Real Wages, Inflation and Unemployment Nexus, Implication on Welfare in Sub Saharan Africa

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Abstract: This study examines the welfare implication of the real wages, inflation and unemployment nexus, in sub-Saharan Africa countries from 2001 to 2020. The goal of this study is to analyze the role of wage rate in the impact of inflation and unemployment on household welfare in SSA. The study adopted Equal Satisfaction Capacity theory by Pigou as the theoretical framework, while the Panel GMM was employed in the estimation of the variables. The results showed that wage rate, population, and exchange rate have a positive and substantial relationship with household consumption and hence welfare, but inflation, unemployment, and government capital spending had a negative but significant relationship. Furthermore, government final consumption spending have a negative and significant relationship. The study made the following recommendation; the effective employment of macroeconomic policy tools in the control of inflation, increase in employment rate through a joint public private partnership in the creation of employment, full encouragement of entrepreneurial activities as well as increase in real wage rate.

Keywords: Inflation, Real Wage, Unemployment, Real household consumption per capita, Panel GMM

JEL Classification: C23, I31, J31, J64

Introduction

Macroeconomic policy aims to promote economic growth and development, employment creation, improved living standards, and an equal distribution of income in society. Achieving the stated macroeconomic goals would maximise a country's

social welfare function (Afzal & Awais, 2012). Employment outcomes are one of the most important factors in determining the welfare of households and the economy as a whole. This is evidenced by the fact that output growth alone is not a sufficient condition for the improvement of the welfare of the population. Unemployment and inflation have significant welfare implications. They are of key relevance in policy formulations (Worlanyo, 2020).

However, there are still disagreements about the impact of government policies aimed at increasing employment and real wages on the national economy. Studies on the output, unemployment, and inflation relationship have a long-standing history. Since the 1950s, the exact relationship between these two concepts has attracted the attention of economists. While some believe that an increase in employment and wages will increase the level of inflation (obedience to the Philips curve) and even unemployment in the long-run, They argue that an increase in real wages will result in an increase in unemployment as both government and private sectors may find it difficult to keep up with the former number of employees as a result of the increase in labour turnover and hence unemployment. As a sequel to these submissions, an increase in real wages is believed to give consumers and workers more purchasing power to demand more goods, thereby increasing the aggregate demand for goods, which, when not backed up with a proportional increase in aggregate supply, will lead to an increase in prices and inflation.

Others argue that an increase in real wages is needed to improve and increase the standard of living (Babalola, 2019). Keeping the growth of real wages in line with labour productivity is widely viewed as a necessary condition for long-term macroeconomic stability—it helps preserve the country's competitiveness while limiting inflationary pressures and the risk of a wage-price spiral. In recent years, it has been highlighted that skilled labour shortages, rapid urbanization, gradual transformation of the "grey" economy into official economic activity, and rapid productivity growth of the tradable goods sector, spillovers from terms-of-trade shocks, and loose public sector wage policy are possible factors driving real wage growth above labour productivity (Cincibuch & Podpiera, 2016).

However, there are regional variations in the real wage, inflation, and welfare effects across the globe. The Sub-Saharan African economy has remained underdeveloped for a long period, despite some countries being blessed richly with human and natural resources. Welfare in Sub-Saharan African countries has been relatively lower than in other regions. For instance, in 2021, of the 46 nations on the

UN list of least developed countries, 33 are in Sub-Sahara Africa. More than half the world's poor live in SSA. While there has been a global fall in poverty rates since 1990, the poverty rate in SSA is still as high as 40%. Absolute poverty increased from 288 million in 1981 to 490 million in 2020 (Schoch & Lakner, 2020; United Nations Conference on Trade and Development, 2022). The region was also found to have the highest rate of youth unemployment at 50% in 2012 as compared to other regions and a total unemployment rate of 6.23% in 2018.

