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Women's Labour Force Participation: Economic Growth Nexus in Sub-Saharan African Countries

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Abstract

Women's labour force participation is an aspect of empowerment and a leeway to achieving the SDGs due to the contribution of women's labour to economic growth. This study investigated the impact of women labour force participation on economic growth in sub-Saharan African (SSA) countries. Important lessons were drawn from Israel as to how Israel has been empowering and currently improving women's labour force participation and economic growth in general. The study employed a two-step system Generalised Method of Moments (GMM) with panel data from 35 selected SSA countries. The findings showed a positive relationship between gross fixed capital formation, female labour force participation rate, economic growth in SSA countries, and a negative relationship between growth in the region and fertility rate. The study therefore recommended that governments should provide a policy framework to favour and encourage more women's participation in the SSA region.

Keywords: Gender, Empowerment, Poverty, Labour force, Gender discrimination, Arellano-Bond

Introduction

The number of women participating in the labour force has witnessed a remarkable surge globally in recent times. This may be as a result of a greater population of women obtaining more training through education (Backhaus and Loichinger, 2021) that resulted in more women's participation in the labour force, thus buttressing the importance of women in the quest for economic growth. Part of 2030 UN Agenda for Sustainable Development is "to achieve gender equality and empower all women and girls". The United Nations (2018) observed that to achieve this agenda, closing the gap between men's and women's participation in the labour force would be one direct way. Even though statistics show that progress has been made, the gap between men's and women's participation in the labour market in sub-Saharan Africa is still wide (ILO 2021).

Globally, the participation rate of women and men aged 15 and above in the labour force was 61.8 percent in 2018 as against 63.2 percent in the past decade. Among women who indicate interest in labour force participation, there is every tendency that the preference will be more for men than for women (ILO, 2017a). In 2018, the global unemployment rate was 5.2 percent for men and 6 percent for women and in SSA, it stood at 6.4 percent for men and 8.2 percent for women. ILO (2017a) reported that socio-economic factors and prevailing social norms influence participation of women in paid labour, especially for women in less developed countries because of household tasks and farm responsibilities facing them.

Verick (2014) is of the opinion that the involvement of women in the labour force is both a consequence and an indispensable driver of economic growth and development. According to him, an economy grows faster with more women being involved in the labour force, thus boosting labour supply. More so, as economies grow, the potential of women also grows and the restrictions facing women working outside their households reduce, thereby making them more relevant in the labour force. It has also been found that women receive less pay and are usually employed in less-productive jobs.

Several studies, including H'madoun, (2010) and Duflo (2012), have found that some non-economic factors like religion, values and beliefs and ethnicity play a great role in discouraging the participation of women in the labour force in many countries, including SSA countries. The gendered burden of household chores can limit the participation of women in the labour force (Cho

et al, 2015; Berniell and Sánchez-Páramo, 2011). A study by Iweagu, Yuni, Nwokolo, and Bulus (2015) found religion to have significant impact in labour force participation of women in rural Nigeria, though highly educated women among them have interest and a greater chance of joining the labour force (Olowa and Adeoti 2014). Fundamentalist women number less in labour force than other religions because their custom demands having many births and demands that women should cater for the children at home (Guiso et al., 2003; Hannah et al., 2014), thus, making countries that have strong ties to that religion have very low rate of participation in labour force (Hamadoun, 2010; Berniell and Sánchez-Páramo, 2011). Also, a study by Hannah, Ayodo, Tikoko, & Enose, (2014) in Uganda opined that elite woman who occupy leadership positions have motivated other educated and younger girls who are held by religious and cultural values to embrace opportunities found in the labour force to assist their poor households. Generally, over time, there is a positive relationship between women's labour force participation and economic growth across multiple countries (Duflo, 2012; Doepke, Tertilt & Voena, 2012).

The extent to which women are involved in the activities of the labour force has varied across countries in the last few years. For instance, in 1992, the total women working-age population (15+) was 52.2 percent but declined to 51.4 percent in 2012 (ILO, 2012) and further to 48.5 in 2018 (ILO, 2017). Statistics show that an increased number of women have joined the labour force in the past 25-years, but women only represent about 39.8 percent of participation of the labour force globally.

The relationship between women's involvement in the labour force and economic growth and development has been found to be U-shaped in nature. According to Goldin (1995), because working conditions of women have changed and subsequent improvement in the education of women as compared to men, participation of women seems to have improved. Economic growth of nations also entails the movement away from agriculture to industry.

