Does Empowering Women and Achieving Gender Equality Contribute to Nation's Output? Evidence from Sub-Saharan Africa

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ABSTRACT

The relationship between women empowerment and economic growth has been a popular debate among development economists. One of the popular arguments is that women contribute more to the development of a nation where there is provision for adequate opportunities for them to develop their potentials. The aim of the study is to investigate the relationship between the dimensions of women empowerment (social, economic and political) and economic well-being in some selected 24 countries in Sub-Saharan Africa (SSA) for 2001-2015 period. The empowerment variables employed are female labour force participation (economic), secondary school enrollment of females and maternal mortality rate (social), proportion of seats held by women in the national parliament (political) and gross domestic product per capita (economic wellbeing). Results from our analysis shows that the relationship between social empowerment and economic well-being is positive while economic empowerment and economic well-being is negative. Further investigation by sub-regions of SSA reveals that there exist differences by sub-regions as there is mixed results with differences in signs. However, investigation of the relationship with the use of interaction variables between each of the social empowerment variables and economic empowerment variable reveals that labour force participation of educated female and adequate health care resources accessible by women participating in the labour force both have positive relationship with economic well-being of SSA countries. The relationship between female health, representation of women in parliament and economic well-being show positive and statistical significance. Our findings imply that in as much as it is important to provide females with adequate and equal access to education and health care resources, it is also important to provide females with equal access to productive

resources, formal employments and decision making mechanisms. This is a call to policy makers and administrators to take pragmatic steps to mitigate against all forms of gender-based discrimination; remove barriers that prevents female from showcasing their potentials; empower women socially, economically and politically simultaneously. Policy makers should take note of the differences among and within countries and sub-regions in sub-Saharan Africa in the planning process. Government should also amend the constitutions to capture the needs of women.

Keywords: Women empowerment, Economic well-being, Economic development, Labor force participation, Sub-Saharan Africa, GMM

ÖΖ

Kadınların güçlenmesi ve ekonomik büyüme arasındaki ilişki, kalkınma ekonomistleri arasında popüler bir tartışma olmuştur. Popüler argümanlardan biri, kadınların, potansiyellerini geliştirmeleri için yeterli fırsatların sağlandığı bir ulusun gelişimine daha fazla katkıda bulunduklarıdır. Bu calısmanın kadınların amacı, güclendirilmesinin boyutları arasındaki iliskiyi arastırmaktır (sosyal, ekonomik ve politik) ve ekonomik refah Sahra Altı Afrika'da seçilen 24 ülkede 2001-2015 dönemi için. Kullanılan güçlendirme değişkenleri kadın işgücüne katılım (ekonomik), kadınlarda ortaokul kaydı ve maternal mortalite oranı (sosyal), kadınların ulusal parlamentoda düzenledikleri koltukların oranı (siyasi) ve kişi başına gayri safi yurtiçi hasıla (ekonomik refah). Analiz sonuçlarımız sosyal güçlenme ile ekonomik refah arasındaki ilişkinin pozitif olduğunu göstermektedir ekonomik güçlendirme ve ekonomik refah olumsuz. Sahra Altı Afrika'nın alt bölgeleri tarafından yapılan daha ayrıntılı araştırmalar, işaretlerdeki farklılıklarla karışık sonuçların olduğu alt bölgelere göre farklılıklar olduğunu ortaya koyuyor. Ancak, sosyal değişkenlerden biri arasındaki etkileşim değişkeninin kullanımı ile ilişkinin araştırılması ekonomik güçlendirme değişkenleri, eğitimli kadınların işgüçüne katılımının Sahraaltı Afrika ülkelerinin ekonomik refahı ile pozitif bir ilişki içinde olduğunu ortaya koymaktadır. Kadın sağlığı ile kadınların parlamentodaki temsilleri ve ekonomik refah arasındaki ilişki olumlu ve istatistiksel olarak önemlidir. Bulgularımız kadınlara eğitim ve sağlık hizmetlerine yeterli ve eşit erişimin sağlanmasının önemli olduğunu göstermektedir, kadınlara üretken kaynaklara, resmi işlere ve karar alma mekanizmalarına eşit erişimin sağlanması da önemlidir. Bu politika yapıcılar ve yöneticiler için bir çağrı her türlü cinsiyete dayalı ayrımcılığa karşı hafifletmek için pratik adımlar atmak; kadınların

v

potansiyellerini sergilemelerini önleyen engelleri kaldırmak; kadınları sosyal, ekonomik ve politik olarak aynı anda yetkilendirmek. Politika yapıcılar, planlama sürecinde Sahra altı Afrika'daki ülkeler ve alt bölgeler arasındaki ve içindeki farklılıkları dikkate almalıdırlar. Hükümet, kadınların ihtiyaçlarını yakalamak için anayasaları da değiştirmeli.

Anahtar Kelimeler: kadınların güçlendirilmesi, ekonomik refah, ekonomik gelişme, işgücüne katılım, Sahra-altı Afrika, GMM

To My Family

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Chapter 1

INTRODUCTION

The purpose of this study is to investigate the impact of the fifth of the United Nations (UN) Sustainable Development Goals (SDGs) which is 'to achieve gender equality and empower all women and girls' in Sub-Saharan Africa. To do so, the study considers the representation of females across various dimensions of development and empirically tests the relationship between the representation of women and the economic well-being of the region.

1.1 Background to the study

The issue of women empowerment and gender equality is high on the agenda across the world, particularly in international organizations and among feminists. It is a well-known fact that gender inequality is wide-spread in all cultures, although not as rampant in the developed countries as it is in the developing countries (Ahmed *et al.*, 2001). Women empowerment and economic development are closely knitted. In one direction, human-centered development alone can play a major role in driving down inequality between men and women; in the other direction, empowering women may benefit economic development because it brings about changes in decision making (Duflo, 2012; Dilli *et al.*, 2019). In Nigeria, one of the most popular African countries, where there is an alarming population of over 199 million, women make up close to half of the estimated population, based on the latest population census in the country (CIA, 2019).

Girls growing into adulthood have ambition that over time usually seem unachievable because of the circumstances around them. The expectations of many females are thwarted and cut short due to reasons such as lack of access to quality healthcare, education and their desired jobs. Some women do not enjoy the freedom and opportunities to make important life choices that affect themselves and their households. In some countries, many husbands deny their wives the rights to make a living. Such is the case in some parts of Sub-Saharan Africa. For instance, in Nigeria, a West African country, men and women are not given the same social, economic and legal rights (Ijaiya, 2000; Abara, 2012). Osemeobo (2004) and Oyerinde (2008) point out that women in Nigeria are faced with unfavorable situations such as the denial of long-term land tenure systems, with women in possession of lesser ranges of productive and agricultural assets. O'Sullivan (2014) reports similar findings in Ethiopia, an East African country.

Generally, in Africa, gender inequality and discrimination are very much visible. Many women are unjustifiably marginalized and are subject to neglect and frustration. This can be linked to low literacy level among women and greater expectations placed on sons than on daughters in the past (Raley *et al.*, 2006). Female infanticide, selective abortion and neglect of female children further emphasize the preference for males. According to Charles and Ikenna (2009), many cultures consider women as second class citizens and do not often value them as much as they do the men. Some cultures offer women little or no opportunity or right to express themselves or make preferred choices. Despite the fact that women bear most of the responsibility in home-making, managing the health and education of the children, their contributions to the family and community welfare are not commensurate with their status in the society (Thomas, 1990; Mehra, 1997; Huq *et al.*, 2009).

Women bear most of the family responsibilities at the expense of their wellbeing; therefore, increasing the resources made available to them will bring about an improvement in the welfare and well-being of these women themselves, their households, communities and nations. Discrimination against females adversely affects their lives and also has a demoralizing consequence on the well-being of their households. This invariably has a negative effect on the society and nation at large. Apart from the fact that this is a human rights violation, it is a development crisis because women are fundamental to the process of economic development.

In recent times, gender equality has been closely knitted with sustainable development (Duflo, 2012), causing non-governmental organizations (NGOs), practitioners, scholars, policy makers and government agencies to rise to the occasion in a bid to achieve gender equality in different categories across countries, regions and income groups. The interest demonstrated is not merely to improve people's economic status or well-being, but to achieve improvement in people's lives by empowering them (Duflo, 2012, p. 137).

The presence of gender-based discrimination and inequality slows down the development of a country (Balatchandirane, 2007). Bloom *et al.* (2004) also affirms that a country's economic growth is stimulated by a consistently productive labour force which is propelled by adequate education and better health. Economic growth is directly affected by human capital in the sense that educated and healthy individuals tend to be more productive and innovative, which invariably leads to an improvement in the factor productivity (Romer, 1990; Huq *et al.*, 2009; Teixeira and Fortuna, 2010; Bodman and Le, 2013; Queirós and Teixeira, 2014; Mehmood *et al.*, 2015). The provision of access to quality health care, education and decent jobs to females who

constitute half of the population, as well as representation in decision-making processes, benefit societies and foster the sustainability of economies, thereby having a ripple effect on the humanity at large (UN women, 2018). This also helps countries perform to their full potential. Gender discrimination should be abolished and women and girls should be properly trained and employed, as failure to do so narrows the chances of development of countries (ILO, 2014). Therefore, it is necessary that goal 5 (to achieve gender equality and empower all women and girls) of the United Nations SDGs be paid full attention and achieved socially, economically and politically.

It is on this premise that this study seeks to investigate the contribution of women empowerment and gender equality achievement to economic well-being in sub-Saharan Africa. This study recognizes the feminist approach which acknowledges the contribution of women inside and outside the household and recognizes women as agents of change rather than passive recipients of development. This study hereby reveals the need to comprehensively empower women and achieve gender equality for the growth and development of Sub-Saharan Africa. Although extensive studies have been carried out on gender gap and growth (Klasen, 2002; Elveren, 2014; Gonzales *et al.*, 2015), there is no single study which investigates the nexus between female social, economic and political empowerment and economic well-being for the case of sub-Saharan Africa to the author's knowledge.

The study contributes to the existing literature in three folds. First, by considering the theoretical and empirical review of the interaction between economic empowerment, social empowerment, political empowerment of women and the economic well-being of Sub-Saharan Africa. Second, the study intends to add to this growing area of research by integrating female health status, educational status, employment status,

female power to make decision and economic well-being into econometric modelling for the case of sub-Saharan Africa in a panel series analysis. Third, the study reveals the need to comprehensively and simultaneously empower women at all dimensions of women empowerment—socially, economically and politically.

The remaining parts of this paper are as follows; the first section overviews gender equality and trends in Sub-Saharan Africa, the second section reviews relevant literature, the third section presents the methodology, the fourth section details and discusses the results, and the fifth section provides the concluding remarks and policy recommendations.

1.2 Gender Equality and Trends in Sub-Saharan Africa (SSA)

In the year 2017, the global population reached 7.5 billion people. Africa, as a region, is ranked the second most populous continent in the world. Notably, while Southern and Eastern Europe show negative growth rates of -0.12% and -0.15% respectively, regions in Africa show significant population growth rates of 2.5% and 3% (World Population Review, 2019).

Africa is comprised of five sub-regions—North Africa, East Africa, West Africa, South Africa and Central Africa (see Figure 1). While North Africa is recognized as part of the Arab world, Sub-Saharan Africa (SSA) mothers East Africa, West Africa, South Africa and Central Africa (see Figure 1 and Table 2 for the countries in each of the sub-regions). However, separation between North Africa and sub-Saharan Africa persists despite obvious historical connections, and this has become acceptable over time and has also shaped people's perception about the field (Bentahar, 2011).

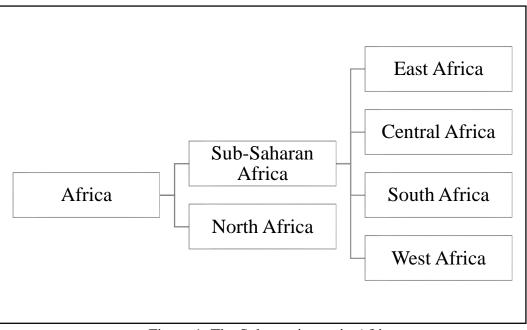


Figure 1: The Sub-continents in Africa Source: Author's drawing

Sub-Saharan Africa makes up 14.37% of the world population and is home to 48 countries. These countries range from prosperous ones to those ones inundated by violence, disease and extreme poverty. While the SSA population is 1,078,106,193, the population growth remains 2.66% (Worldometers, 2019).

Table 1: Population and Growth rate of Sub-Saharan Africa				
Sub-Regions	Population	Growth rate		
Eastern Africa	445,447,287	2.72%.		
Western Africa	392,176,114	2.67%		
Southern Africa	66,789,825	1.24%		
Central Africa	173,692,967	3.06%		
Sub-Saharan Africa	1,078,106,193	2.66%		
	: (2010)			

Source: World Population Review (2019)

Eastern Africa, one of the sub-regions in SSA has a population of 445,447,287 with a growth rate of 2.72%. Western Africa, another sub-region in SSA, has a population of 392,176,114 with a growth rate of 2.67%. Southern Africa, also a sub-region in SSA has a population of 66,789,825 with a growth rate of 1.24%, and Central Africa has a population of 173,692,967 and growth rate of 3.06% (World Population Review, 2019).

Sub-Saharan Africa					
East Africa	Central Africa	South Africa	West Africa		
Burundi	Central Africa Republic	Angola	Benin		
Comoros	Republic of Congo	Botswana	Burkina Faso		
Djibouti	Dem. Republic of Congo	Eswatini	Cameroon		
Eritrea	Equatorial Guinea	Lesotho	Cape Verde		
Ethiopia	Gabon	Malawi	Chad		
Kenya	Sao Tome and Principe	Mozambique	Ivory Coast		
Madagascar		Namibia	Gambia		
Mauritius		South Africa	Ghana		
Rwanda		Zambia	Guinea		
Seychelles		Zimbabwe	Guinea Bissau		
Somalia			Liberia		
Sudan			Mali		
Tanzania			Mauritania		
Uganda			Niger		
South Sudan			Nigeria		
			Senegal		
			Sierra Leone		
			Togo		

 Table 2: List of Countries by Sub-Regions in Sub-Saharan Africa

Source: World Bank

Although there has been improvement in SSA, the region is still considered backward based on indicators such as education, healthcare, political rights and state of the economy. SSA is experiencing visible improvements in social, economic and political transformations (Blum, 2007). The struggle to achieve the millennium development

goals and the sustainable development goals by the years 2015 and 2030 respectively has brought about an improvement in most of these indicators in the past two decades. Governments from each of the countries in the sub-regions have put some effort into developing their nations. These improvements vary across the regions over time (See Table 3).