This increased to 6.28% in 2019 and 6.63% in 2020 (World Development Indicator, 2020). The inflation rate is also on a rising trend, increasing from 2.73% in 2019 to 3.22% in 2020 and 3.71 in 2021. The growth of wages has varied across Africa. Although wage employment is limited in many countries, about 26% of the total population is still on wages and salaries, which are often low and stagnant. As a result, it is reasonable to assume that the low wage, low income, high unemployment rate, and high and volatile inflation rate have been having a ripening effect on welfare. it has become imperative to investigate the nexus of unemployment, wages, inflation, and welfare in SSA.

Many studies have examined the impact of inflation and unemployment on growth (e.g., Madito and Khamalo (2014), Tenzin (2019), Gachoki (2021). Others have examined the impact of unemployment and wages on economic growth or welfare (Mwangi *et al.* (2017), Khan and Morrissey (2020). These studies, however, have come up with conflicting results. While some studies found no impact of unemployment on growth, inflation was found to have a significant impact on growth and hence welfare. However, an analysis of one of the linking factors between inflation and economic growth has received less attention and has not been considered, especially for SSA Africa. Knowledge of this will help policy makers in the development of correct policies that will tackle these problems, thereby increasing the welfare of the people in the region. Also, while the various studies have consider the impact of inflation and unemployment on economic growth, but economic growth do not always transform to welfare. Thence, in this research, we aim to fill this gap by extending the existing literature on this matter using SSA data. Given the low welfare level, the rising unemployment and inflation, and the relatively low wages as compared to other regions of the world, it becomes imperative to ask: is the low welfare level a significant function of the high unemployment and high inflation rate? Is the wage rate a contributing factor to the low welfare level? Indeed, the main objective of this study is to analyze the role of the wage rate in the impact of inflation and unemployment on household welfare in SSA.

This study contributes to the existing literature in the following ways: first, the use of a consumption measure of welfare rather than just income or growth of output. Second, as it relates to welfare, the study determine the role of wages in the unemployment-inflation trade-off. Our research findings provide a quantitative policy framework to tackle the poverty and low welfare problems that have eaten deep into the region. We also devoted an essential component of this study to establish the basis for long-term and sustainable development for SSA countries.

2. Literature Review

2.1. Conceptual Literature

According to Balami (2006), unemployment is conceptualized as a situation where a worker or workers are involuntarily out of work. This means that workers are willing and able to work but cannot find any work. Similarly, unemployment has been defined by classical economists as the excess supply of labour over the demand for labour which is caused by an adjustment in real wages. Classical or real wage unemployment occurs when real wages for jobs are set above the market-clearing level, causing the number of job-seekers to exceed the number of vacancies.

Inflation is the persistent increase in the general price level within the economy that affects the value of the domestic currency, Fatukasi (2017). It is not a one-time event; rather, it must be sustained over time and affect all goods and services in the economy. There are several factors that are responsible for inflation. The inflation that results from excess aggregate demand is called "demand pull inflation." Cost-push inflation results from upward movement in the cost of production while the structural inflation arises from some constraints such as inefficient production, marketing and distribution systems in the productive sectors of the economy Fatukasi (2017).

2.2. Theoretical Literature

In the theoretical review of the connectivity among wages, unemployment, inflation, and welfare, various theories have been put forward. Some of these theories examined these variables in pairs. In pursuit of an investigation into the statistical relationship between unemployment and a country's output growth, economist Arthur Melvin Okun, in his Okun's Law, noted that a unit increase in cyclical unemployment is associated with two percentage points of negative growth in real GDP, depending

on the country and period that is being considered (Fuhrmann, 2016). Since the output of a country is dependent on the amount of labour that it has used, it can be understood that a positive relationship exists between output and employment, which further explains the negative relationship between output and unemployment (Snowdon and Vane, 2005). A one-percentage-point decrease in the unemployment rate over a year results in a 2% increase in the annual rate of real GDP growth (Fuhrmann, 2016). In order to hold the unemployment rate steady, the growth rate must usually be twice the growth rate of employment potential. Two methods were postulated for measuring Okun's coefficient; Okun's Law can be expressed in this form:

The initial form of Okun's law can be written as the Gap method:

$$Ut - U*t = b(yt - y*t) \tag{1}$$

Where:

yt = The real output product (GDP)

y*t =potential output

Ut = The natural level of unemployment

U*t = the potential unemployment

b = The Okun's coefficient

The second method is the use of Okun's first-difference method: This method helps to indicate the sensitivity of output to unemployment changes.

