sub-Saharan Africa countries, in their attempt to reap the immense benefits

emanating from global interactions and thus call for the need to harmonized reforms. This step is anticipated to improve human welfare development and enhance infrastructure accessibility, as the outcome of the empirical analysis revealed that trade openness enhances human well-being in SSA region but with a very small marginal effects in terms of magnitude as well as deteriorates access to basic primary schooling and sanitations. It was also found to explain 92% changes in human welfare development within the considered time-frame. A plausible explanation for this observed empirical outcome is attributed to the existence of high trade tariffs and extensive open trade regimes hindering SSA specialization in highly competitive non-commodity products for global exchange. The long reliance on primary products amidst high commodity prices' volatility is that externally driven has been one of the main driving forces of negative trade openness impact on human welfare. Despite the consistent GDP growth rate recorded by most of the SSA countries, this has been rootless and non-inclusive in terms of qualitative development. Other reasons why large trade volume in SSA has not be translated to a remarkable improvement in human welfare include high marginal propensity to import, small size of domestic output and international trade characterised by dumping and non-compliance to comparative advantage laws of trade.

Therefore, there is need for policy makers in each SSA country to continuously increase the adoption and utilization of inclusive growth oriented trade policy tools such as moderate tariffs and non-tariff barriers to guide trade interactions with the global world especially via exports promotion strategy in order to facilitate development in human wellbeing. Also, harmonization of trade tariffs

and reforms among SSA countries will further improve future multilateral trade negotiations, break down structural constraints emanating from open trade regimes and reduce restrictive trade measures such as import duties and taxes in order to enhance the capability of the people through domestic production and reduction in demand for imported goods.

REFERENCES

1. 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)*, pp. 50-73.
2. Becker, G (1996): *Human capital*, 3rd edition. University of Chicago Press, Chicago.
3. Bhajwati, J and Srinivasan, T.N. (2002): *Trade and Poverty in the poor countries*, *American Economic Review* 92: 180-183.
4. Blaug, Mark (1970): *Introduction to the economics of education* London, Allen Lane, Penguin Press.
5. Choi, C. (2006): *Does foreign direct investment affect domestic income inequality?* *Applied Economic Letters* 13: 811-814.
6. 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.
7. Clark, William (2000): *Environmental Globalisation*, in: Joseph S. Nye and John D. Donahue (eds.), *Governance in a Globalizing World*, Brookings Institution Press, Washington, D.C.: 86-108.
8. Cohn, E. (1979): *The Economic of Education*. Cambridge, Ballinger Publishing Company.
9. Decanq K. and Lugo, M. A. (2009): *Weights in Multidimensional Indices of Well-being*. OPHI working paper No. 18.
10. Dollar, D and A. Kraay (2004): *Trade, Growth and Poverty*. *Economic Journal* 114: 22-49.

11. Fosu, A.K and A. Mold (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.
12. Gold, K. (2009): *Globalisation and Poverty: Comparative Analysis of Bangladesh and Nigeria* ASBBS Annual Conferences: Las Vegas, February.
13. Hai.S, Minhaj. Ahmed R and Y. Mujahid (2006): *Impact of Globalisation, Liberalization on Growth, Poverty and Income Inequality: A case of Pakistan*.
14. Harrison Ann (2006): *Globalization and Poverty*. NBER Working Paper No. 12347, June 2006. Retrieved from <http://www.nber.org/papers/w12347>
15. Igberaese and Diama (2012)
16. Keohane, Robert O. and Joseph S. Nye, (2000): *Introduction*, in: Joseph S. Nye and John D. Donahue (eds.), *Governance in a Globalizing World*, Brookings Institution Press, Washington, D.C.: 1-44.
17. 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), pp. 126-134
18. Lee. E and M. Vivarelli (2006): *The Social Impact of Globalisation in the Developing Countries*. Discussion Paper No 1925. January.
19. Maddison, A. (2010): *Historical Statistics of World Economy: 1-2008 AD*. Paris: Organization for Economic Cooperation and Development.
20. Maertens, M Colen, L and F. M. Swinnen (2009): *Globalisation and Poverty in Senegal: A Worst case Scenerio?* UNDP working Paper series.
21. Milnovic, B and L. Squire (2005): *Does tariff Liberalization increase wage inequality? Some Empirical Evidence*. World Bank Policy Research working Paper No 3571, World Bank Washington, DC.
22. 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).
23. Myrdal, G. (1968): *Problem of Population Quality in Asian Drama. An inquiry into the poverty of nations* Volume 3, chapter 29, pp1531-1551.
24. Noorkbakhsh H. (1998): *The Human Development Index: Some Technical Issues and Alternative Indices*. *Journal of International Development* 10, 589-605
25. Norris, Pippa, (2000): *Global Governance and Cosmopolitan Citizens*, in: Joseph S. Nye and John D. Donahue (eds.), *Governance in a Globalizing World*, Brookings Institution Press, Washington, D.C.: 155-177.