Usually in traditional settings, women participate actively in household farms and sometimes own their own production outfits. But with economic development comes improvement in education of women thereby leading to formal employment of women, a rise in income levels and hence a total shift of women from home production to formal employment in factories. This causes increased productivity of women outside the household. The rise in the U-shaped is experienced at an advanced stage of economic growth and development when women's education has gone beyond the fundamentals, and they can obtain reasonable positions in formal employment; this will significantly increase their rate of participation in the labour force.

The U-shaped function which explains labour force participation of women, according to Dao (2014), implies that most developing countries are characterised by households that are highly involved in agricultural production with labour intensive production processes supplied by poor household members. Persistence of poverty in such households drives women into the labour force irrespective of how low the wage may be. But with development in such countries, income of their male counterparts increases which indirectly increases the unearned income of women thereby lowering their yearning to further participate in the labour force. Nevertheless, further growth and economic development create opportunities for education of women which opens better employment opportunities that attract higher pay for them. At this point, women labour force participation rises again. Also, movement of women to urban areas opens more opportunities and societal standards against women so that participation in the labour force is increased (Goldin, 1995).

According to the AfDB (2015), the African continent records the greatest participation of women in economic activities globally. They are very active in agricultural production, own up to 30% of agricultural firms and make up about 70% of employees. Verick, (2014) found that an increasing number of women are engaged in paid employment, but a large gap still exists between men and women and this results from several factors, including economic growth, level of education and other societal norms, which define the relationship between them (Verick, 2014).

Several studies have analysed the relationship between level of education and labour force participation of women, offering varying views. Jaumotte (2003) opine that woman would prefer paid employment if the opportunity costs were higher than household production. Some country specific studies (Gunatilaka, 2013; Rahman and Islam, 2013) and group of country studies (Dao, 2014; Christiansen et. al., 2016a & 2016b) have been done on this issue but few have dwelt specifically on African countries. Some studies in Africa (Casale, 2004, Sackey, 2005; Yakubu, 2010) studied the effect of education on women labour force participation in different countries while (Gronzales *et al.*, 2015) combined SSA countries with OECD countries.

This study sought to establish the relationship between women's labour force participation and economic growth of sub-Saharan African countries and offered ideas on how to improve female labour force participation and increase contributions to growth within the sub-Saharan African region.

Select Literature Review

There are two major theoretical approaches explaining the economic growth-women's labour force participation nexus. The approaches are: 1) the 'Modernization Neoclassical' approach and 2) the 'Feminisation U' hypothesis.

The Neoclassical Approach

This approach, according to Becker (1957) in Luci (2009), suggested a definite rise in women's participation in all phases of the economic progress. He said that discrimination should be momentary, since discrimination is not in line with individual's optimal behaviour which leads to utility and income maximization, hence inequity in the market for labour is not possible in an economy that is competitive. For companies or owners of fixed assets who prefer gain to unfairness, every employee is absorbed and receives the same salaries given (Luci, 2009). This approach maintained that continuous discrimination in the employment of men and women is the result of the level of education and job experience, or as a result of the differences in the preferences of the companies or owners of fixed assets. Hence, to increase the competitiveness of economies or sectors, gender inequality in employment decreases with increase in growth, which implies that women's participation in the labour force rises with increase in economic growth.

The 'Feminisation U' Hypothesis

This approach which dates back to the 1960s (Sinha (1967) in Klasen, (2017)), suggested that as an economy moves from agricultural economy associated with significant relationship between the domestic and economic activities to an industrialised economy and strict service-supported society, the rate of women's participation in labour force declines, but driven by technological progress coupled with improvement in the level of education and decline in fertility rate, women labour force participation rate rises again later in the development process (Klasen, 2017). Boserup (1970) in Luci (2009) illustrated this relationship in three stages of growth. Stage

one is characterised by poor standard of living, mostly agrarian with increase in women labour force participation. There is still a high fertility rate; nevertheless, the majority of women engage in farming or in local production, hence they can engage in both production activities and child-upbringing. A typical example is the rise in sub-Saharan Africa's women labour market participation rate (Klasen, 2017; Goldin, 1995).

At stage two, economies undergo an initial process of growth. Here men and women's participation in the workforce are polarised by industrialization and urbanisation, hence increasing gender inequality in employment. These processes lead to rural-urban migration and increased mobility of labour, making it hard for women to merge work with household responsibilities (Idowu and Owoeye, 2019; Jayachandran, 2020). The process of technological progress and industrialization increase the demand for high and technically skilled workers that can operate machines relative to low-skilled workers. Men have an edge over women in terms of finding work in the industrialised sector because men can easily access opportunities for training and consequently easily get used to the latest production equipment (Hanushek et al. 2015). This attracts more income to them. Hence, industrialization does not seem to encourage women labour force participation, owing mostly to income effects and technological progress (Gaddis and Klasen, 2014).