2015	Empowerment	Central	East	South	West
Year	indicators	Africa	Africa	Africa	Africa
2001	Female education	29.66	33.77	40.14	21.59
	Male education	17.35	31.43	38.97	28.02
2015	Female education	61.11	47.13	59.77	43.50
	Male education	67.10	47.85	58.24	47.87
2001	Female LFP	54.85	66.00	62.69	57.14
	Male LFP	73.92	83.97	74.36	78.43
2015	Female LFP	51.96	66.41	59.56	56.36
	Male LFP	71.79	81.41	72.68	73.37
2001	Maternal mortality	534.00	646.71	621.60	718.20
2015	Maternal mortality	424.50	367.57	427.40	505.50
2001	Women parliamentarian	10.55	12.27	15.20	7.74
2015	Women parliamentarian	13.55	31.94	25.90	18.27
2001	GDP per capita	1281.72	2727.17	3747.87	2172.15
2015	GDP per capita	1879.96	4754.62	5011.56	3172.67

Table 3: Changes in the empowerment indicators across SSA between 2001 and 2015

Source: Author's computation from World Bank Database

Table 3 presents the disparities and improvement in the demographics across the four regions in Sub-Saharan Africa, namely Central Africa, East Africa, South Africa and West Africa, with respect to the empowerment indicators, education of both female (FE) and male (ME), labour force participation of both female (FLFP) and male (MLFP), rate of maternal mortality (MM), parliamentarian seat apportioned to women (PSW), and the gross domestic per capita (GDPC) in the periods 2001 and 2015.

The outcomes observed are insightful and have far-reaching implications. We observe that South Africa invests, more than any other region, in the education of both females and males in the year 2001. While by the year 2015, Central Africa improves by investing more than South Africa and other regions in the education of both males and females. Generally, the rate of female secondary school enrolments in all the subregions of sub-Saharan Africa increases in the year 2015. The plausible explanation could be attributed to incentives from the government to bridge the illiteracy rate gap.

Literature reveals a strong link between the level of education and social outcomes, health status and range of employment (Schultz, 2002; Lisaniler and Bhatti, 2005; Guven-Lisaniler *et al.*, 2018; Osundina, 2019), but the converse of this is true for the case of female labour force participation in SSA during the period of study. Labour force participation rate did not experience improvement despite the increase in the level of education of females. Rather, the rate of participation of women reduced generally by the year 2015. Some of the ways women are discriminated against in the workplace include being denied of some jobs even though they are qualified and being paid lower than men for the same jobs. This gender-based discrimination makes less women participate in the labour force, and since labour supply generally exceeds labour demand, many people become underemployed and unemployed, thereby making less female participate in the economy. There is also a sort of motherhood penalty that women with children face, thereby making it hard for them to find a suitable job for their status as mothers.

The reduction in the maternal mortality rate by the year 2015 is an indication that more resources are being devoted to the health of women. There is great improvement in the healthcare received by women in all the sub-regions of sub-Saharan Africa. Table 3

reveals that East Africa improved more than other sub-regions in terms of the resources dedicated to women's health by the year 2015 as this region reduced their maternal mortality rate more than all other sub-regions. In the year 2001, West Africa happened to be the sub-region with the highest maternal mortality rate, but this was greatly improved by the year 2015. East Africa, according to the data from the World Bank, is revealed to have the highest number of women parliamentarian seats. South Africa, in the year 2001, had the highest number of seats reserved for women at the national parliament, but became the second sub-region with highest number of women parliamentarian by the year 2015. West Africa greatly improved with the number of seats reserved for women in the parliament in the year 2015, almost triple of what was reserved in the year 2001. Comparing the improvement in the average GDP per capita of each of the sub-regions, although South Africa and Central Africa have the highest and lowest average GDP per capita respectively, the increase in the average GDP per capita of East Africa is more than other sub-regions, followed by that of South Africa, with that of Central Africa being the lowest.

Table 3 also shows that gender gap still exists in education and labour force participation. Hence, gender gap still exists in sub-Saharan Africa. Hakura *et al.* (2016) show that low income and gender inequality jointly impede growth in SSA. Lesotho, Mozambique and South Africa in the Southern Africa have the narrowest gender gap as a result of improvement in political empowerment and economic participation, while Ivory Coast and Chad in West Africa have the widest gender gap (Walton *et al.,* 2013). There is improvement in Namibia and Botswana, they are the closest to gender equality in education, while Angola, Uganda and Ivory Coast are the closest to gender equality in health and survival (World Economic Forum, 2013).

According to the 2017 edition of the Global Gender Gap Index (GGGI), SSA has a remaining gender gap of approximately 32% to close. Only one out of the countries in the SSA region, Rwanda in East Africa, appears to be among the overall index's top ten countries that have crossed the threshold of closing more than 80% of their gender gap as at 2017. Rwanda is a country with a female majority in the national parliament and is based on subsistence agriculture. Going with the global rate of progress, it would take the SSA region 102 years to close her gender gap.

Apart from the fact that low global literacy rates, which was around 65% in 2017, are more concentrated in SSA (CIA Factbook, 2019), the last three bottom-ranked countries are from SSA (Benin, Guinea and Chad), and four out of the ten lowest-ranked countries on the literacy indicator in the year 2017 are from SSA. Half of the women (52%) and one third of men (33.3%) were unable to read and write in 2001. In 2015, the percentage of illiterate women decreased to 44 and percentage of illiterate men decreased to 29. Although there is significant improvement in both female and male literacy during the period of consideration, SSA still ranks the last globally on the educational attainment sub-index (GGGI, 2017).

Considering secondary education, SSA constitutes an interesting example. Although there were more women who were unable to read and write compared to men, female secondary school enrollment is higher than male enrollment in three sub-regions, except the South African region in 2001 (see figure 2a).

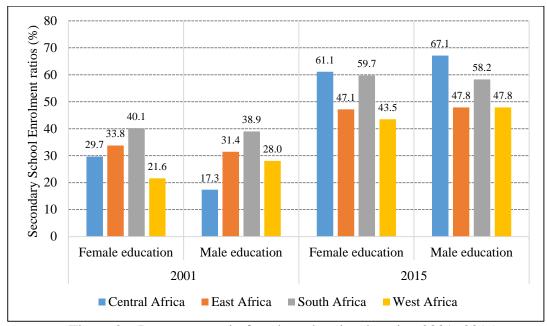


Figure 2a: Improvement in female and male education 2001- 2015 Source: Author's computation from World Bank Database

As in literacy rates, secondary school enrollments also improved in 2015 for both genders and regions. The biggest improvement is in the Central African sub-region, with a 31 percentage point increase for females and an almost 50 percentage point in male enrollment. The higher improvement in male enrollment in Central Africa reverses the gender gap in 2015. In 2001, while there was a gender gap in secondary school enrollment in favor of women, in 2015 there was a gender gap in favor of men (see figure 2b).

The lowest improvement is in the East African sub-region and the improvement is higher for men (16 percentage points) than for women (13 percentage points). The improvements in enrollment ratios are almost the same, which is around 20 percentage points by regions and gender.

It seems the education policies favor men more than women, and instead of eliminating the gender gap while improving secondary school enrollment in SSA, more gender gap is created against women in all sub-regions, except the South African sub-region where enrollment was higher for females in both years (see figure 2b).

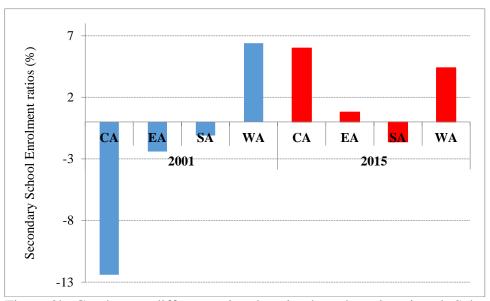


Figure 2b: Gender gap differences in education by sub-regions in sub-Saharan Africa Source: Author's computation from World Bank Database

Statistics show that maternal mortality is still a challenge in SSA as more than half of the maternal deaths in the world occur in this region. However, a number of countries have been able to halve their maternal mortality (MM) levels since 1990 (Guterres, 2018). Notably, SSA has improved more than other regions in the past decade as annual declines in MM between 2000 and 2010 rose above 5.5% (WHO, 2018). Statistics from the World Bank also reveal that there is a decline in the maternal mortality rate between the period of 2001 and 2015 in all the regions in SSA (see figure 3). This implies that there is great improvement in the health of women in the SSA region between the periods. This also suggests that there was an improvement in the supply of health facilities to improve women's health and also women were able to get access to the resources during this period.

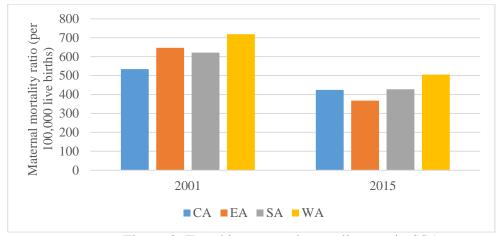


Figure 3: Trend in maternal mortality rate in SSA CA, EA, SA and WA denote Central Africa, East Africa, South Africa and West Africa respectively. Source: Author's computation from World Bank Database

Only six countries from SSA have closed more than 80% of their gender gap in economic participation (GGGI, 2017). While comparing regions in the world, SSA remains the region where women are more actively involved as economic agents. In the informal sector, there is a higher percentage of women to men employment. Women experience difficulty in getting access to formal employment. This is as a result of higher illiteracy rates, inadequate job skills, lower levels of education, and cultural and social barriers. Nonetheless, statistics still shows that women's labour force participation rate is still lower than that of men and gender gap is much evident (see Figure 4a and 4b). Global female participation has declined over the last two decades from 51.3% to 48.5% in 1998 and 2018 respectively despite the significant growth in developing countries (Verick, 2018). There is a gender gap in female economic participation which is tantamount to restriction of the pool of talent in the labour market, and of course the end result of this is lower growth in income and productivity (Esteve-Volart, 2004; Cuberes and Teignier, 2015). Women tend to hold an inferior status in the job market compared to men, and are more employed in the subsistence agriculture and informal sector (Stotsky et al., 2016). Furthermore, 85%

of informal employment takes place in the informal sector, while the remaining takes place in the formal sector. Globally the level of informal employment is 50.5% excluding agriculture; in Africa alone, the share of informal employment is as high as 86% (ILO, 2018).

In developing countries, 43% of the agricultural labour force is made up of women. In SSA, majority of females are not well equipped and utilized where they are participating. While more than 60% of women employed are engaged in agriculture, not more than 15% of the land owners are women. Majority of women have limited credit access, and are not in possession of property or resources. Where females do not own a land to farm and cannot afford the high cost of renting one for use or do not have access to farm equipment or agricultural input or receive support or training, the output would be invariably low and this results into food insecurity. A good number of women are also in vulnerable positions in informal employment, that is home-based workers, domestic workers, or contributing family workers (ILO, 2018). Some women render household help services, some manufacture garments, some do petty trading, and some others engage in food processing. Many constraints come with this scale of operation; businesses are usually undercapitalized, skills underutilized, work conditions difficult, offers too little, and returns and benefits almost invisible (Mehra, 2007). In SSA, girls and women spend around 40 billion hours a year to collect water, this is equivalent to 365 days of labour of the entire France workforce (UN Women, 2014). This is really burdensome and has a great deal of impact on employment opportunities for women (Dilli et al., 2019). Therefore, in order to address these constraints, there is the need for women empowerment and promotion of gender equality. For the period considered in the study, 2001 to 2015, one can make a clear inference that there is no improvement both in the female and male labour force

participation rates (see Figure 4a), they even get worse. Female LFP decreased in all sub-regions, except East Africa. Male LFP also decreased in all sub-regions with no exception.

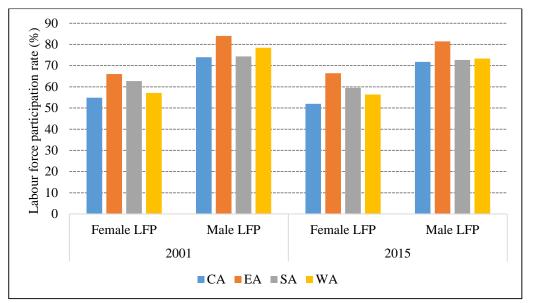


Figure 4a: Female and male labour force participation rates between years 2001-2015 Source: Author's computation from World Bank Database

On the other hand, when we look at the changes in gender gap in LFP (the difference between male and female LFPRs) we see big differences in the gap by regions. The biggest gap is in West Africa in 2001 and Central Africa in 2015. The smallest gap is in South Africa, both in 2001 and 2015 (see Figure 4b). However, although both the male and female participation worsened between the investigated periods, there is mixed results in terms of the improvements in gender gap by regions. While there is significant improvement in the gap in two of the sub-regions, namely West and East Africa, there is slight increase in gender gap in Central and South Africa. The biggest improvement is in West Africa. On one hand, the gap decreased by almost 10 percentage points, from 27 percent to 17 percent and in East Africa the gap decreased by almost 3 percentage points, from 18 percent to 15 percent. On the other hand, gender gap in LFPRs in Central and South Africa increased by 1 and 1.5 percentage points respectively.

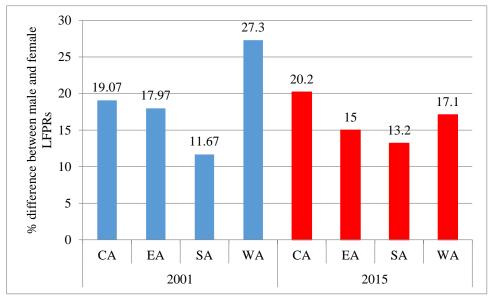


Figure 4b: Gender gap differences in labour force participation rates in SSA Source: Author's computation from World Bank Data Base

Among the indicators considered in our study, gender gap is widest in politics. The World Economic Forum (2013) reports that women only occupy around 20% of political leadership roles when compared to men. According to Sustainable Development Goal Report (2018), it is revealed that there is improvement in the representation of women in the national parliament globally, particularly in the lower houses of the parliament. The percentage of representation increased to 23% in year 2018 from 19% in the year 2010. Out of all the regions in the world, SSA has a rapid improvement in the political representation of women (Stotsky, 2016) with Rwanda in East Africa having gender parity score of 0.61 and the highest share of women parliamentarians in the world (GGGI, 2017) (see Figure 5).