Given:

$$\Delta U = \alpha - b(\Delta Y/Y) \tag{2}$$

Then $\qquad b\, \Delta Ut = \alpha - (\Delta Y/Y)$

The difference version highlights that the change in unemployment rates is driven by the growth rate in real GDP. This is based on the assumption that an increase in output will need more factors of input, leading to a lower unemployment rate. The difference version, written as a linear regression model, is given by:

$$Ut - Ut{-}1 = \alpha + \beta(Yt - Yt{-}1) + Et$$

Where U_t represents the unemployment rate in t, Y_t symbolizes the level of real GDP, and Et is the error term that satisfies the usual properties. The parameter β is called the Okun's coefficient and is expected to have a negative sign. Thus, β estimate gives a negative coefficient between output growth and unemployment rates.

In the investigation of the relationship between inflation and unemployment, the basic theories are the **Phillip's Curve and the Augmented Phillip's Curve.** The Phillip's curve plots the relationship between the recorded level of unemployment and the rate of change in wages, where the rate of change in money wages is used as a proxy for inflation. As unemployment falls, the rate of inflation increases. This means that there is no change in real values, as the rate of inflation adjusts to the new pressures demanded due to wage increases (Howells & Bain, 2008). The Phillip's curve is made up of an equation with several parts:

$$\pi = \pi e - \beta \ (u\text{-}u^{\wedge}) + v$$

where:

π = inflation

πe = Expected inflation

β = parameter that measures the response of inflation in relation to cyclical unemployment (u-uˆ) = Cyclical Unemployment

v = Supply Shocks

Another important thing to look at when discussing the Phillip's curve is the sacrifice ratio. This is the percentage of a year's real GDP that must be given up in order to reduce inflation by 1 percentage point. The typical estimate of this ratio is 5 percent of the GDP, which must be given up in order to reduce inflation by 1 percent.

2.3. Empirical Literature

Unemployment, Wages and Welfare

In general, there is no accepted consensus about the impact of wage changes on employment. This lack of consensus is primarily due to the fact that wages are considered not only as a cost factor for firms but also as a substantial component of aggregate income as well as aggregate demand. Even though this view is not generally accepted in modern macroeconomics, studies such as Jerger and Michaelis (2013) opined that certain approaches, however, give emphasis to the demand-side repercussions of wage increases. According to them, wage changes seem to have a significant impact on employment, which in turn leads to an increase in welfare.

Malley and Molana (2017) studied the relationship between output, employment, and efficient wages, using the G7 countries to observe this relationship. They

constructed a stylized model of the supply side with goods and labour market imperfections to show that an economy can rationally operate at an inefficient, or 'low-effort," state in which the relationship between output and unemployment is positive. Data from the G7 countries was used over the period 1970-2014 and their findings revealed that only German data strongly favours a persistent negative relationship between the level of output and the rate of unemployment. The consequence of this is that circumstances exist in which market imperfections could pose serious obstacles to the smooth working of expansionary and/or stabilization policies, and a positive demand shock might have adverse effects on employment.

In a similar study carried out by Mwangi *et al.* (2017) on the effects of minimum wages on the labor market and income distribution in Kenya, the single country static model, the PEP-1-1 model, and the Social Accounting Matrix for Kenya for the year 2009 were used. The findings indicate that increases in wages fuel the migration of labor from rural to urban areas and stifle the expansion of the economy. A rise in minimum wages has an overall negative effect on the incomes of rural households while benefiting urban households, which contributes to increased inequality. A fall in real minimum wages, on the other hand, is supportive of output and employment growth.