In addition, as child-upbringing places labour restrictions on women, their labour costs rise, leading to preference for male employees by companies or employers (Jayachandran, 2020; Kruse et al. (2021). This could worsen due to cultural values and norms, coupled with an official ceiling against women industrial employees, (Goldin 1995, in Klasen (2017).

The third stage is characterised by advanced economic development, with a rise in women's labour force participation. Discrimination against women in the labour market results in the reduction in the size of the labour force and increasing demand for women employees. This arises because women acquire more skills and expertise (through education), leading to increased opportunities for women rather than household work, also causing a decline in fertility rate. This leads to substitution effect associated with women's wages and domination of income effect; hence women's labour market participation is positively linked with income (Psacharopoulos and Tzannatos 1989) in Klasen (2017). A typical example is the rising Latin American women's labour market participation rate.

Drawing from the above, Cavalcanti and Tavares (2011) and Yeboah and Jayne (2018) added that women's labour market participation rises as countries move from agrarian economies to industrialised economies. It is of utmost importance to recognize that social background, religious norms and cultural values also influence women's labour market participation (Korotayev, Issaev and Shishkina, 2015; Njang Che and Sundjo, 2018). This hypothesis, therefore, emphasises the susceptibility of women labour to the path of economic progress (Cuberes & Teignier, 2016). Hence, the relationship between the participation of women in the labour force and the economic growth nexus could be a bidirectional one, due to the fact that economic growth can lead to rise in women's participation in the labour market (Duflo, 2012), and vice versa.

An Overview of the rate of Women's Participation in Labour Force in Sub-Saharan African (SSA)

Sub-Saharan African countries share similar social and economic factors that influence gender disparity across countries, and this makes it possible to recommend general policy options to increase women labour market participation. Employment is predominantly in the agricultural

sector, with full participation of women, leading to increased rate of participation (Klasen, 2017). Hence, as societies remain dominantly agrarian, research revealed that the participation of women in the labour market remains high, as in the case of many developing economies (Appiah, 2018). Women labour force participation in the developing economies majorly, Latin American Countries (LAC), SSA and the Middle East have been on the increase since the 1970s (World Bank, 2017). In addition, women labour force participation rates in the agricultural sector in Sub-Saharan Africa (SSA); especially in Sahel countries and parts of West Africa varies significantly; women labour rates are lower when compared elsewhere. When, in the 2000s, some countries witnessed economic progress, coupled with the increase in cash transfer programmes, more women entered into the labour force. However, the trend continued to be positive (Gasparini and Machionni, 2017).

The restriction on women's participation in economic activities was removed in most sub-Saharan African countries following the Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW) in 1995, but there are still countries in SSA like Lesotho, Ghana, Botswana where customary law still restricts the full implementation of the constitutional declaration against gender discrimination, leading to considerable gender gap which remained unchanged over the past decade.

World Development Indicators (WDI) (2016) said that the women labour force participation rate has remained significantly higher in SSA from 63% in 2010 to 64% in 2014 when compared with other regions. There exists a wide gap between the women and men labour market participation within the sub-Saharan region between 1990 and 2014, with men participation significantly higher than women's participation. Although men's labour force participation has declined from 80% in 1990 to 76% in 2014, it was still significantly 10% higher than women labour force participation by 2014.

Empirical Issues

There is a plethora of studies on the impact of female labour participation on economic growth globally. The scale, methodology and analytical results of these studies vary. We therefore review these studies and incorporate useful additional knowledge in this area. Appiah (2018) examined the impact of female participation in the labour force and economic growth in SSA countries as compared with other developing countries. The study applied the neoclassical growth model and the 'System' GMM on data for 139 countries collected from the World Development Indicators (WDI) between 1975 and 2015. The study found that the rate of participation of women was very high in the 1970s when most nations were agrarian and concluded that the participation of women in the labour force impacts positively on the growth of the economy of developing countries, especially in SSA countries. But Çağatay and Özler (1995) and Gaddis and Klasen (2014) observed a decrease in the participation of women as economies grew from agrarian to industrial. Yeboah and Jayne (2018) in another study in SSA observed that younger adults abandon agriculture to join the labour force once their education is completed.