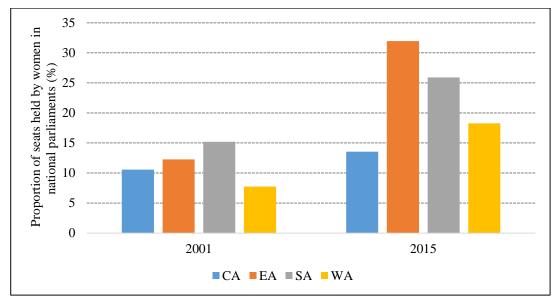


Figure 5: Share of women parliamentarians in SSA CA, EA, SA and WA denote Central Africa, East Africa, South Africa and West Africa respectively. Source: Author's computation from World Bank Database

The review of the selected social, economic and political empowerment indicators (education, maternal mortality, LFP and representation of women in the national parliaments) by sub-regions of SSA shows that there is significant gender inequality in SSA with significant differences between sub-regions. Past researches show that where the volume of income available to women increases, it generally brings about an improvement in their education and health and that of their children; the improvement is also visible in their children's nutrition (Thomas, 1990; Caldwell and Caldwell, 1991; Heaton, Forste, Hoffmann and Flake, 2005; Gonzales *et al.*, 2015; Agriculture for Nutrition and Health, 2018). Gonzales *et al.* (2015) additionally show that different aspects of gender inequality, such as gender gaps in labor force participation, educational attainment, and parliamentary representation, have negative impacts on income distribution.

Among all the sub-regions, East Africa is the only sub-region that improved greatly in all the areas by the end of our sample year, 2015. We observe that this sub-region improved in female education. We also observe that this sub-region improved more than other sub-regions in terms of the resources dedicated to women's health by the year 2015 as this region reduced their maternal mortality rate more than all other sub-regions. East Africa, according to the data from the World Bank, is revealed to have the highest number of women parliamentarian seats. Rwanda in East Africa appears to be among the overall index's top ten countries that crossed the threshold of closing more than 80% of their gender gap as at 2017. Female labour force participation decreased in all sub-regions except East Africa by the year 2015. All these have significant impact on the general wellbeing of the sub-region as the average GDP per capita of East Africa increases more than other sub-regions.

Chapter 2

LITERATURE REVIEWS

2.1 Theoretical Analysis

2.1.1 Feminist Economics and Women Empowerment

According to Strober (2003), feminist economics (FE) is more or less a reassessment of economics as a discipline. While the basis for this is mainly to improve the economic and social conditions of women, the reassessment gives rise to improvement in theories and policies in the economic field. Against the observation of the classical economists, FE expresses a view that most of the doctrines and policy recommendations of classical economics are archaic and outdated. The claim is that the economic doctrines are products of and mere reactions to the peculiarities and political agendas of the Western world a couple of centuries ago. FE, therefore, steers up some curiosity around a few basic assumptions of the ever-presence of selfishness, scarcity, efficiency, utility function, and lastly, the unlikelihood of comparison between interpersonal utility. Hence, FE calls for a platform for the reassessment of the old-fashioned assertions in the bid to acknowledge its own political and economic agenda which is to improve the economic condition of women.

Drawing on Pujol (1992), Strober (2003) writes that the theory of women's equality in employment and ownership of property came from the first set of feminist economists such as Barbara Bodichon, Harriet Taylor and John S. Mill, and covers the mid-18th century. Following this is the feminist view of the debate on equal pay for men and women by Beatrice Webb, Eleanor Rathbone, Ada Heather-Biggs and Millicent Fawcett in England in the period between 1890 and 1920. In the United States, women's position in the home was analyzed and the importance of women's market work was put forth by Charlotte P. Gilman. The movement of feminism in the 1960s brought about the deluge of feminist economics on issues on "labour force participation, economics of child care, occupational segregation, household work, earnings differentials, and the feminization of poverty" (Strober, 2003, pg.8). Feminist economics writings in the 1980s through to the 1990s include those of Blau (1981), Blau and Ferber (1986), Bergmann (1986, 1987), Strober (1984, 1987) and Waring (1988), with issues ranging from the situation of women to the underlying structure of economics discipline, occupational segregation, gender gap, wage gap, women labour force participation, and writings from Ann Jennings, Paula England, Michele Pujol, Nancy Forbre, Diana Strassmann and Heidi Hartmann, dealing with issues on "scarcity and choice, self-interest assumptions, seperative selves, rationality and exogenous preference formation" (Strober, 2003, pg.8).

Barker (2005) expresses feminist economics field as not being monolithic. Feminism comes in different forms. Contemporary feminists are classified as liberal feminists, traditional Marxists, radical feminists and socialist feminists. According to Harding (2004) and Jaggar (2004), liberal feminists are of the opinion that as long as women suffer from unjust discrimination, they are being oppressed. The standpoint of the traditional Marxists is that as long as women are excluded from public production, they are being oppressed. As for the radical feminists, it is perceived that the oppression of women is visible in connection to the common male dominance over "women's sexual and procreative capacities" (Jaggar, 2004, pg.55). Socialist feminists describe the oppression of women in connection with an improved form of the Marxist

theory of alienation. According to Cox (1998), the Marxist theory of alienation was developed by Karl Marx to unveil the human activity explained by the seemingly impersonal forces dominating the society.

These contemporary feminists have divergent views on the oppression of women and how to tackle it. However, "the most politically appropriate and theoretically illuminating interpretations of theoretical desiderata are those associated with socialist feminism" (Jaggar, 2004, pg.55). With regard to socialist feminism, women are known to suffer notable forms of oppression and exploitation in the contemporary society. Higher investments in the reproductive role rather than the productive role of women reflects the fact that women are not regarded as essential to the economic development process, considering the development policies and programs (Duflo, 2012, p.136; Bhoganadam et al., 2014). Notwithstanding, international organizations do not relent in their efforts in bringing the issues of women to the forefront of development agendas. And sequel to this is the promotion of women empowerment. "Advocacy on behalf of women which builds on claimed synergies between feminist goals and official development priorities has made greater inroads into the mainstream development agenda" (Kabeer, 1999, pg.435), albeit the process remains ongoing. There is an understandable and political logic around this assertion from Kabeer. It is understandable in the sense that although in most cases, policymakers determine the way out in obvious cases of limited resources, advocates for feminist goals take the policymakers beyond the known concept of efficiency, poverty and welfare into the ambiguous arena of power, influence and injustice. And it is politically logical because the beneficiaries of the advocacy do not have much power or influence on those working on the agendas in policy making institutions. And consequentially, as much as the empowerment of women are pushed from the angle of it being an end, it results

into "a zero-sum game politically weak winners and powerful losers" (Kabeer, 1999, pg.436). On the contrary, advocacy that merges the reasoning of both women empowerment and gender equality with a promising desirable multiplier effect is capable of convincing the policymakers of achieving similar approved goals even though that would be done through unpopular means. In the process, women themselves benefit as much as the nation.

2.1.2 The Changing Perspectives of Women, Gender and Development over time

There is a general framework which has guided most development researchers and practitioners till date. As expressed by Rathgeber (1990), these theoretical perspectives have pervasively helped to shape scholarly and practical work, and are identified as follows.

2.1.2.1 Women in Development (WID)

Women in Development (WID) originated in the early 1970s. WID became pronounced by American liberal feminist, Ester Boserup (1970), courtesy of her publication, "Women's Role in Economic Development". The theoretical base for WID is linked to modernization paradigm. This modernization, equating with industrialization in the period between 1950s and 1970s, was expected to bring improvement in the developing economies by way of improving their standards of living. But by the 1970s, while on one hand, it was realized that women did not benefit from this so-called modernization, the existing position of women in some sectors were undermined on the other hand (Boserup *et al.*, 2013). The focus of WID is associated with not only the necessity to have women integrated in economic systems, but also the need to create strategies that minimize the disadvantages women face in the productive sector. This was thought to be possible through the introduction of necessary adjustment in the administrative and legal systems and adjustment in the productive role of women.

WID contributed to the questions of women which became obvious in the arena of development theory and practice. Some features are peculiar to WID. First, the approach strongly relates with the traditional modernization theory, and it wrongly assumes that the development process does not integrate women. Second is the acceptance of the existing social structures. This approach is not confrontational, as the nature and sources of the oppression and subordination of women are neither confronted nor questioned. Rather, a more equal participation of women in different spheres of the society such as in employment and education was advocated for (Mbilinyi, 1984). This approach gives no recognition to critical perspectives of the analyses of the Marxist, neo-Marxist or the dependency theories. Therefore, it lacks regard for history as its treatment of women reveals an undifferentiated category and overlooks the influence and impact of culture, race and class (Mbilinyi, 1984; Nijeholt, 1987). Lastly, this approach is solely concerned with the workforce productivity of women and ignores or minimizes the reproductive side of women (Buvinic, 1986). WID approach does not offer much as it does not challenge biased gender social relations (Rathgeber, 1990).

2.1.2.2 Women and Development (WAD)

WAD is also regarded as a neo-Marxist approach. This approach emerged as a result of the critique of the WID approach and modernization theory in the last half of the 1970s. While the theoretical base for WAD is drawn from the dependency theory, its focus is on the relationship between development processes and women. WAD considers integrating women in development to be a myth, rather opining women to have always been part of development processes. Thus, WAD accepting women as important economic factors in their societies became its contribution to development. WAD examines the nature of women's integration in development, and this more or less brought sustenance to the existing inequality in international structures. This approach states that the work of women in the private and public domains is germane to the maintenance of their societal structures. WAD also has its distinguishing features. It fails to analyze the relationship between oppression and subordination of women, differing production modes of women, and patriarchy. "WAD discourages a strict analytical focus on the problems of women independent of those of men since both sexes are seen to be disadvantaged with oppressive global structure based on class and capital" (Rathgeber, 1990, pg.493). WAD has the notion in common with WID that the singular preoccupation with the productive role of women is at the cost of the reproductive side of women. One of the strategies introduced by WID/WAD is the development of the income-generating activities. This strategy was more concentrated upon with little or no attention paid to time burdens placed on women (Roberts, 1979). Another feature of WAD is its failure to question the relationship between gender roles. Lastly, WAD assumes that the position of women would improve as long as the international structure becomes more equitable (Rathgeber, 1990).

2.1.2.3 Gender and Development (GAD)

This approach came to be in the 1980s as a substitute to WID. It considers all aspects of women's lives by offering a holistic perspective. Unlike WAD, it does not fail to question the starting point of assigning gender roles. The theoretical base for this approach is influenced by the socialist feminist perspective (Visvanathan, 1997). As for the contributions of this approach, GAD acknowledges the contribution of women outside and inside of the household. This includes the non-commodity production. Under GAD approach, special consideration is given to the oppression of women in

the family by entering the so-called 'private sphere'. Emphasis is laid on the duty of the state to offer social services in line with the promotion of women's emancipation. Rather than being considered passive recipients of development, women are recognized as agents of change. The need for women to get themselves organized, especially for a more effective political voice, is emphasized. It is identified that the aims of operation of patriarchy across and within classes are to dominate and oppress women. Focus is mostly on the amplification of the legal rights of women, which include that of land laws as well as the reform of inheritance. The argument is tantamount to disrupting the obvious power relations between men and women in the society (Rathgeber, 1990).

The classical economists are more concerned with efficient allocation of resources. Their view is based on the assumption that where there is efficient allocation of resources, output in the economy will increase and this will trigger the process of development. The view of the feminists is that the contributions of both men and women are essential to the development of a nation, and a lack of involvement of either one affects the general productivity and national output. Apart from the time constraint and budget restrictions faced by women, discrimination against women is also a factor that contributes to the less involvement of women in the affairs and operations of countries (Vlasblom and Schippers, 2004), which invariably affects the national output. This can be further expatiated with theories explaining the productivity differences between women and men, which include but are not limited to discrimination theory, human capital theory and overcrowding hypothesis.

2.1.3 Discrimination Theory

Discrimination theories were built to illustrate the concept of personal characteristics of workers that are unrelated to productivity but are valued in the market. This includes race, ethnic background and sex. Neoclassical theory was first applied to discrimination by Edgeworth (1922). The most used study on discrimination till recently is that of Becker (1957, 2010) whose work addresses the economic impact of discrimination as a result of race, personality, color, sex, religion, class, or various unrelated observations in the market place. Arrow (1971) further explains Becker's model more technically and relates it to the general competitive equilibrium theory. The discrimination theory considered in this study is on the labour market and the productivity between the groups of workers with emphasis laid on gender differences. Males and females are assumed to be perfect substitutes in production. Where discrimination occurs and females are excluded from male jobs by the economic agent (which could be customers, co-workers or employers), the occupation and wages of females are affected negatively. Where, if at all, a discriminating economic agent hires a female, this is done when the difference in wage between female labor and male labor is huge enough to pay off the disutility incurred by the female (Becker 1957; Blau and Jusenius, 1976). Where this persists, it reduces the general productivity of the workforce in the economy. In this case, discrimination is not healthy for the wellbeing of the economy as it will deter the country from tapping fully into a wider talent pool. More so, organizations that discriminate against women are not likely to be at their optimal as discrimination against women does not allow the maximization of its human resources.

2.1.4 Human Capital Theory

The human capital hypothesis states that education and training are important in employment outcomes (Becker, 2009). Tansel (2001) confirms that educational attainment is a very important factor considered by individuals in their decision to participate in the labour market. According to existing literature, the greater the educational attainment, the higher the participation rate in the labour force (Psacharopoulos and Tzannatos, 1989; Tansel, 2001; Ejaz, 2007). In the human capital theory, women's lower productivity can be associated with their lower stocks of human capital accumulated when compared with that of men (Blau and Jusenius, 1976). This simply means that women invest less in human capital compared to men, because women amass less labor market experience and invest less in on-the-job trainings and market-oriented formal education compared to men. Women attend to traditionally apportioned gender-based household work and activities which leave them little or no energy and time to attend to the aforementioned concerns. As a result of women's smaller human capital investment, they earn less and are less productive than men. Fundamentally, the cost of excluding women or girls from trainings or education greatly hampers the potential productivity of an economy, not to mention the overall development of the economy. A company may not be efficient where it does not make appropriate use of women's available talent pool.

2.1.5 Overcrowding Hypothesis

Overcrowding hypothesis originated during the union movement of women in the United States between the years 1890 and 1925. Lower productivity and wages may also result where there is excess labour supply compared to the limited female occupations. In the overcrowding hypothesis, Edgeworth (1922) asserts that the crowding of women into a small number of occupations is the reason behind their lower pay. This usually results in a relatively low capital to labour ratio. Crowding is said to be caused by the artificial distortion in the operation of the labour market by institutional barriers—unions excluding women from the so-called men's jobs—thus resulting in higher wages for some groups and lower wages for some others. This continued with little attention until the publication of an economist, Bergmann (1971).