Apergis and Theodosiou (2018) found statistical evidence for a long-run relationship between employment and real wages using panel data from different OECD countries from 1950 to 2005, which firmly rejects the hypothesis that wages cause employment in the short run.

Marika and Hector (2019) studied the role of the wage-productivity gap in economic activity. It carried out this study using some developed countries and a few developing countries, such as France, Germany, Spain, Japan, the United States of America (USA), and others. The scholars found that the labour share is negatively associated with employment even when the conventional assumption of a unitary long-run elasticity of wages with respect to productivity holds. Babalola (2019) assessed the impact of an increase in the national minimum wage in Nigeria. The study employed the ARDL method of estimation and an ECM model for the period 1980 to 2019. The national minimum wage was found to have a positive, substantial impact on unemployment and inflation in both the short and long run.

In a more recent study, Khan and Morrissey (2020) investigated the effects of income diversification on household welfare in Tanzania. The paper used three waves of Tanzanian National Panel Surveys (2008/09, 2010/11, and 2012/13) to construct

a panel of 3,676 households that appeared in at least two waves to explore the effect of income diversification on household welfare measured in terms of food consumption. The study established that increasing diversification is associated with higher welfare, but there are differences by gender and activity type. Non-agricultural wage employment is clearly beneficial, irrespective of gender, and has had relatively high growth. Non-agricultural self-employment is a welfare-increasing diversification strategy.

Inflation, Unemployment and Welfare

On the connectivity between inflation, unemployment and welfare, Frimpong and Oteng-Abayie (2010) analyzed the threshold effect of inflation on economic growth in Ghana for the period of 1960–2008 by using threshold regression models. The result indicated an inflation threshold level of 11% at which inflation starts to significantly harm economic growth in Ghana. At or below the 11% level, inflation was likely to have a mild effect on economic activity, while above this threshold level, inflation would adversely affect economic growth.

Madito and Khamalo (2014) examined the impact of unemployment and inflation on economic growth in South Africa. The paper uses quarterly data from 1967 to 2013 in an error-correction regression model. The results show that unemployment has no impact on economic growth in South Africa. In a study by Saidu and Muhammad (2015), the flow of causality between unemployment, inflation, and economic growth in Nigeria was investigated. The results indicate that inflation affects economic growth, but growth does not cause inflation. While there was no causality between economic growth and unemployment.

Muryani and Pamungkas (2018) investigated the impact of unemployment, inflation, government spending, labor force, and gross fixed capital formation on Indonesian economic growth. The study estimated the parameters of the population regression using an error correction model (ECM). The results showed that unemployment and gross fixed capital formation promote economic growth. Economic growth is slowed by the labour force and inflation. Government expenditure has no effect on economic growth.

The impact of unemployment on economic growth was investigated by Makaringe and Khobai (2018) for South Africa. They employed quarterly data from 1994 to 2016 in an ARDL regression model. The results of the study showed that unemployment depresses South Africa's economic growth. Tenzin (2019) investigated

the impact of unemployment and inflation on economic growth in Bhutan using data from 1998 to 2016. The study uses an autoregressive distributed lag (ARDL) model to estimate the parameters of the regression model. The results show that unemployment has no impact on economic growth in Bhutan, both in the short-run and the long-run. Inflation has an impact on economic growth in the long run, indicating that inflation causes uncertainty.

A recent study was carried out by Gachoki (2021) on the impact of inflation and unemployment on economic growth in Kenya for the period 1960 to 2019. The study adopted the Vector Error Correction Model in estimating the short run and long run effects. The outcome of the results revealed that GDP per capita growth does not seem to have a direct long-term relationship with unemployment, and neither does unemployment have a direct long-run relationship with GDP per capita growth.