Analysing female labour force participation (FLFP) is very essential to assist in understanding the inequality arising from gender and the rights of women. Some studies have shown that African women are very talented and resourceful and can form useful agents that can impel the growth of the African nation as a whole. Creating opportunities for women to engage in economic activities away from home helps to increase the level of production as well as increase the income level of women (IMF, 2018). For instance, in a country like Sweden, it was found that

increasing women participation in the labour force increased the OECD GDP by \$6 trillion, while bridging the gap in employment raised the GDP by \$2 trillion (PwC, 2019). Therefore, gap in labour force participation can have a negative effect on the economy (Cuberes & Teignier, 2016).

Studies have shown that the rate at which women give birth, their level of education, ability to access childcare services, religious values and beliefs affect the level of productivity and can be said to contribute immensely to gaps found in labour force participation between men and women (Jayachandran, 2020; Idowu and Owoeye, 2019). Klasen (2019) found a weak relationship between women participation in the labour force and their education and fertility rates but also observed a positive relationship between women's labour force participation and educational level in a study of developed and emerging economies. Another study in the Middle East by Mirzaie (2015) discovered that an increase in the rate of growth of GDP led to a decrease in women's labour force participation in Iran and Turkey while it encouraged more participation of women in Egypt. Das, Jain-Chandra, Kochhar, and Kumar (2015) observed that increase in fertility rate has an inverse relationship with women's labour force participation while the level of education has a direct relationship in India and South Africa (Yakubu (2010) but was found to be negative in Morocco (Morikawa (2015). Forgha and Mbella (2016) studied the determinants of women's labour force participation in Cameroon for a period of 37 years by applying GMM method and found that level of participation of men in labour force, level of dependency, per capita income and fertility rate were the major factors that determined labour force participation in Cameroon.

Luci (2009) investigated how economic growth impacts on gender inequality dynamics in the labour market in 171 countries, mostly sub-Saharan African countries from 1960-2005, testing the hypothesis of the 'feminization U' using a panel data set which comprises time series and cross-country data to take care of the endogeneity problems. The analysis in this work established the hypothesis of the 'feminization U', which indicated that the short run is not sufficient to rely on the equalising effects of economic growth to induce more entrance of women into the labour market. Many other studies have been carried out to verify the authenticity of the U-shaped feminisation hypothesis. Some of these studies found no direct relationship between FLFP and economic growth (Verme, 2015; Lahoti and Swaminathan, 2013), while other studies established a direct connection (Olivetti 2013). Chapman (2015) established a U-shaped connection between education and women fertility rate and FLFP. The study found that the level of education of women and fertility had a negative influence on participation of women in the labour force in the MENA region.

Klasen (2017) carried out a study using a survey that dwelt on women participation in the labour force in developing countries including SSA countries. The study found that the movement of women in and out of labour force is influenced by family setting, economically and whether such employment is socially considered befitting for women, as well as the rising available vacancy for educated women, considering the number of educated women that are able to overcome employment bottlenecks in the areas that predominantly employ women.

A study by UNDP in 2018 found SSA to have the highest gender inequality index (GII) of 0.569 as against 0.441 globally. This region still lags behind in its opportunity for full growth because the skills and abilities of women are very low, and a good percentage of the women population lie idle. Women were found to experience underemployment as about 40 – 50% of total employment are more fully engaged in unpaid household work sparing few hours for paid employment (ILO, 2012 & 2016). Bandara (2015) estimated US\$255 billion to be annual loss as a result of the gender gap in the labour force for the African region alone.

A study by Efobi, Tanankem and Asongu (2016) examined the impact of technological advancement and the evolving gender identities with particular focus on the level of female involvement in economic activities in sub-Saharan Africa. The study employed Ordinary Least Squares, fixed effects and system Generalised Method of Moments regressions on a panel of 48 African countries for the period 1990-2014. The findings show that technological improvement has a significant impact on women's economic participation. The findings further show variations in impacts as it cuts across various measures of technological advancements in selected African countries. That is, the pecking order distribution of impact is higher for fixed cable modem users like broadband, accompanied by Wi-Fi users and finally by mobile phone usage.