Since the analysis of Bergmann (1974) on crowding among female workers, a major determinant of gender disparity in wages recognized by economists is the occupational segregation by sex. Gunluk-Senesen and Ozar (2001) also confirm the existence of wage discrimination as well as occupational segregation. Occupations such as teaching and nursing that are compatible with female home responsibilities are usually regarded as female occupations (Blau, Simpson and Anderson, 1998). Women, on the other hand, choose relatively low-paying professions because these professions afford them the time to cater for the responsibilities of the home. According to O'Neil (2003), women choose occupations based on the possibility of coordinating market work with home responsibilities, less weekly working hours, less stress at work and unexpected casual leave in case of family emergencies, among others. The influx of females in these limited female occupations result into overcrowding and since they are relatively low-paying jobs, there is low level of productivity and wages. This negatively impacts the nation's economic well-being because such a nation would not be able to account for one-half of its potential talent base, and consequentially would not be able to maximize its development potential. Women should therefore be empowered, given the same rights, opportunities and responsibilities as men, and occupational segregation reduced to the barest minimum. Policies that allow women to combine work and family should also be created to help prevent problems that may be posed by the ageing population in the future (Daly, 2007).

2.2 Conceptual Analysis

According to the World Economic Forum (2015, 2017), human talent, which is regarded as the skills and productivity of a country's workforce, is said to be the most important determinant of a country's competitiveness. In the same vein, the human capital that an organization possesses and the ability of the organization to efficiently

utilize its resources determine the performance of an organization. The feminists are of the belief that for a country to be able to compete and for a company to be efficient, there is a need for healthy development of and appropriate use of the world's half available talent pool. Women constitute one half of the world's population and thus deserve the same degree of access as men to education, health, economic participation as well as political power to make decision (Kabeer, 2010). This necessitates women empowerment and gender equality (Bayeh, 2016).

2.2.1 Women Empowerment (WE), Gender Equality (GE) and Economic Wellbeing

Empowerment, as defined by Page and Czuba (1991), is a multi-faceted process which allows individuals to possess the ability to gain significant control over their existence. There is no consensus as to its definition and measurement. To the majority of feminists, the value placed on the concept is determined by its simplicity (Kabeer, 1999, pg.436). There has been no particular generally-accepted definition of women empowerment because of its multi-dimensionality (Kabeer, 1999; Duflo, 2012). The conclusion from the general perspective is that empowerment equips individuals to be more resourceful to themselves, their immediate communities and the society by taking pragmatic measures on concerns that they consider crucial. Empowerment is described as a process that enables individuals confront their current states or conditions. The process of building an individual or group to be able to make choices and transform the choices into preferred actions or outcomes is also termed empowerment (Alsop and Heinshn, 2005). According to Mehra (2007), the definitions of empowerment greatly vary and should be measured and quantified on the bases of its context. Empowerment requires people to make important decisions on issues that are paramount in their lives and to be capable of carrying out the decisions.

In the context of development and women, empowerment definitions ought to feature the increase in the choices for women as well as expand the ability of women to explore the choices. Women are able to increase their choices when their access to economic opportunities improve, and they are able to explore their choices when there is improvement in their education and health. Therefore, to feminists, women empowerment is a process whereby women's capacities are built to enable them make choices and transform those choices to desired outcomes.

Women empowerment (WE) should not be seen as a zero-sum game where gains for the women automatically imply losses for men (Osagi, 2001). Rather, it should be perceived as a process necessary to bring about benefits for women at "individual, household, community and broader levels" (Malhotra *et al.*, 2009, pg.4).

WE involves giving women equal opportunities and conditions as men and equipping them to make important life choices in their households, communities and countries. It can therefore be conceptualized as the power to make choices (Kabeer, 1994; Malhotra *et al.*, 2002). "Empowerment is the expansion in people's ability to make strategic life choices in a context where this ability was previously denied to them", Kabeer (1999, 2001) proffers. Women need to be empowered so that they can make important life choices they had been previously deprived of (Malhotra *et al.*, 2009; Cunningham *et al.*, 2015). When women are empowered, they have a feeling of selfworth, they gain power and control over their own lives, irrespective of wherever they find themselves, and are able to influence their environment. WE has an indispensable role and this encompasses the act of improving women's statuses via trainings and education, and creating awareness of the action in order to create more ripple effects (Alvarez and Lopez, 2013). For instance, an educated woman benefits her environment (whether immediate or not) by bringing both monetary and non-monetary returns to her family and society. Consequently, she builds human capital and empowers future generations. Higher female education is said to make women better-informed mothers and thus helps to lower the rate of child mortality and reduce malnutrition (Aly and Grabowski, 1990; Smith and Haddad, 2000; Knowles *et al.*, 2002; Klasen, 2003). As stressed by the United Nations Population Fund (2012), WE is a useful tool in the advancement of development and poverty mitigation. The empowerment of women is necessary for the development of the economy (Sohail, 2014). Thus, providing women with skills and competencies to strengthen and enhance their economic productivity should be regarded as vital to the sustained development of the economy.

Gender equality (GE) refers to individual human rights, responsibilities and opportunities which are not gender-dependent (Osagi, 2001). GE is a phenomenon whereby no human being is stuck in developing personal abilities or making choices limited by strict gender responsibilities, implying that equal consideration and value is given to the desires and needs of both males and females (Holzner *et al.*, 2010). The ultimate goal of GE is the non-existence of discrimination on the basis of one's gender (Alvarez and Lopez, 2013) and should be achieved because of the dividends it brings to the society. As much as GE remains a goal in its own right, it is also a key factor for sustainable economic growth, social development and environmental sustainability (sustainable development) (Warth and Koparanova, 2012). As a matter of emphasis, GE is a universal human right which also features as one of the Sustainable Development Goals¹ (SDGs), specifically goal 5 which is to achieve gender equality

¹ SDG 1- No poverty; SDG 2- Zero hunger; SDG 3- Good health and well-being; SDG 4- Quality education; SDG 5- Gender equality; SDG 6- Clean water and sanitation; SDG 7- Affordable and clean energy; SDG 8- Decent work and economic growth; SDG 9- Industry, innovation and infrastructure; SDG 10- Reduced inequalities; SDG 11- Sustainable cities and communities; SDG 12-

and empower all women and girls. Its sub-index emphasizes putting an end to various forms of discrimination against all girls and women, putting an end to various forms of violence against girls and women, putting an end to harmful practices such as female genital mutilation, child marriages, early marriages and forced marriages, recognizing the value of domestic work and paid service, and ensuring women fully and effectively participate and obtain equal leadership opportunities at different levels of decision-making, be it economic, political or public life. This makes it obvious that the agenda to realize GE is a path towards achieving development and sustainability. GE is all-encompassing as it creates an avenue for girls and women to have the same access that men do to decent and desired jobs, services and resources, and representation in political and economic decision-making processes for both men and women (UN, 2016).

As the Global Gender Gap report highlights to policymakers, every country of the world should strive to give women same opportunities, responsibilities and rights as men, in order to maximize its development potential and competitiveness (WEF, 2014). For effectiveness, the empowerment process should be all-encompassing, holistic and simultaneous, rather than focused on a single area. Duflo (2012), Gonzales *et al.* (2015) and WEF (2015) report the existence of a positive relationship between gender equality and per capita GDP and level of competiveness. Women empowerment will in turn significantly impact gender equality, productivity and economic growth (WEF, 2015). All forms of gender-based discrimination should thus be eliminated, and females accepted for job positions as long as they qualify based on

Responsible consumption and production; SDG 13- Climate action; SDG 14- Life below water; SDG 15- Life on land; SDG 16- Peace, justice and strong institutions; SDG 17- Partnerships for the Goals (UN Women, 2018)

their skills and potentials. No gender-based discrimination should exist to hinder women from pursuing their desired jobs. In the same vein, they should be paid equally as their male counterparts for the same type of job. This will boost productivity in the economy. For emphasis, feminists argue that women's equality demands the participation of women in the paid economy in the same way as men.

2.3 Empirical Analysis

2.3.1 Economic, Social, Political Empowerment of Women and Economic Wellbeing

It has been established that women are more disadvantaged than men in different spheres, whether political, socio-cultural or economical. This does not only affect women, but also has a negative impact on the society at large. This is why even international organizations have risen to the occasion, and among the many steps taken to save the situation is the promotion of gender equality. One of the processes through which GE can be achieved is by empowering girls and women. Access to productive resources may positively affect women's transformative processes (the shift from being disempowered to being empowered) and this may facilitate WE and concomitantly contribute to GE.

The dimensions of women empowerment include social, economic and political empowerment. The National Economic Empowerment and Development Strategy (NEEDS, 2004) acknowledges the need to incorporate women into development processes through capacity enhancement in economic, social, political and cultural participation. Hunt and Kasynathan (2001) observe that one factor alone cannot result in empowerment or gender equality; it requires a blend of accomplishments that tackle the problem of poverty in different domains of women's lives.

Berman and Phillips (2004) posit that the social empowerment of women addresses issues applicable to the improvement of women's overall status in various parts of the world. Women's education is an important social empowerment tool. It generally builds women's confidence and societal status. Klasen (2002) highlights the importance of female education to the growth and development of the country, especially in developing economies. Ojobo (2008) opines that some women in Nigeria are victims of lack of access to adequate education, and this hinders individual development as much as national development. In the studies of Knowles et al. (2002) and Mehmood et al. (2015), higher levels of female education lead to higher levels of labour productivity, thus suggesting that educational gender gap is an impediment to economic development. Hence, gender gap has an adverse effect and is robust for the instrument sets examined. There are many studies on the role of gender equality with education focused on as one of the determinants of growth and income. Such studies include but are not limited to Filmer (1999), Klasen (1999, 2002), Esteve-Volart (2000), Knowles (2002), Klasen and Lamanna (2003), Baliamoune-Lutz and McGillivray (2009), and Klasen and Lamanna (2009). They all conclude that gender inequality in education has a negative effect on income and economic growth.

Another indicator used to capture women's social empowerment in this study is maternal mortality rate. According to the World Bank, maternal mortality is associated with the risk associated with each pregnancy. Feminists consider it an indicator of the amount of resources devoted to women's health. A low mortality rate shows good health status and availability of health facilities for women, and good health status in turn stimulates growth. Another indicator which is commonly used to capture health status of individuals is life expectancy at birth. According to Mayer-Foulkes (2001) and Thomas and Frankenberg (2002), the life expectancy of individuals who live healthy is higher than that of those who live unhealthy lives. This concept accelerates demographic transition and encourages growth (Weil, 2007). Therefore, healthy women in the society contribute to the well-being of the economy. From a feminist perspective, a high maternal mortality rate is an indication of gender inequality in health, and implies that not enough resources are supplied or devoted to the health of females. Likewise, in this study, maternal mortality indicator is used to quantify the amount of resources devoted to women's health. Where women's health become a concern in the society, policies should be geared towards deploying a good number of resources to make an improvement. For instance, provision of health care insurance, easy access to facilities, availability of antenatal drugs for free or at affordable prices, availability of antenatal care facilities and health practitioners, availability of clean water and improved sanitation all have positive implications on the health of pregnant women by reducing the number of deaths.

The concept of economic empowerment is associated with labour force and employment. When women are employed, they are able to access economic resources (Kabeer, 2012). Comparing the present with the past century, women from different racial and ethnic groups now prefer to remain employed and work to earn wages. This is evident in the participation of women in the labour force at 46.6% in the year 2000 (Figart *et al.*, 2003) and 48.5% in the year 2018 (ILO, 2018), almost doubling the 27.8% in 1950. This doubling of the number of women since 1940 is known as the 'feminization' of the labour force. Female labour force participation rate is derived by

dividing the number of women present in the labour force by the number of women that are eligible to work, usually above the age of sixteen (Figart *et al.*, 2003).

In this study, female labour force participation is used as the indicator for women's economic empowerment. This is used to measure the access of women to productive resources. According to Barker (2005), a sound economy is one where both the productive and reproductive aspects of labour function well. Productive labour has more to do with paid labour and the production of goods and services such as the selling of clothes and food in the market, while reproductive labour has more to do with cleaning, cooking, taking care of children, spouses, the aged and the infirm.

The ideology of gender has over time assigned women to the private sphere of the family and men to the public sphere of the market (Jennings, 1993). Apart from the fact that there are many households with women as bread winners, women should be a part of the productive labour so that they can be free to make independent decisions. It is thus important for women to have access to productive resources. Women are economically empowered when they possess the ability to succeed and advance economically as well as make economic decisions and act on them (Golla *et al.*, 2011). Koyuncu *et al.* (2016) identify that female labor force participation positively correlates with labor productivity. Female employment is just as important to the improvement of an economy as male employment (Doğan and Akyüz, (2017).

The concept of political empowerment has to do with women's real power over decision-making. These decisions can be economical or political, and often influence lives and priorities in the society. Political empowerment is portrayed in this study as women's access to positions of power. According to Bobo and Gilliam (1990), it is the

extent to which a group has achieved significant representation and influence in political decision-making. This is in relation to certain positions attained to be able to serve as representatives to make or influence decisions. As pointed out by Kabeer (2010), as long as females constitute half of the population, they are entitled to at least half of the parliamentarian seats. Where seats reserved for women are less than half, this implies gender inequality. The variable used in the study is the proportion of seats held by women in national parliaments. As it is perceived that women may be less prone than men to adopt corrupt practices when in power (World Bank, 2001; Sung, 2003; Jha and Sarangi, 2018), allowing women in positions of power brings about improved governance and promotes faster growth (Swamy *et al.*, 2001; Huq, 2009). Jha and Sarangi (2018) provide robust evidence that women's presence in parliament has a causal and negative impact on corruption.

Sumner (2004) opines that well-being matters to economists. This is true as it has for long been a central interest on economic development, especially as it connects with poverty mitigation (Kanbur and Squire, 1999). However, there has been no consensus on the definition and measurements of economic well-being in the past five decades. The meanings and measurements are peculiar to the state of development in different decades. According to Bourguignon *et al.* (2002), economic growth defines what economic well-being was in the 1950s as the improvement in well-being was tied to growth which was assumed to reduce the level of poverty. Hence, GDP growth was the indicator during the period. GDP per capita growth became the indicator in the 1960s as development was recognized to be responsible for the rise in the living standard of the population. Well-being in the 1970s was recognized as the satisfaction of acquiring the basic necessities of life through participation in the labour force. Hence, GDP per capita growth plus the basic goods became the measurement during at the time. Dimensions changed in the 1980s as well-being was characterized beyond income to encapsulate the non-economic aspect of well-being—health, education and nutrition (World Bank, 1980; Chambers, 1983). Economic and non-economic components became the meaning of well-being in the 1990s and were measured by the UNDP human development index (HDI). Universal rights, livelihoods and freedom have been realized to define what well-being represents since the year 2000, and various measurements include Millennium Development Goals (MDGs), Sustainable Development Goals (SDGs), and new areas which include risk (relating to economic well-being) and empowerment (relating to non-economic well-being).