3. Methodology

3.1. Theoretical Framework

The study is rooted in the Equal Satisfaction Capacity theory by Pigou (1935) in (). Pigou solved the problem of welfare maximization, not through management techniques as Pareto did, but rather by resource distribution. According to Pigou's observation, a certain product would have the same effect and benefit for all individuals. Hence, he stated the theorem of "Equal Satisfaction Capacity." On the other hand, he assumed that as the bulk of the product increased, the satisfaction level would decrease. According to Pigou in order to maximize overall welfare, resources should be absolutely equally distributed. However, he had objected in the sense that equal resource distribution would prevent capital stock and decrease total production.

In this scenario, two enterprises have sufficient capacity. According to the profit maximisation objective, the first-order condition of $= 0$ needs to be satisfied. The quantity of reaction functions and equilibrium outputs can be expressed as

$$q1 = \qquad\qquad\qquad\qquad (1)$$

$$q2 = \qquad\qquad\qquad\qquad (2)$$

$$q1^* = q2^* = \qquad\qquad\qquad (3)$$

The equilibrium profits, consumer surplus, and social welfare of the two firms are

$$\pi1* = \pi2* = \text{, } CS* = \text{ and } SW* = .$$

From the analysis of the effects of r on production, profit, consumer surplus, and social welfare, it is shown by equation (3)

In the case of sufficient capacity, the effects of r on the equilibrium results are:

$$= \ < 0, \ = \ < 0, \ < 0, \text{ and } < 0.$$

3.2. Model Specifications

The study uses the model of Jeke and Wanjuu (2019), who studied the economic impact of unemployment and inflation on output growth in South Africa. Therefore, the model for this study is specified as follows:

$$RHCpc = (INF, UNEMP, RWAGR, POP, EXCR, GFCE)$$

The linear form of the panel equation is specified below:

$$RHCpc_{i,t} = \alpha0 + \alpha1 INF_{i,t} + \alpha2 UNEMP_{i,t} + \alpha3 RWAGR_{i,t} + \alpha4 POP_{i,t} + \alpha5 EXCR_{i,t} + \alpha6 GFCE_{i,t} + 5\varepsilon_{i,t}$$

Where:

RHCpc = Real Household Consumption per Capital

INF = Inflation rate

UNEMP = Unemployment rate

RWAGR = Real Wage rate

POP = Population

EXCR = Exchange rate

GFCE = Government Final Consumption Expenditure

3.3. Sources of Data and Method of Data Analysis

The model was estimated using the generalized method of moments (GMM). The GMM can rectify difficulties like endogeneity, heteroscedasticity, and cross-sectional dependence that are frequent in panel data models (Sarafidis, 2008). The study's data came from the World Development Indicators (2020) and World Bank database (2021) for ten sub-Saharan African countries: Kenya, Angola, Burundi, South Africa, Gabon, Nigeria, Cameroon, Tanzania, Sierra Leone, and Ghana. The selection of the countries was rooted in the availability of data. The study covers the period 2001–2020.

4.   Presentation of Results

4.1. Descriptive Statistics

Table 4.1: Descriptive Statistics

	RHCPC	INF	UNEMP	RWAGR	POP	EXCR	GFCE
Mean	1312.194	9.908068	7.936355	29.46615	39053681	899.0512	13.12048
Median	958.5835	6.740937	3.984500	19.12500	25301987	446.0000	12.28598
Maximum	3439.957	152.5610	33.29000	85.87000	2.06E+08	9829.927	31.15769
Minimum	0.000000	-2.814698	1.570000	0.000000	1258008.	0.716305	0.951747
Std. Dev.	958.9170	15.58239	8.121631	24.17471	45243505	1528.286	5.055548
Skewness	0.673625	6.168983	1.583587	1.143797	2.163225	3.273630	0.613123
Kurtosis	2.373721	49.19726	4.127218	3.080459	7.100967	15.68222	3.630091
Jarque-Bera	18.39423	19053.43	94.18011	43.66301	296.1342	1697.545	15.83913
Probability	0.000101	0.000000	0.000000	0.000000	0.000000	0.000000	0.000364
Sum	262438.7	1981.614	1587.271	5893.230	7.81E+09	179810.2	2624.097
Sum Sq. Dev.	1.83E+08	48319.35	13126.22	116298.9	4.07E+17	4.65E+08	5086.155
Observations	200	200	200	200	200	200	200