Novignon, Nonvignon and Arthur (2015) investigated the relationship between population health status and labour force participation in sub-Saharan Africa. The study employed a dynamic panel data analysis on 46 African countries for the period 1990-2011. The findings show that the health conditions of the general inhabitants (proxied by life expectancy at birth) strongly determine the extent of participation of females in the labour force in some of the chosen African countries studied. This means that, all things being equal, the healthier the population, the more females will participate in the labour market (Medhin and Erulkar, 2017), while the participation of males in the labour force shows positive but insignificant impacts. Blackden, Canagarajah, Klasen and Lawson (2007) in another study investigated "the impact of gender and growth in Sub-Saharan Africa". The study employed theoretical and statistical tools and found a huge gender disparity in sectors such as education, formal sector employment, and tolerable gender gaps in informal and agricultural sectors, most especially in areas of land ownership, access to credits, agricultural inputs, and other productive assets and resources. This explains why men are in the formal sector more than women, and in the informal and agricultural sectors where cultural and patriarchal factors inhibit women's participation.

Bicerly & Gundogan (2009) in their study on female labour force participation in urbanisation process found that the movement of women from rural to urban areas could lead to an imbalance between the available skills and the required or needed skills which may lead to some people's inability to participate in the labour force. Dao (2014) in his study found that the rate of women participation in the labour force depends on several norms as defined by the society, for instance, single parenthood, the role of the housewife, political leaders, nature of the working hours, among others.

Women's labour force participation rate has been found to be lower than that of men in most countries. This might be attributed to women's access to education which is also lower than that of men in low-income countries, and this may have adverse effects on women productivity and income inequality in those nations. Becker (1965) used a time allocation model to study female labour force participation rate. The model opines that women consider household responsibilities as much as labour and leisure time while taking decisions on supplying their labour outside their home. The final decision depends on the prevailing wage rate, that is, if it can offset the cost of their absence. Eckstein and Lifshitz (2011) carried out a study on female labour supply estimated a dynamic stochastic women labour supply model with discrete choice and found that education explained over 30% increase in the female participation rate while the wage rate explained about 20%. Fernandez and Wong (2014) applying a dynamic life-cycle model found that divorce risk in addition to other factors affect female labour force participation rate.

In a panel of 97 countries, Bloom et al (2009) found that fertility rate has a significant negative relationship with the female labour supply, as supported by Mishra and Smyth (2010)

who found that a percentage increase in fertility rate decreases female labour force participation rate by 0.4%. But in a cross-country analysis, De Laat and Sevilla-Sanz (2011) found that fertility and female labour force participation are positively related when the participation of men in household responsibility/production is high.

Data and Methodology

This paper investigates the relationship between women's labour force participation and economic growth in sub-Saharan African countries. For this purpose, the study adopted the system Generalised Method of Moments (GMM) using 35 countries which were selected from the sub-Saharan African countries for the period 1990 to 2017 due to data availability: the number of countries (N = 35) and the time period (T = 27) years were used for the analysis. All data were sourced from the World Development indicator (WDI) of 2018.

The reason for adopting the system GMM lies in the flexibility of this model to handle small sample data and its usefulness of handling endogeneity problems that could be common with the variables used in this analysis. The study followed closely the work of Blundell and Bond (1998) and thus the system GMM can be specified as follows:

$$\ln Y_{it} = \phi \ln Y_{it} + \partial Z'_{it} + \beta X'_{it} + \delta_i + \varepsilon_{it} \dots \dots \dots 1$$

where Z represents the control variables, X represents the explanatory variables, and ln Y is the logarithm of the dependent variable. In order to achieve a robust estimation, the study introduced gross domestic product (GDP) per capita to capture the effect on economic growth. Other explanatory variables include: fertility rate, women labour force participation rate and Gross fixed capital formation.

Empirical Findings and Discussion

The result in Table 1 shows a two-step system GMM with various outputs for every variable employed in the model.

Table 1: Dynamic Panel-data Estimation for Two-step GMM (Dep.Var: Lnrgdppc)

Variable	Coefficient	t-value	p-value
L.lnrgdppc	0.994552	198.84	0.000***
Fertility	-0.0207067	-3.29	0.001***
FLFP	0.0006457	2.48	0.013***
LnGCF	0.0006457	2.04	0.041**
Constant	0.0729372	0.67	0.67
Arellano-Bond Test for AR(1) in first differences		-2.65	0.008
Arellano-Bond Test for AR(2) in first differences		-1.36	0.174
Sargan test of overid. Restrictions chi2(2)		Chi2(2)= 0.411	1.78
Hansen test of exogeneity of instrument subsets		Chi2(1)= 0.362	0.83

Standard errors in parentheses *** p<0.01, ** p<0.05, * p<0.1 SGMM2 denotes Two-Step GMM. Also, regressions treat lnrgdppc as endogenous and follow Roodman (2009) to collapse the instrument matrix with lag (2)