However, the definition of well-being determines its measure. Non-money metric or non-economic measures are more appropriate where well-being is defined as rights and capabilities, while money-metric or economic measure are insightful where material standards of living and basic needs define well-being (Sumner, 2004). Notably, in this study, consideration is given to economic measures of well-being, since we reflect economic well-being as possessing the present financial security (basic necessities of life) and future financial security (ability to maintain or improve the standard of living). Therefore, the indicator used is GDP per capita (Pollard and Lee, 2003; World Bank, 2003; Sumner 2004; OECD, 2011). To avoid the variation that may exist between material well-being of households and aggregate economic situation, it is appropriate to emphasize the individual and household dimensions of well-being in place of economy-wide well-being (Stiglitz *et al.*, 2009; OECD, 2011). A correlation has been found to exist between gender equality and per capita GDP (World Economic Forum, 2017).

Chapter 3

METHODOLOGY

This study examines the impact of empowering women and achieving gender equality on economic well-being. The following variables are thus employed; female secondary school enrolment as a measure of access to education, maternal mortality rate as an indicator of the resources utilized in the healthcare of women, and a lower mortality rate as an indicator of the healthcare resources made available and accessible to women. These are all used to capture the social empowerment of women. To capture the economic empowerment, female labour force participation is considered as a measure of women's access to productive resources. The proportion of seats held by women in the national parliament is used to capture the political empowerment of women. Gross domestic product per capita is used as the indicator of economic wellbeing. Data used in the study spans from 2001 to 2015 and it is sourced from the World Bank (See Table 4). The analysis includes 24 selected countries² in sub-Saharan Africa. Uniformity and availability of data informs this choice of time and study sample. The study collects data on the variables over time; hence, the statistical method engaged in the study is panel data analysis with the use of generalized methods of moment (GMM).

² Burkina Faso, Burundi, Cabo Verde, Cameroon, Chad, Congo Democratic Republic, Eritrea, Eswatini, Ethiopia, Ghana, Lesotho, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Niger, Nigeria, Rwanda, Sao Tome, Senegal, South Africa, Sudan.

 Table 4: Data description

Statistical Indicators	Label	Unit/Description	Source	
Female Labour Force Participation	FLFP	Labour force participation rate, female (% of female population ages 15+)	WDI	
Maternal mortality rate	MM	Maternal mortality ratio (modelled estimate, per 100,000 live births)	WDI	
Female Secondary School Enrolment	SES	School enrolment, secondary, female (% gross)	WDI	
Gross Domestic Product (GDP) per capita	GDPC	GDP per capita, PPP (constant 2010 international \$)	WDI	
Proportion of seats held by women in national parliament	PSW	Proportion of seats held by women in national parliaments (%)	WDI	

Note: WDI represents World Bank Indicator

3.1 Model Specification

The neoclassical growth model (Solow, 1956), which is widely used, has been modified in different patterns for various measurements. The empirical approach adopted in this study also follows suit. Hence, following Bassanini *et al.* (2001), Tiwari and Mutascu (2011), Pelinescu (2015) and Ogundari and Awokuse (2018), this study states the augmented function as:

$$Y = f(H, L, V) \tag{1}$$

Where Y is GDP per capita; H denotes the vector of human capital; health (maternal mortality rate) and education (secondary school enrolment ratio) defined as H = MM, SES; L denotes female labour force participation; V represents the proportion of seats held by women in national parliament defined as V = PSW. The apriori expectation in this study explains that where women have access to good healthcare, adequate education and productive resources through the labour market, and possess

the power to make economic and political decisions, it brings about improvement in the well-being of the economy. Our model is thus stated as follows:

$$GDPC_{t} = \beta_{0} + \beta_{1}GDPC_{it-1} + \beta_{2}MM_{it} + \beta_{3}SES_{it} + \beta_{4}FLFP_{it} + \beta_{5}PSW_{it} + \beta_{6}DTIME_{it} + \varepsilon_{it}$$

$$(2)$$

Here, gdpc is gross domestic product per capita, flfp is female labour force participation, ses is female secondary school enrollment, mm is maternal mortality, psw is proportion of seat occupied by women at national parliament, dtime is the year dummies. Here, i=1, 2, ... N and t=1, 2, ... T. β_0 is constant while $\beta_1, \beta_2, \beta_3, \beta_4$ and β_5 are partial slope co-efficient and ε_i is the stochastic term which is expected to be independent and identically distributed (IID). Equation 2 implies that economic wellbeing is a function of its lag, improvement in female health care, female education, female labour force participation, women's decision making power, events over time and error term.

3.2 Generalized Method of Moments (GMM)

The model in this study is a dynamic panel model. A common problem with dynamic panel model specification is that the lagged term of the regressand among the regressors correlates with the error term and this causes endogeneity bias, since the regressand is a function of the error term (Baltagi, 2008). GMM estimation, known for its consistent estimation, is usually used to solve the endogeneity problem. GMM, introduced by Hansen (1982), makes use of orthogonality conditions to allow for efficient estimation in the presence of heteroscedasticity. The two types of GMM are the original estimator which is usually referred to as difference GMM and which could either be a one-step or two-step estimation (Arellano and Bond, 1991; Hayashi, 2000; Bond, 2002; Baum *et al.*, 2003), and the augmented estimator usually referred to as

the system GMM, which could be also be either a one-step or two-step estimation (Arellano and Bover 1995; Blundell and Bond, 1998; Bond, 2002). This study makes use of the two-step system GMM so as to obtain estimates that are more efficient and robust to heteroscedasticity and autocorrelation (Roodman, 2009). In addition, xtabond2 estimator is used in this study as it makes two-step estimation robust and more efficient. Two specification tests—Hansen test and autocorrelation—are used to assess the consistency of the system GMM estimator. While the former checks for overall validity of the instruments, the latter checks for the serial correlation of the error term. The model will only be supported if we fail to reject the null hypotheses of these tests (Arellano and Bond, 1991; Arellano and Bover, 1995; Blundell and Bond, 1998; Roodman, 2014; Osabuohien *et al.*, 2015; Adeleye *et al.*, 2017).

Chapter 4

PRESENTATION AND DISCUSSION OF RESULTS

This section presents and discusses tables which reveal the results from our regression analyses.

Table 5 provides the results from our estimated model. The coefficient of the lagged variable; $GDPC_{it-1}$, is significant. This confirms that the model is dynamic. The autocorrelation test, particularly the AR2 test, shows an absence of serial correlation. The over-identification Hansen test result also confirms that the instruments are valid and not over-identified. Thus, the model is supported and the results are found to not be ambiguous.

Dependent variable (lngdpcit)		
Variables	Coefficient	
lngdpc _{it-1}	0.8539***	
Lnses	0.0971^{***}	
Lnflfp	-0.1287**	
Lnmm	-0.0316*	
Lnpsw	0.0044	
Constant	1.5099***	
No. of Observations	336	
Time Dummies	Yes	
Wald chi2(5)	4148	
Group/Instruments	24/29	
AR(2)	0.341	
Hansen Statistics	0.529	

Table 5: Dynamic Panel GMM Result for Sub-Saharan Africa

Note: ***, ** and * denote 1%, 5% and 10% significance rejection levels respectively. P-values are reported for AR(2) and Hansen statistic. Source: Author's computations Table 5 shows that the relationship between female education and economic wellbeing is positive and significant, with a percentage increase in female school enrolment resulting in 0.0971% increase in the GDP per capita of sub-Saharan Africa. The outcome here resonates with the studies of Hill and King (1993, 1995), Schultz (1994, 1995), Forbes (2000), Knowles et al. (2002), Li and Liang (2010), Ogundari and Abdulai (2014), and Pegkas and Tsamadias (2014). This implies that female education is important to the growth and development of the sub-Saharan African region (Klasen, 2002). Women having access to education has several important implications. More female education generally encourages higher educational attainment of the members of the family, improves family formation, and health status of the household as they are more informed about how to prevent infections and diseases (Blum, 2007). Education helps to improve the lives of women as it makes them literate and more resourceful, and earns them access to the labour force (Lisaniler and Bhatti, 2005; Guven-Lisaniler et al., 2018; Osundina, 2019). It also helps them earn more income. As the volume of income in the care of women increases, it gives rise to an improvement in their health and education as well as the health, nutrition and education of their children (Thomas, 1990; Caldwell and Caldwell, 1991; Heaton, Forste, Hoffmann and Flake, 2005; Gonzales et al., 2015; Agriculture for Nutrition and Health, 2018). This scenario explains the human capital theory in the case of Sub-Saharan Africa.

This study observes an inverse relationship between female labour force participation and economic well-being. We experience a negative and statistically significant relationship between the variables over the investigated period in the Sub-Saharan African countries generally. Table 5 reveals that a percentage increase in the female labour force participation rate results in 0.1287% decrease in the GDP per capita of Sub-Saharan Africa. This is consistent with the findings of Esteve-Volart (2004), Teignier and Cuberes (2014), Verick (2014), and Cuberes and Teignier (2015). According to Ortiz-Ospina and Sandra Tzvetkova (2017), a U-shape expresses the relationship that exists between the global female labour force participation and GDP per capita in a cross-section, explaining that negative correlation exists within Africa, with the poorest countries having the highest participation rates.

The plausible logic behind our result could be linked to the level of involvement of women in the labour force. Women do not have access to decent and productive employment. They tend to be overrepresented in informal work and unpaid jobs. This could, in one way, be attributed to a situation whereby women work as unpaid family workers in market-oriented establishments owned by men. It could also be attributed to their educational level which only affords most of them the lower strata of the labour force and earns them lower pay. This scenario explains the overcrowding effect in Sub-Saharan Africa. Women are employed in wage employment brought about by exportoriented, labour-intensive manufacturing and services from large scale traditional and non-traditional agricultural production, but they are usually underrepresented in wage employment brought about by capital-intensive industries (Gunluk-Senesen and Senesen 2011; Kabeer, 2016). This also explains the discrimination theory in the case of sub-Saharan Africa.

There is a gender pay gap, a wage discrimination that affects growth (Seguino, 2000). Considering the opportunities in the labour market, women earn on average 20% less than men for the same job (Verick, 2018). This deterioration in the income distribution results from a shift in economic paradigm. Even when women work, there is a probability that they still live in poverty because they earn less than their expenses. The earnings and employment of women boost their bargaining power at home (Haddad *et al.*, 1997; Thomas, 1997; Klasen and Wink, 2003; Dedeoglu, 2011), and benefits not only the women themselves, but also has a growth-enhancing effect on the economy.

Women face discrimination and violence at workplaces. The impact of the minority females in the formal labour force are not significant enough to contribute meaningfully to the wellbeing of the economy as 85% of informal employment take place in the informal sector, while the remaining take place in the formal sector and households. Globally, the level of informal employment is 50.5%, excluding agriculture. In Africa alone, the share of informal employment is as high as 86% (ILO, 2018). Higher educational attainment of women is considered an important factor that could help women gain access to quality employment and thus positively influence their wages (Verick, 2014).

Gender inequality is another significant issue in female labour participation rate. Gender inequality which is capable of influencing economic outcomes through different channels also has to do with this outcome (Elborgh-Woyteket *et al.*, 2013). Our statistics show that except for East Africa, there is a decrease in the female labour force participation in Sub-Saharan African within the period of 2001 and 2015, and gender inequality in labour force participation exists within the same period. Our result is consistent with the findings of Costa *et al.* (2009), Duflo (2012), Elveren (2014), Teignier and Cuberes (2014), Gonzales *et al.* (2015), and Elgin and Elveren (2019), all of whom report the existence of negative relationships between gender inequality and per capital GDP, and between income inequality and economic growth. The World Economic Forum (2017) also reveals a correlation between gender equality and GDP per capita. This negative relationship between female labour force participation and economic well-being validates the discrimination theory and overcrowding hypothesis.

Maternal mortality rate is the indicator for female health status. Lower mortality rate is connected to females having access to adequate health care resources. The sign of the maternal mortality rate is negative and significant. The result from table 5 reveals that a percentage decrease in the maternal mortality rate results in 0.0316% increase in the GDP per capita of sub-Saharan Africa, thus demonstrating an indirect relationship between maternal mortality rate and economic well-being. It shows that appreciable health care resources are supplied to cater for the health of women. Policies made to cater for women's are effective and resources devoted to women's health appreciably supplied during the period investigated. We interpret this to mean that women have access to good healthcare facilities and they contribute to the economic well-being of sub-Saharan Africa. This result implies that women have access to good healthcare resources and explains the reduction in the number of pregnancy-related deaths among women during the period under consideration.

The indicator connected to the political empowerment of women is the proportion of seats held by women in national parliament. This study emphasizes it as women's access to power to make economic and political decisions. A percentage increase in the female parliamentarians brings about 0.0044% in economic well-being, revealing that a positive relationship exists between this variable and economic well-being, but the relationship is not significant. According to the global gender gap index (2017), gender gap is still much visible in sub-Saharan Africa, and according to the World Economic Forum (2013), women only occupy around 20% of political positions and

leadership roles when compared with men. This percentage is lower than one-third of the decision-making board. Hence, women are not well represented in the positions where decisions on national affairs are made. This percentage which increased to 23% in year 2018 (SDG Report, 2018) is still low. Kabeer (2010) states that as long as females remain half of the population, they are entitled to at least half of the parliamentarian seats. Therefore, gender inequality exists since seats reserved for women are less than half.

The findings from the relationship between female economic participation, female political participation, and economic well-being stir up our curiosity to go further into investigating the relationship at the sub-regional level, as the sign revealed is not as expected for the former and there is insignificant relationship for the latter. According to Standing (1981), because there are variances in the level, patterns and trends within countries and between countries, any generalization made about participation of female in the labour force is likely to be ambiguous. We have already established that there are differences (Table 3). These differences are revealed in the trend of development in the sub-regions—West Africa³ (WA), South Africa⁴ (SA), East Africa⁵ (EA) and Central Africa⁶ (CA). We dig deeper to reveal these changes in the empowerment indicators by examining the relationship that exists between these variables and the economic well-being for each of these sub-regions, the findings of which are recorded in table 6.

³ Burkina Faso, Cabo Verde, Cameroon, Chad, Ghana, Mali, Mauritania, Niger, Nigeria, Senegal.

⁴ Eswatini, Lesotho, Malawi, Mozambique, South Africa.

⁵ Burundi, Eritrea, Ethiopia, Madagascar, Mauritius, Rwanda, Sudan.

⁶ Congo, Dem. Republic, Sao Tome and Principe.