Source: Author's Computation from E-view 9

Table 4.1 displays the mean, maximum, minimum, and Jargue-Bera (J.B) values for each variable. The information in table 4.1 gives valuable insight into the statistics over time. To begin with, the vast and astronomical disparity between the highest and minimum values in RHCpc, INF, RWAGR, and EXCR indicates that the variables are changing rapidly. This means that the interaction of these factors with the economy has had a significant influence over time. Over time, the variable's mean suggested an extremely high figure. This also suggests that varying average performance is rather significant. The skewness result reveals that all of the variables are positively skewed. The Jargue Bera test, on the other hand, confirmed distributional normality in all the variables. This means that all of the variables are distributed regularly.

4.2. Correlation Matrix

Table 4. 2: Correlation Result

	RHCPC	*INF*	*UNEMP*	*RWAGR*	*POP*	*EXCR*	*GFCE*
RHCPC	1.000000						
INF	-0.112216	1.000000					
UNEMP	0.839743	-0.155697	1.000000				
RWAGR	0.779939	-0.065921	0.828657	1.000000			
POP	0.272537	0.018877	-0.030551	-0.085436	1.000000		
EXCR	-0.366817	-0.075647	-0.238259	-0.369525	-0.262207	1.000000	
GFCE	0.079211	0.136435	0.234757	0.338390	-0.430813	-0.117636	1.000000

Sourced: Author's Computation from E-view 9

The correlation was utilized to figure out how much multicollinearity there existed. The result showed the absence of multicollinearity between variables given their correlation coefficients which are less than 0.85. Given the low coefficients, the result indicates that there is no concern for multicollinearity among the independent variables. The results also suggest that RHPC and UNEMP, RWAGR, POP, and GFCE have positive relationships, but INF and EXCR have negative relationships with RHPC.

4.3. Panel Data Estimation, Generalized Method of Moments

Table 4.3: GMM Estimation (*2SLS instrument weighting matrix*)

Variable	*Coefficient*	*t-Statistic*	*Prob.*
INF	-9.204117	-7.071812	0.0000
UNEMP	-33.51064	-2.858377	0.0047
RWAGR	5.975642	3.241865	0.0014
POP	8.36E-06	4.266863	0.0000
EXCR	0.058093	2.622123	0.0095
GFCE	-14.69192	-2.167293	0.0315
C	1307.436	8.220761	0.0000
R-squared	0.947652		
Adjusted R-squared	0.943385		
J-statistic	165.2753		
Prob(J-statistic)	0.077491		
Durbin-Watson stat	1.642972		
Instrument rank	117		

Source: E-view Results

The validity of the result was first determined. From the J-statistics, the diagnostic test statistic, is not zero, indicating that the model is well-fit. The R^2 of 0.847652 showed that about 85% of the total variation of the dependent variable was explained by the independent variables. The result was found to be free from the problem of autocorrelation, given a DW statistics of 1.642972, which is close to 2. On the interaction of the independent variables with the dependent variable, the result showed a positive and significant relationship between welfare (RHCPC) and real wage (RWAG), population (POP), and exchange rate (EXCR). On the other hand, inflation (INF), government final consumption expenditure (GFCE) and unemployment were found to have a negative and significant impact on RHCPC. The outcomes of inflation and unemployment are in line with expectations. Inflationary pressures from shocks to supply and price increases may prompt disinflationary actions, with concomitant lower production consequences. This discovery is in direct opposition to Blanchard's observations (2016) but is consistent with Frimpong and Oteng-Abayie (2010) observations in Ghana, which indicated that inflation significantly harms economic growth in Ghana. The estimates revealed that unemployment has a major negative impact on household consumption and welfare, with unemployment having the greatest magnitude. This is on par with Maringe and Khobai (2018), who used the ARDL regression model to show that unemployment has harmed South Africa's economic performance. It is, however, inconsistent with the studies of Tenzin (2019) in Bhutan and Gachoki (2021) in Kenya, who found that unemployment has no impact on economic growth, while the studies by Banda (2016) found that unemployment boosts economic growth in South Africa, and Saidu and Muhammad (2018) found that unemployment boosts economic performance in Nigeria.