Source: Authors' Computation from STATA 15

As shown in Table 1, the study adopted two-step GMM diagnostic tests to validate the correctness of the results and all tests carried out which include the Hansen (1982) J-test and the Sargan (1958) test. The Hansen test was used to test the validity of the instruments employed in the model, while the Sargan test was employed to test for overidentifying restrictions. From the table, the p-value (0.174) of the AR (2) shows that there is no second order serial correlation in the model. The reason is that the p-value of 0.174 is greater than the default value at 5%. Hence, we fail to reject the null hypothesis of no second order serial correlation in the model. Also, the value of the Hansen test statistic shows that the instruments adopted in the model are valid instruments based on the p-value of 83%.

The results also revealed that, all things being equal, a percentage change in fertility rate is associated with a 2.07% decrease in economic growth in the short run at 1% significance level. Therefore, fertility rate and economic growth exhibit a negative relationship. This therefore means that when the fertility rate within the region increases by one percent, it will lead to a decrease in economic growth by 2.07% at 1% significance level. This result is in line with the findings of Bloom et al, (2009), Mishra and Smyth (2010) and Das, Jain-Chandra, Kochhar, and Kumar (2015) who also found a negative relationship between fertility rate and economic growth in their studies.

Also, from the result in Table 1, a percentage increase in women's labour participation is associated with a 0.065% increase in economic growth in the short run at 1% significance level, hence, women labour force participation and economic growth exhibit an elastic relationship. This further means that when female labour force participation increases by a percentage, it will lead to

an increase in economic growth by 0.065 percent. This result is in line with economic theory as it shows a positive and significant relationship between women labour force participation and economic growth, thus, confirms the expectation that increases in female participation should lead to increases in economic growth. This further means that the more participation from the female active population, the more they contribute to growth in the region, which is corroborated by the finding of the work of Appiah (2018), who also found a positive relationship between women labour force and economic growth within the SSA region. It is worthy of note that the underlying assumptions of the GMM model were all met from the result of the Hansen and Sargan test conducted in this study. This implication is that the results obtained from the model are very reliable.

The result further shows that one percentage change in gross fixed capital formation is associated with a 5.3678 percent increase in economic growth at the 5 percent significance level, showing that gross fixed capital formation (proxy for investment) and economic growth exhibit a positive relationship. This therefore means that when gross fixed capital formation within the region increases by a percentage, it will lead to an increase in economic growth by 5.3678 percent at the 5 percent significance level.

Lastly, the result shows that one lag period of real gross domestic product per capita is significant at 1 percent significance level, with an increase in real growth by 99.4552 percent and this means that one period lag increases in economic growth will lead to further increase in economic growth within the region by about 99.45percent.

Policy Recommendations

This paper investigated women's labour force participation rate and economic growth nexus in 35 selected Sub-Saharan Africa countries. The goal of the study was to ascertain the relationship between women's labour force participation rate and economic growth in the region. In order to achieve this, the system GMM was adopted to investigate the objective of the paper using panel data from 1990 to 2017 for selected countries in the region. This study therefore recommends that government should provide supportive environments for women to develop themselves through education and training and good healthcare facilities for the society. This will create a level playing field for women to be equipped with skills for supplying their labour services for productive activities.

Since women's participation in the labour market spurs economic growth, governments in the region should provide incentives for women by designing policies for them, such as credit facilities with some caveats of low interest rates. This will boost opportunities for women to become more productive than ever and increase growth in economies of SSA countries.

Governments in SSA could also set up new acts and laws that moderate and modify customs and traditions which are anti-women's labour participation in productive activities. This could change the ways the society views women and can be strengthened by providing low interest loan schemes to women who are willing to become entrepreneurs, freeing them from any financial pressure/constraints. This would bring more women into the labour market, thus increasing economic growth in the region.

Conclusion

The results from this study which applied the system GMM to achieve the objective of the paper using a panel data from 1990 to 2017 for 35 selected countries in the region show that women labour force participation rate has a positive relationship with economic growth within the region. This means that the contributions of women participating in the labour force to economic growth in the region is quite impressive and significant and does impact positively to growth in the region. This further implies that a lot must be done to encourage more women's participation in the productive sectors of the economies of the region, so as to register more positive growth. In conclusion, while these results are interesting, it is important to note that they represent women's labour force participation and economic growth nexus within Sub-Saharan Africa and its influence on economic growth within the region.

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