Dependent variable (lngdpc _{it})	Coeficients			
Independent variables	WA	SA	EA	CA
lngdpc _{it-1}	0.6667^{***}	1.0376***	0.994***	1.027^{***}
Lnses	0.1795^*	-0.0579**	0.1044^{*}	0.0821^{**}
Lnflfp	-0.3434*	-0.0693**	-0.9173*	0.0038
Lnmm	-0.0257**	-0.0926**	-0.4862*	0.0043
Lnpsw	-0.0650**	0.0695^{**}	0.0453^{**}	0.1942
Constant	3.7125^{*}	0.463	12.74^{**}	0.0041
Number of observation	135	72	99	30
Wald chi2(5)	2572	2636	1426	4740
Groups/Instruments	24/29	24/29	24/29	24/29
AR2	0.571	0.157	0.391	0.381
Hansen Statistics	0.427	0.623	0.659	0.516

Table 6: GMM results for the sub-regions

Note: ***, ** and * denote 1%, 5% and 10% significance rejection levels respectively. P-values are reported for AR(2) and Hansen statistic. SSA, WA, SA, EA, CA represent Sub-Saharan African countries, West African countries, South African countries, East African countries and Central African countries respectively. Source: Author's computations

The results revealed in table 6 show that the relationship between female education and economic well-being is positive and significant for West Africa, East Africa and Central Africa, and negative and significant for the Southern African region. Generally, there is improvement in education by regions in SSA between the years 2001 and 2015 (See Figure 2a). Statistical findings from the descriptive analysis show that gender gap exists in education in Central African and West African regions (See Figure 2b). The indicator for health is as expected for all the sub-regions, except for Central Africa. There is a positive relationship between the improvement of women's health and the economic well-being of South Africa, East Africa and West Africa, but a negative relationship is found in Central Africa. Statistical findings from the descriptive analysis show that there is great improvement in the health of women in the SSA region (see Figure 3). The relationship between female participation and economic well-being across the sub-regions is negative analysis, there is a big gender gap difference by region during the investigated period (see Figure 4a and 4b). There are mixed results concerning the improvement. These mixed results emphasize the differences in the sub-regions. While the gender gap decreased in West Africa and East Africa, it increased slightly in Central and South Africa (see Figure 4b). The sign for the indicator for decision-making power of the women is as expected for Southern Africa, East Africa and Central Africa, positive and significant, except for the Central African region. The relationship is positive and significant for South Africa and East Africa. The relationship is positive for Central Africa, but not significant. The relationship is negative and significant for West Africa. Statistical findings from the descriptive analysis show that there is an improvement in the representation of women in the national parliament in SSA during the period of investigation. The improvement is great in East Africa (see Figure 5) compared to other sub-regions.

The empirical results revealed in table 6 and analysis from the descriptive statistics confirm that there are mixed results and sub-regional differences as regards gender gap and improvement during the years of investigation in Sub-Saharan Africa. These differences need to be put into consideration in policy recommendations. Generally, it can be concluded that education has significant impact on the economic wellbeing of Sub-Saharan African Countries. And in the same vein, from the findings from both regional and sub-regional, conclusion can be drawn that female participation in the labour force has a negative impact on the economic well-being. Apart from the fact that this finding is totally against our apriori expectation, the statement that female participation in the labour force does not contribute to economic well-being of a nation is not consistent with the theory. We follow the point made by Hunt and Kasynathan (2001) that it is impossible to arrive at gender equality or women empowerment if focus is concentrated on a single factor alone. And according to Tansel (2001), Ejaz

(2007), and Angel-Urdinila and Haimovich (2009), increase in the level of education creates employment and job opportunities and further increases the rate of female labour force participation. Improvement in female education increases their chances of being employed (Cazes and Verick, 2013; World Bank, 2014; Shaheen *et al.*, 2015, Abena *et al.*, 2017; ILO, 2017). We thus introduce interaction variables between the indicators for social empowerment and economic empowerment in order to check their relationship with economic well-being. This is to investigate the relationship between the labour participation of educated and healthy females and the economic well-being of sub-Saharan African region. The result for this is revealed in table 7.

Dependent variable (Ingdpcit)			
Variables	Coefficient		
lngdpc _{it-1}	0.3996***		
Lnselfp	0.1062^{***}		
Lnmmelfp	-0.4171***		
Lnpsw	0.0599^{***}		
Constant	7.8808***		
No. of obs.	336		
Wald chi2(4)	1837		
Groups/Instruments	24/18		
AR(2)	0.275		
Hansen Statistics	0.158		

Table 7: Dynamic Panel GMM Result with interaction terms for Sub-Saharan Africa

Note: ***, ** and * denote 1%, 5% and 10% significance rejection levels respectively. P-values are reported for AR(2) and Hansen statistic. Source: Author's computations

Results from table 7 show a positive and significant relationship between the interaction variables and the well-being of the economy. A percentage increase in the number of educated females employed in the labour market brings about 0.1062% increase in the GDP per capita of sub-Saharan Africa. This implies that where educated females are absorbed into the labour force, it increases the economic well-being of the

region. This is significant and in line with the findings of Psacharopoulos and Tzannatos (1989), Yang (1992), and Abena *et al.* (2017). The more educated women become, the more they are able to gain access to productive resources (Lisaniler and Bhatti, 2005; Guven-Lisaniler *et al.*, 2018; Osundina, 2019). Women become financial independent when employment is provided, and this helps them to gain autonomy and freedom (Boserup, 1970; Charusheela, 2003). Their education earns them good position and helps improve their placement at workplaces. This definitely is a plus to them since their pay will also increase. This increase in their take-home will in effect boost economic well-being as the increase in their income level will help their financial status and thereby improve the quality of lives of the family members, especially the nutrition, health and education of their children (Thomas, 1990, 1997).

Table 7 also reveals that adequate supply of healthcare facilities to cater for the health of women participating in the labour force increases economic well-being as the sign portrays. This is also significant. The result from the table 7 reveals that a percentage decrease in the death rate of pregnant women present in the labour force results in 0.4171% increase in the GDP per capita of sub-Saharan Africa. Reduction in the number of death of women implies that more healthcare facilities are being supplied and women have adequate access to the facilities. This could be in terms of the resources being brought closer for easy accessibility by pregnant women, antenatal drugs being made available to pregnant women free of charge or at affordable prices, antenatal care facilities and health practitioners being made readily available for pregnant women on demand during antenatal visits and check-ups, access to improved sanitation and clean water, and provision of healthcare insurance, among others. These all contribute to a reduction in the mortality rate. Improvement in women's health has a significant and positive relationship with economic well-being. Apart from the fact that women with good health status have the opportunity to enter formal employment (Osundina, 2019), healthy women participating in the labour force bring about improvement in economic well-being. Interlinkages like this is emphasized by Canning and Schultz (2012). Healthy women with good financial status are able to cater for their family members, especially the nutrition, health and education of their children, thus improving the human capital in the country.

According to Chopra *et al.* (2009), increase in maternal mortality will bring about more loss of earning potential and intellectual development, increase in care burden on especially elderly people, and by implication, a high burden on the country at large. To feminists, increase in maternal mortality is an indication of gender inequality. Therefore, reduction in maternal mortality rate will bring about relief in these aspects, enhance economic empowerment and bring about economic well-being. This is also consistent with the study of Stenberg *et al.* (2014) where a reduction in mortality is reported to result in potential increase in participation and productivity. Our result also implies that women's health is an important determinant of economic well-being in SSA, in total and sub-regions. Conclusively, the interaction between maternal mortality and economic well-being shows that an inverse relationship is experienced over the current study period, suggesting that adequate access to medical and healthcare facilities dedicated to female health reduce maternal mortality rate and further translates into more supply of women in the labour force which engenders an increase in economic well-being at large.

The indicator for decision-making power of women is also positive and significant. The result from table 7 also reveals that a percentage increase in the parliamentary seat for women results in 0.0599% increase in the GDP per capita of sub-Saharan Africa. This is consistent with the study of Jha and Sarangi (2018) which shows a causal and negative relationship between the presence of women in parliament and corruption level, thereby contributing positively to economic growth (World Bank, 2001; Huq, 2009). The presence of women at decision-making positions also help to improve the lives of women as issues involving women are not likely to be left out during deliberations. The presence of women in positions of power also provides balanced perspectives on many issues. It is also said that women are less prone to corrupt practices *vis a vis* their male counterpart, when in power (World Bank, 2001; Sung, 2003; Jha and Sarangi, 2018).

The presence of women in positions of power thus promote faster growth and contribute to the well-being of countries (Swamy *et al.*, 2001; Huq, 2009). In Rwanda, for instance, majority of the members of the national parliament are female. The country was reported to have low level of corruption when compared to other African countries, and the country was ranked the 5th cleanest in sub-Saharan Africa and the 55th cleanest in the world (Agutamba, 2014; Transparency International, 2014). The cultural differences in different geographical environment (Psacharopoulos and Tzannatos, 1989) and sub-regional differences in sub-Saharan Africa has to do with the level of power women have in decision-making.

Chapter 5

CONCLUSION AND POLICY IMPLICATION

A popular debate is whether women contribute more to the development of a nation where there is provision for adequate opportunities for them to develop their potentials. Women constitute nearly half of the national population. Where female human resources are well allocated and utilized, it impacts greatly on the national output. This allocation can only be efficient where women are empowered in the social, economic and political facets of the economy, and gender equality is achieved. The objective of this study is to investigate the relationship between the dimensions of women empowerment and economic and political—are investigated to reveal how they relate with economic well-being among the selected 24 countries in sub-Saharan Africa using panel data for the years 2001 and 2015. The variables employed are female labour force participation (economic empowerment), female secondary school enrollment and maternal mortality rate (social empowerment) and gross domestic product per capita (to measure economic well-being).

Results from our first analysis reveal that the more access women have to education and adequate healthcare resources, the more improved the well-being of the economy. Our findings for the case of sub-Saharan Africa show that social empowerment indicators and economic well-being exhibit a positive and significant relationship. Where girls and women are socially empowered and there is no gender-based discrimination in access to education and health care, the growth and development of the economy is impacted positively and significantly (Klasen, 2002). Our study emphasizes that where women have access to power to make decisions, it brings about political empowerment. Although our results reveal a positive relationship between the indicators concerned, it is however insignificant. For economic empowerment, female labour force participation shows a negative and significant relationship with economic well-being for the case of sub-Saharan Africa. This case in particular is not consistent with the economic theory and also negates our apriori expectation. This confirms the assertion made by Standing (1981) that generalizations about female labour force participation without taking into consideration differences that exist in the countries and between countries is likely to be misleading. In addition, we realize from the descriptive analysis that there are sub-regional differences in terms of their characteristics.

We further investigate the relationship in each of the sub-regions. The results reveal that education has a positive and significant impact on economic well-being in West Africa, East Africa and Central Africa. Findings from the sub-regions concerning the female labour force participation and economic well-being is similar to the findings from sub-Saharan Africa as a whole that female participation in the labour force decreases economic well-being. Apart from East Africa which improves virtually in almost all the areas and in turn experiences an improvement in economic well-being, the improvement in other sub-regions is skewed to one area. There are disparities in the level of improvement in all of these indicators across the region generally. This is because the level of attention and investment on each of them vary across countries and sub-regions. For instance, while a country or region improves in education as a

result of intense interest and attention given to the sector, another country or sub-region invests and improves well in another sector. Central Africa improves well in female secondary school enrolment in 2015. Lesotho, Mozambique and South Africa in the Southern Africa improve in political empowerment and economic participation in 2013, thereby narrowing their gender gap. Ivory Coast and Chad in West Africa do not improve, thus their gender gaps widen. Angola, Uganda and Ivory Coast in West Africa improve in health and survival. Rwanda in East Africa, having females as the majority at the national parliament, improves well in political empowerment. This reveals that differences do not only exist in the sub-regions of Sub-Sahara Africa, but also that differences exist between and within the countries in each of the sub-regions themselves. These differences can be cultural, environmental and political. They include but are not limited to differences in governing pattern, differences in religion, differences in culture, differences in economic structure, differences in the level of development, difference in the laws that cover the citizens, especially the women. Therefore, policies that work to improve a particular country or sub-region may not be as effective in another country or sub-region.

Lastly, we feature some interaction variables. Indicators of social empowerment (female education), economic empowerment (female participation), social empowerment (female health) and economic empowerment (female participation) were interacted and their relationship with our dependent variable checked. This is carried out to investigate the relationship educated females participating in the labour force have with economic well-being, and also the relationship healthy females participating in the labour force have with economic well-being. The results reveal a positive and significant relationship between these interaction variables and economic well-being. This implies that the presence of females with adequate educational

attainment in the labour force has a significant contribution to the well-being of the economy, and that adequate healthcare resources at the reach of women participating in the labour force have a positive and significant influence on the well-being of the economy. Therefore, healthcare resources should be made easily accessibility to women, health care insurance should be provided for women participating in the labour force, antenatal drugs should be made available to pregnant women at affordable prices or free of charge if possible, antenatal care facilities and health practitioners should be made readily available for pregnant women on demand during antenatal visits and check-ups, there should be improved sanitation, safe and clean water should be made available nearby, and there should be provision of healthcare insurance and facilities to cater for all females.

Conclusively, as much as female education is important, availability and accessibility of sufficient healthcare resources and provision of productive resources and decisionmaking positions for females are all vital. Therefore, it is not just enough to provide adequate education and/or supply health care resources for females. Rather, adequate opportunities to develop and showcase their potentials for the benefit of the economy should also be provided. There should be equal access to productive resources, healthcare facilities, formal employments and decision-making mechanisms. The indicator for decision-making power of the women is also positive and significant, hence women should be allowed access to positions of power that will also allow them to make economic and political decisions. The existence of cultural, environmental and regional differences and challenges peculiar to various sub-regions or countries in sub-Saharan African should not be allowed to create burden for women, but rather government and international bodies should rise to further challenge the situation. Our contribution to the literature is expressed as follows. Female access to education, healthcare resources, productive resources and decision-making positions are all crucial and should be attended to simultaneously. Policymakers should make sure that where females possess adequate educational qualification for their desired positions, they should not be denied. There should be no gender-based discrimination in the wages. Adequate medical attention should be given to females, most especially the pregnant women and nursing mothers in the labour force. Females have the capability to make economic and political decisions and should be given chances to showcase their potentials. The process of empowerment should be absolute, be it socially, economically and politically. This will aid the utilization of female resources and potentials for the benefit of societies and the global communities.

Klasen (2002) asserts that gender inequality in education affects long-term economic growth and the effects are visible in sub-Saharan Africa. The study further suggests the promotion of gender equality in education which invariably contributes to economic prosperity and efficiency, and thus stimulates lower fertility and mortality rates. With reference to the analyses conducted in this study, and giving consideration to the period 2001 to 2015, we hereby make the following recommendations based on our findings:

 The process of empowerment should be absolute, socially, economically and politically. As much as government investment is necessary in the social empowerment of women, investment is also necessary and important in the economic and political empowerment of women. Empowerment should thus be comprehensive enough to reach all dimensions of women empowerment. Investment in empowerment of women should feature simultaneously in social empowerment, economic empowerment and political empowerment. The implication of this is that when educated and healthy females get access to the labour markets and decision-making positions, they positively affect the economic well-being and development of the sub-Saharan African region.