The real wage rate was revealed to have a positive and substantial impact on real household consumption per capita. This is in line with economic expectations, but contradicts the conclusions of Babalola, (2019). However, this is consistent with the studies done by Khan and Morrissey (2020), who investigated the effects of income diversification and household welfare in Tanzania.

The exchange rate and population were found to have a positive and substantial impact on real household consumption per capita. The outcome of the relationship between the population and welfare is contrary to our expectations. An increase in household size and population is expected to reduce welfare as it reduces consumption per capita, increases dependency rates and hence lowers welfare. Population growth,

on the other hand, has been argued to increase labor supply and productivity, all else being equal. Economists have noted that depending on the rate of rise (little or huge) and whether it is above or below the competitive equilibrium pay, the effect might be considerable or minor. In several Sub-Saharan African nations, such as Nigeria, the rate of pay rate increases has been fairly substantial, despite the fact that it has not been consistent and frequent. The most recent rise in 2019 was over 67%. As a result, in economies like Nigeria, the impact is expected to be favorable and large.

5.   Policy Implication and Conclusion

This study examines the implications of real wages, inflation, and unemployment on welfare in sub-Saharan Africa. The GMM method of estimation was employed for the period 2001 to 2020.

The following are the policy implications and recommendations of the result.

1.   The results show that the real wage rate has a positive and substantial impact on welfare. The finding of the positive effect of wage rate on household welfare disagrees with the finding of Babalola (2019), who established that an increase in wage rate can cause a high rate of unemployment that may result in low welfare. Hence, an increase in real wages is recommended. However, it is also recommended that the increase in real wages be matched with productivity so that there will be enough aggregate supply to match the aggregate demand from the increase in real wages, thereby checking inflation. Finally, in order to increase employment, a deliberate effort should be made to promote labour-intensive production processes, , notably in the real sector.

2.   The result also revealed that inflation rates in Sub-Saharan Africa have a lower significant impact on household consumption expenditure. This conclusion might be explained by the fact that inflation increases uncertainty, which slows economic development. Reduced inflation in Sub-Saharan Africa can assist or spur economic growth and reduce unemployment, thereby increasing welfare. As a result, monetary policies that lower inflation are more likely to impact on real wages and, as a result, lower unemployment rates and boost RHCpc.

3.   Unemployment, according to the outcome, was also found to have a negative impact on welfare. Hence, the study recommends a reduction in the

unemployment rate. However, in the creation of employment, it is recommended that labour productivity be enhanced, particularly by efficient human capital development.

4. Government final consumption expenditure was found to have a negative, substantial impact on welfare. This can be attributed to the fact that government expenditures in SSA are not prioritized towards human capital development, which will promote productivity, growth, and an increase in welfare. Hence, this study advocates an increase in productive government expenditure, particularly in the educational and health sectors.

5.2. Conclusion

In Sub-Saharan Africa, the unemployment problem has been a major issue of concern. The outcome of this study revealed that unemployment has a strong and negative impact on real household consumption per capita (RHCpc), which was the proxy for welfare. Controlling variables that have a direct influence on job creation and real GDP is required to address the problem of unemployment in Sub-Saharan Africa. Three variables have been found to have a positive relationship with RHCpc: real wage rate, population, and exchange rate. Population can help Sub-Saharan Africa solve the problem of a critical skills deficit, which was mentioned in the literature assessment as a key cause of unemployment in the region and reducing wellbeing. As expected, inflation rates in Sub-Saharan Africa have a lowering effect on RHCpc.

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