- 2. Governments should address gender-oriented goals in education by creating avenues whereby education can be accessed more easily by females. Females having access to adequate education helps in overall development as it enables them to keep up with the rapid pace of technological transformation affecting all facets of the economy. Where females face no barrier as to the level of educational attainment, it will improve their access to quality employment and earn them better income.
- 3. Governments should not relent in the effort to make healthcare resources available and accessible for females. They should also intensify their efforts to address gender-oriented goals in health as this has brought about positive impacts over time.
- Governments should not only invest highly in the reproductive role of women, but also in their productive role. This will encourage women to go for better jobs.
- 5. All forms of occupational segregation by sex should be removed and there should be no legal restrictions that may prevent women from working in specific jobs. As much as females have the capacity to work, they should be allowed. Governments should strengthen the law and order that kicks against occupational segregation by sex, and the oppression and exploitation of women. With this, gender-based discriminations that deny women their preferred jobs of interest will be removed and women will be able to comfortably participate in the labour force at the same rate as men.

Consequently, this will prevent overcrowding which is known to be one of the causes of reduction in women's wages.

- 6. Governments should endeavour to create more job opportunities and expand the workforce in the economy. This will reduce the over-representation of women in certain professions that usually reduce their pay. Expansion of the workforce will also allow women access to their dream jobs.
- 7. Appreciable number of seats should be deliberately reserved for women at the national parliaments. This will enhance adequate representation of women and help in properly balanced deliberations on issues affecting girls, women and men. This will also create balance in the gender representation in the chambers.
- 8. Legislation and constitutions should be amended to emphasize domestic violence against females as a crime in all countries in sub-Saharan Africa. With this, all forms of violence against females will reduce drastically to the barest minimum.
- 9. Creation of awareness on ending violence against women can help reduce violence in the society. Therefore, legislations that emphasize the curb of violence against the females should be created. This will help to encourage the fight against violence and discrimination against girls and women.
- 10. Governments, in their operations, should align with all SDGs in dealing with national affairs.
- 11. Policymakers should also take note of the differences between the sub-regions, the differences within the countries and differences among the countries in the sub-regions in SSA while addressing social and gender issues in various planning processes.

Where investment reaches all dimension of women empowerment, all circumstances which serve as road blocks for girls while growing into adulthood would reduce, and girls and women who make up half of the human resources in the economy will be well catered for. This half of economy will participate in the society, just like their male counterparts, according to their individual abilities and contribute to the development of the nation. Girls will grow into womanhood with a sense of fulfilment in living out the kind of life they desire. Females will get to attain the level of education they so wish, get access to desired health care, have access to their desired jobs, and be able to make economic and political decisions for themselves, their households, communities and nations. They will be able to make life determining choices and transform the choices into desired outcomes. With this, they will have their freedom and individual rights. No limit will exist as regards their individual human rights, responsibilities and opportunities. They would be able to participate equally with men in public arena, thereby reducing gender inequality.

The ripple effect of all this is that the number of people participating in the economy will increase, and this will bring about improvement in the skills and productivity of the country's workforce as well as bring about improvement in the well-being of the sub-Saharan region. The presence of women in the workforce increases the national economic output when they are educated, healthy and employed in decent jobs and they have the ability to make economic and political decisions. Women empowerment and gender equality builds women's ability and capability which in effect improves their condition as much as bring about economic development and economic growth, and this is the basis for feminist economics.

5.1 Area of further studies

The causes of disparities in the difference among the sub-regions can be a direction for further studies. An in-depth research may further be conducted on the impact of female participation on economic well-being controlling for each sub-region in sub-Saharan Africa. Another subject for consideration is women's power to make decisions and the impact it has on the economy's level of competitiveness, giving consideration to each sub-region and taking note of differences within and among the countries.

5.2 Limitations of the study

One of the limitations of the study is the unavailability of complete data, such as the incomplete data on the tertiary education of females in sub-Saharan Africa. Also, incomplete data was found on the senior managerial and skilled positions occupied by women. These data could have been useful to capture better the power of females in decision-making.

REFERENCES

- Abara, C. J. (2012). Inequality and discrimination in Nigeria tradition and religion as negative factors affecting gender. *Federation of International Human Rights Museums*, 1-18.
- Abena, Y. A., Fidelia Nana, A. O., & Ohemeng, W. (2017). Female labour force participation: Evidence from Ghana. International Journal of Social Economics, 44(11), 1489–1505.https://doi.org/10.1108/IJS E-06-2015-0159
- Adeleye, N., Osabuohien, E., & Bowale, E. (2017). The Role of Institutions in the Finance-Inequality Nexus in Sub-Saharan Africa. *Journal of Contextual Economics*, 137, 173-192.
- Agriculture for Nutrition and Health (2018). How Women's Empowerment Shapes Children's Schooling and Nutrition. International Food Policy Research Institute, Washington DC, USA.
- Agutamba, K. (2014). "Rwanda graft index falters but ranking unaffected". *The New Times*. Kigali, Rwanda's Leading Daily. Retrieved from https://www.newtimes.co.rw/section/read/183704
- Ahmed, J., Aurora, A., Biru, A., & Salvini, S. (2001). *Gender Issues, population and development in Ethiopia*. Central Statistical Authority, Addis Ababa.

- Alsop, R., & Heinsohn, N. (2005). *Measuring empowerment in practice: Structuring analysis and framing indicators*. The World Bank.
- Alvarez, M. L. (2013). From Unheard Screams to Powerful Voices: A Case Study of Women's Political Empowerment in the Philippines. *Seoul, Korea: Thesis*.
- Aly, H. Y., & Grabowski, R. (1990). Education and child mortality in Egypt. *World Development*, *18*(5), 733-742.
- Angel-Urdinola, D., and F. Haimovich. (2009). Will Education Alone Solve Underparticipation in Turkey? World Bank, Washington, D.C.
- Arellano, M., & Bond, S. (1991). Some tests of specification for panel data: Monte Carlo evidence and an application to employment equations. *The review of economic studies*, 58(2), 277-297.
- Arellano, M., & Bover, O. (1995). Another look at the instrumental variable estimation of error-components models. *Journal of econometrics*, 68(1), 29-51.
- Arrow, K. (1973). The theory of discrimination. Discrimination in labor markets, 3(10), 3-33.
- Arrow, K. J. (1971). Some Models of Racial Discrimination in the Labor Market. The Rand Corporation: Santa Monica, California, RM-6253-RC.

- Balatchandirane, G. (2007). Gender discrimination in Education and EconomicDevelopment: A study of Asia. Institute of Developing Economies, JapanExternal Trade Organization.
- Baliamoune-Lutz, M., & McGillivray, M. (2009). Does Gender Inequality Reduce Growth in Sub-Saharan African and Arab Countries? *African Development Review*, 21(2), 224-242.
- Baltagi, B. (2008). Econometric analysis of panel data. John Wiley & Sons.
- Barker, D. K. (2005). Beyond women and economics: Rereading "women's work". *Signs: Journal of Women in Culture and Society*, *30*(4), 2189-2209.
- Bassanini, A., Scarpetta, S., & Hemmings, P. (2001). Economic growth: the role of policies and institutions. Panel data evidence from OECD countries.
- Baum, C. F., Schaffer, M. E., & Stillman, S. (2003). Instrumental variables and GMM:Estimation and testing. *The Stata Journal*, *3*(1), 1-31.
- Bayeh, E. (2016). The role of empowering women and achieving gender equality to the sustainable development of Ethiopia. *Pacific Science Review B: Humanities and Social Sciences*, 2(1), 37-42.
- Becker, G. (1957). *The Economics of Discrimination*. Chicago: University of Chicago Press.

- Becker, G. (1971). *The Economics of Discrimination*. Chicago and London: University of Chicago Press.
- Becker, G. S. (2009). *Human capital: A theoretical and empirical analysis, with special reference to education*. University of Chicago press.

Becker, G. S. (2010). The economics of discrimination. University of Chicago press.

- Bentahar, Z. (2011). Continental Drift: The Disjunction of North and Sub-Saharan Africa. *Research in African Literatures*, 42(1), 1-13.
- Bergmann, B. R. (1971). The Effect on White Incomes of Discrimination in Employment. Journal of Political Economy 79 (2), pg.294-313.
- Bergmann, B. R. (1974). Occupational Segregation, Wages and Profits When Employers Discriminate by Race or Sex. Eastern Economic Journal 1 (2), pg.103-110.
- Berman, Y., & Phillips, D. (2004). Indicators for social cohesion. Paper submitted to the European Network on Indicators of Social Quality of the European Foundation on Social Quality, Amsterdam.
- Bhoganadam, S. D., Malini, H. & Rao, D. S. (2014). Women's Empowerment and Economic Development. EXCEL International Journal of Multidisciplinary Management Studies, 4(8), 100-107.

- Blau, F. D., & Jusenius, C. L. (1976). Economists' approaches to sex segregation in the labor market: an appraisal. Signs: Journal of Women in Culture and Society, 1(3, Part 2), 181-199.
- Blau, F. D., Simpson, P., & Anderson, D. (1998). Continuing progress? Trends in occupational segregation in the United States over the 1970s and 1980s. *Feminist economics*, 4(3), 29-71.
- Bloom, D. E., Humair, S., Rosenberg, L., Sevilla, J. P., & Trussell, J. (2014). Capturing the demographic dividend: Source, magnitude, and realization. In *One Billion People, One Billion Opportunities. Washington, DC: African Development Bank, Communications Development Incorporated.*
- Blum, R. W. (2007). Youth in sub-Saharan Africa. Journal of Adolescent Health, 41(3), 230-238.
- Blundell, R., & Bond, S. (1998). Initial conditions and moment restrictions in dynamic panel data models. *Journal of econometrics*, 87(1), 115-143.
- Bobo, L., & Gilliam, F. D. (1990). Race, sociopolitical participation, and black empowerment. *American Political Science Review*, 84(2), 377-393.
- Bodman, P., & Le, T. (2013). Assessing the roles that absorptive capacity and economic distance play in the foreign direct investment-productivity growth nexus. *Applied Economics*, *45*(8), 1027-1039.

- Bond, S. R. (2002). Dynamic panel data models: a guide to micro data methods and practice. *Portuguese economic journal*, *1*(2), 141-162.
- Boserup, E., Tan, S. F., & Toulmin, C. (2013). Woman's role in economic development. Routledge.
- Bourguignon, F., & Morrisson, C. (2002). Inequality among world citizens: 1820-1992. American economic review, 92(4), 727-744.
- Buvinic, M. (1986). Projects for women in the Third World: Explaining their misbehavior. *World Development*, 14(5), 653-664.
- Caldwell, J., & Caldwell, P. (1991). What have we learnt about the cultural, social and behavioural determinants of health? From selected readings to the first Health Transition Workshop. *Health Transition Review*, 3-19.
- Cazes, S., & Verick, S. (2013). The labour markets of emerging economies: Has growth translated into more and better jobs? Springer. https://doi.org/10.1057/9781137325358
- Chambers, R. (1983). Whose Reality Counts? Putting the First Last. London: Longmans.
- Charles, I. E., & Ikenna, M. A. (2009). Electoral process and gender discrimination in Nigeria: A Case study of 2003 and 2007 general elections. *Journal of sustainable Development in Africa*, 10(4), 113-128.

- Charusheela, S. (2003). "Empowering Work? Bargining Models Reconsidered." In *Toward a Feminist Philosophy of Economics*, ed. Drucilla K. Barker and Edith Kuiper, 2870303. London: Routledge.
- Chopra, M., Lawn, J. E., Sanders, D., Barron, P., Karim, S. S. A., Bradshaw, D., ... & Tollman, S. M. (2009). Achieving the health Millennium Development Goals for South Africa: challenges and priorities. *The Lancet*, 374(9694), 1023-1031.
- Costa, J., Silva, E., & Vaz, F. (2009). The role of gender inequalities in explaining income growth, poverty and inequality: evidence from Latin American countries (No. 52). Working Paper, International Policy Centre for Inclusive Growth.
- Cox, J. (1998). An introduction to Marx's theory of alienation. *International Socialism*, 41-62.
- Cuberes, D., & Teignier, M. (2015). *How costly are labor gender gaps? Estimates for the Balkans and Turkey.* The World Bank.
- Cunningham, K., Ruel, M., Ferguson, E., & Uauy, R. (2015). Women's empowerment and child nutritional status in South Asia: a synthesis of the literature. *Maternal* & child nutrition, 11(1), 1-19.
- Daly, K. (2007). Gender Inequality, Growth and Global Ageing. Goldman Sachs, Global Economics Paper No. 154. file:///C:/Users/DC/Downloads/Genderinequality-Growth-and-Global-Aging.pdf

- Dedeoglu, S. (2011). Gendering industrial subcontracting work: A qualitative study of garment ateliers in Istanbul. *Asian Women*, 27(3), 25-51.
- Dilli, S., Carmichael, S. G., & Rijpma, A. (2019). Introducing the historical gender equality index. *Feminist Economics*, 25(1), 31-57.
- Doğan, B., & Akyüz, M. (2017). Female labor force participation rate and economic growth in the framework of kuznets curve: evidence from Turkey. *Review of Economic and Business Studies*, 10(1), 33-54.
- Duflo, E. (2012). Women empowerment and economic development. *Journal of Economic literature*, 50(4), 1051-79.
- Edgeworth, F.Y. (1922). Equal Pay to Men and Women or Equal Work. Economic Journal 31: 431-457.Extracted from World Bank President Zoellick's speech at the MDG3 conference, Copenhagen, 25 March, 2010.
- Ejaz, M. (2007). Determinants of female labor force participation in Pakistan an empirical analysis of PSLM (2004-05) micro data. *The Lahore Journal of Economics*, 12(S), 203-235.
- Elborgh-Woytek, Katrin, Monique Newiak, Kalpana Kochhar, Stefania Fabrizio, Kangni Kpodar, Philippe Wingender, Benedict Clements, and Gert Schwartz, 2013, "Women, Work, and the Economy: Macroeconomic Gains from Gender Equity." Staff Discussion Note, SDN/13/10, (Washington: International Monetary Fund).

- Elgin, C., & Elveren, A. Y. (2019). Informality, Inequality, and Feminization of Labor. Political Economy Research Institute, University of Massachusetts Amherst.
- Elveren, A. Y. (2014). Women's labour force participation and pay inequality: evidence from panel cointegration. *Applied Economics Letters*, 21(12), 862-865.
- Ester, B. (1970). Women's Role in Economic Development. London: George Allen and Unwin.
- Esteve-Volart, B. (2000). *Sex discrimination and growth* (No. 0-84). International Monetary Fund.
- Esteve-Volart, B. (2004). Gender discrimination and growth: Theory and evidence from India. LSE STICERD Research Paper No. DEDPS42.
- Figart, D., Mutari, E., & Power, M. (2003). Breadwinners and Other Workers: Gender and Race-Ethnicity in the Evolution of the Labor Force. Women and the Economy: a reader, E. Mutari and DM Figart (eds.), Armonk, NY: ME Sharpe, Inc, 39-53.
- Filmer, D. (1999), 'The Structure of Social Disparities in Education: Gender and Wealth', Policy Research Report on Gender and Development Working Paper series, No. 5, World Bank, Washington DC.

- Forbes, K. J. (2000). A reassessment of the relationship between inequality and growth. *American economic review*, *90*(4), 869-887.
- Golla, A. M., Malhotra, A., Nanda, P., Mehra, R., Kes, A., Jacobs, K., & Namy, S. (2011). Understanding and Measuring Women's Economic Empowerment. Deinition, Framework, Indicators. Washington DC: International Centre for Research on Women.
- Gonzales, C., Jain-Chandra, S., Kochhar, K., Newiak, M., & Zeinullayev, T. (2015). Catalyst for change: empowering women and tackling income inequality. *FMI*. *http://www.imf.org/external/pubs/ft/sdn/2015/sdn1520.pdf*.
- Gunluk-Senesen, G., & Ozar, S. (2001). Gender-based occupational segregation in the Turkish banking sector", in *The Economics of Women and work in the Middle East and North Africa Ed. Cinar, M (Elsevier, Amsterdam) pp 247-267.*
- Gunluk-Senesen, G., & Senesen, U. (2011). Decomposition of labour demand by employer sectors and gender: Findings for major exporting sectors in Turkey. *Economic Systems Research*, 23(2), 233-253.
- Guterres, A. (2018). The Sustainable Development Goals Report. Retrieved on 6/5/19 from https://unstats.un.org/sdgs/report/2018
- Guven-Lisaniler, F., Tuna, G., & Nwaka, I. D. (2018). Sectoral choices and wage differences among Nigerian public, private and self-employees. International Journal of Manpower, 39(1), 2–24. https://doi.org/ 10.1108/IJM-01-2016-0002

- Haddad, L., Hoddinott, J., & Alderman, H. (1997). Intrahousehold resource allocation in developing countries: models, methods and policy, Johns Hopkins University Press, USA.
- Hakura, M.D.S., Hussain, M.M., Newiak, M., Thakoor, V., & Yang, M.F. (2016). Inequality, Gender Gaps and Economic Growth: Comparative Evidence for Sub-Saharan Africa. IMF Working Paper 16/111.
- Hansen, L. P. (1982). Large sample properties of generalized method of moments estimators. *Econometrica: Journal of the Econometric Society*, 1029-1054.
- Harding, S. G. (Ed.). (2004). *The feminist standpoint theory reader: Intellectual and political controversies*. Psychology Press.
- Hayashi, F. 2000. Econometrics. Princeton, NJ: Princeton University Press.
- Heaton, T. B., Forste, R., Hoffmann, J. P., & Flake, D. (2005). Cross-national variation in family influences on child health. *Social Science & Medicine*, *60*(1), 97-108.
- Hill, M. A., & King, E. (1995). Women's education and economic well-being. Feminist Economics, 1(2), 21-46.
- Hill, M. A., & King, E. M. (1993). Women's education in developing countries: An overview. *King, Elizabeth M. and M. Anne Hill, eds*, 1-50.

- Holzner, B., Neuhold, B., & Weiss-Ganger, A. (2010). Gender Equality and Empowerment of Women Policy Document. *Federal Ministry for European* and International Affairs, Vienna.
- Hunt, J., & Kasynathan, N. (2001). Pathways to empowerment? Reflections on microfinance and transformation in gender relations in South Asia. *Gender & Development*, 9(1), 42-52.
- Huq, M. M., Clunies-Ross, A., & Forsyth, D. (2009). Development economics. McGraw Hill.
- Ijaiya, G. I. (2000). Feminization of poverty in nigeria: a case study of households in Ilorin Metropolis. *African Journal of Business and Economic Research*, 1(2), 141-148.
- International Labour Organzation (ILO). (2014). Skills for employment policy brief—The gender divide in s kills development: Progress, challenges and policy options for empowering women. Retrieved from https://www.ilo.org/ wcmsp5/groups/public/---ed_emp/----ifp_skills/documents/publication/wcms _244380.pdf
- International Labour Organzation (ILO). (2017). Towards a better future for women and work: Voices of wo men and men. ILO-Gallup Report. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/---publ/documents/publication/wcms_546256.pdf (Access date: 12/6/2019).

- International Labour Organzation (ILO). (2018). World employment and social outlook: Trends for women 2018—Global snapshot. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---dgreports/---dcomm/----publ/documents/publication/wcms_619577.pdf (Access date: 16/08/2019).
- Jaggar, A. M. (2004). Feminist politics and epistemology: The standpoint of women. The feminist standpoint theory reader: Intellectual and political controversies, 11(7), 55-66.
- Jennings, Ann. 1993. "Public or Private? Institutional Economics and Feminism." In Beyond Economic Man: Feminist Theory and Economics, ed. Marianne A. Ferber and Julie A. Nelson, 111–30. Chicago: University of Chicago Press.
- Jha, C. K., & Sarangi, S. (2018). Women and corruption: What positions must they hold to make a difference? *Journal of Economic Behavior & Organization*, 151, 219-233.
- Kabeer, N. (1994). Reversed realities: Gender hierarchies in development thought.London; New York: Verso.
- Kabeer, N. (1999). Resources, agency, achievements: Reflections on the measurement of women's empowerment. *Development and change*, *30*(3), 435-464.
- Kabeer, N. (2005). Gender equality and women's empowerment: A critical analysis of the third millennium development goal 1. *Gender & Development*, 13(1), 13-24.

- Kabeer, N. (2010). Women's empowerment, development interventions and the management of information flows. *ids Bulletin*, *41*(6), 105-113.
- Kabeer, N. (2012). Women's economic empowerment and inclusive growth: labour markets and enterprise development. *International Development Research Centre*, 44(10), 1-70.
- Kabeer, N. (2016). Gender equality, economic growth, and women's agency: the "endless variety" and "monotonous similarity" of patriarchal constraints. *Feminist Economics*, 22(1), 295-321.
- Kanbur, R., & Squire, L. (1999). The Evolution of Thinking about Poverty: Exploring the Interactions" mimeographed document. World Development Report Office, Washington DC World Bank.
- Klasen, S. (1999). Gender Inequality Reduce Growth and Development? Evidence from Cross-Country Regressions, World Bank, Washington, DC.
- Klasen, S. (2002). Low schooling for girls, slower growth for all? Cross-country evidence on the effect of gender inequality in education on economic development. *The World Bank Economic Review*, *16*(3), 345-373.
- Klasen, S. (2003), 'Malnourished and Surviving in South Asia, Better Nourished and Dying Young in Africa? What Can Explain this Puzzle?', in FAO (ed.), *Measurement and Assessment of Food Deprivation and Undernutrition*, FAO, Rome, pp. 283–86.

- Klasen, S., & Lamanna, F. (2003). The Impact of Gender Inequality in Education and Employment on Economic Growth in the Middle East and North Africa, Mimeo, University of Gottingen.
- Klasen, S., & Lamanna, F. (2009). The impact of gender inequality in education and employment on economic growth: new evidence for a panel of countries. *Feminist economics*, 15(3), 91-132.
- Klasen, S., & Wink, C. (2003). "Missing women": Revisiting the debate. *Feminist Economics*, 9(2-3), 263-299.
- Knowles, S., Lorgelly, P. K., & Owen, P. D. (2002). Are educational gender gaps a brake on economic development? Some cross-country empirical evidence. Oxford economic papers, 54(1), 118-149.
- Koyuncu, Y. J., Yılmaz, R., & Ünver, M. (2016). The relationship between female labor force participation and labor productivity: Panel data analysis. *Eskişehir Osmangazi Üniversitesi İİBF Dergisi*, 11(2), 237-249.
- Li, H., & Liang, H. (2010). Health, education, and economic growth in East Asia. *Journal of Chinese Economic and Foreign Trade Studies*, *3*(2), 110-131.
- Lisaniler, F. G., & Bhatti, F. (2005). Determinants of female labour force participation: A study of North Cyprus. Review of Social, Economic and Business Studies, 5(6), 209–226.

- Malhotra, A., Schuler, S. R., & Boender, C. (2002). Measuring Women's Empowerment as a Variable in International Development. Washington DC, USA: World Bank Bank's Social Development Group..
- Malhotra, A., Schulte, J., Patel, P. & Petesch, P. (2009). Innovation for Women's Empowerment and Gender Equality. International Center for Research on Women (ICRW) North Washington, D.C.
- Mayer-Foulkes, D. (2001). Convergence clubs in cross-country life expectancy dynamics Discussion Paper No. 2001/134. World Institute for Development Economics Research, United Nations University.
- Mbilinyi, M. (1984). Research priorities in women's studies in Eastern Africa. In Women's Studies International Forum, 7(4), 289-300.
- Mbilinyi, M. (1984). Women in development'ideology: the promotion of competition and exploitation. *The African Review: A Journal of African Politics*, *Development and International Affairs*, 11(1), 14-33.
- Mehmood, B., Ahmad, S., & Imran, M. (2015). What derives female labor force participation in Muslim countries? A generalized method of moments inference. *Pakistan Journal of Commerce and Social Sciences (PJCSS)*, 9(1), 120-130.
- Mehra, R. (1997). Women, empowerment, and economic development. *The Annals of the American Academy of Political and Social Science*, *554*(1), 136-149.

- Nijeholt, G. L. (1987). The fallacy of integration: the UN strategy of integrating women into development revisited. *Netherlands Review of Development Studies*, *1*, 23-37.
- O'Neil, D. (2003). Ethnicity and race: An introduction to the nature of social group Differentiation and inequality. http://anthro.palomar.edu
- O'Sullivan, M. (2014). Africa's big gender gap in agriculture. Available at http://blogs.worldbank.org/africacan/taxonomy/term/10891
- OECD (2010) Accelerating progress towards the MDGs through pro-poor growth: policy messages from the DAC Network on Poverty Reduction, OECD, Paris.
- OECD (2011). Women's Economic Empowerment; DAC Network on Gender Equality Issues paper. Retrieved from http://www.oecd.org/social/genderdevelopment/47561694.pdf
- Ogundari, K., & Abdulai, A. (2014). Determinants of household's education and healthcare spending in Nigeria: Evidence from survey data. *African Development Review*, 26(1), 1-14.
- Ogundari, K., & Awokuse, T. (2018). Human capital contribution to economic growth in Sub-Saharan Africa: Does health status matter more than education? *Economic Analysis and Policy*, *58*, 131-140.

- Ojobo, J. A. (2008). Education: A catalyst for women empowerment in Nigeria. *Ethiopian journal of Education and Sciences*, 4(1).
- Ortiz-Ospina, E. & Tzvetkova, S. (2017). Working Women: Key Facts and Trends in Female Labor Force Participation. Retrieved from https://ourworldindata.org/female-labor-force-participation-key-facts
- Osabuohien, E., Efobi, U. R., & Gitau, C. M. (2015). Environment challenges in Africa: further dimensions to the trade, MNCs and energy debate. *Management of Environmental Quality: An International Journal*, *26*(1), 118-137.
- Osagi (2001), "Important concepts underlying gender mainstreaming", factsheet by the Office of the Special Adviser on Gender Issues and the Advancement of Women. Available online: http://www.un.org/womenwatch/osagi/pdf/factsheet2.pdf
- Osemeobo, G. J. (2004). Tropical rainforest in poverty alleviation: economics of alternative forestland uses for rural livelihoods in Nigeria. *FAO*, *Rome*, *106*.
- Osundina, O. A. (2019). Sustainable development: Does improvement in education and health of women improve female labour force participation rate? *Sustainable Development*. 1–12.
- Oyerinde, O. V. (2008). Potentials of common property resources in a Nigerian rainforest ecosystem: an antidote to rural poverty among women. In *Governing*

shared resources: connecting local experience to global challenges, the twelfth biennial conference of the International Association for the Study of Commons.

- Page, N., & Czuba, C. E. (1999). Empowerment: What is it. Journal of extension, 37(5), 1-5 retrieved from https://joe.org/joe/1999october/comm1.php
- Parpart, J. L., Rai, S. M., & Staudt, K. A. (2003). *Rethinking empowerment: Gender* and development in a global/local world. Routledge.
- Parpart, J., Rai, M., & Staudt, K. (2002). Rethinking em (power) ment, gender and development. *Rethinking empowerment. Gender and development in a* global/local world, 3-21.
- Pegkas, P., & Tsamadias, C. (2014). Does higher education affect economic growth? The case of Greece. *International Economic Journal*, 28(3), 425-444.
- Pelinescu, E. (2015). The impact of human capital on economic growth. *Procedia Economics and Finance*, 22, 184-190.
- Pollard, E. L., & Lee, P. D. (2003). Child well-being: A systematic review of the literature. Social Indicators Research, 61(1), 59-78.
- Psacharopoulos, G., & Tzannatos, Z. (1989). Female labor force participation: An international perspective. *The World Bank Research Observer*, *4*(2), 187-201.

- Queirós, A. S., & Teixeira, A. A. (2014). Economic growth, human capital and structural change: an empirical analysis. In *Universidade do Porto*. Economia do Porto Faculdade de.
- Raley, S., & Bianchi, S. (2006). Sons, daughters, and family processes: Does gender of children matter? *Annual Review Sociology*, 32, 401-421.
- Rathgeber, E. M. (1990). WID, WAD, GAD: Trends in research and practice. *The Journal of Developing Areas*, 24(4), 489-502.
- Roberts, P. (1979). 'The Integration of Women into the Development Process': Some Conceptual Problems. *The IDS Bulletin*, *10*(3), 60-66.
- Romer, P. M. (1990). Endogenous technological change. Journal of political Economy, 98(5, Part 2), S71-S102.
- Roodman, D. (2009). How to Do Xtabond2: An Introduction to "Difference" and "System" GMM in Stata. The Stata Journal, 9(1), 86-136.
- Roodman, D. (2014). Xtabond2: Stata Module to Extend Xtabond Dynamic Panel Data Estimator. Washington DC: *Statistical Software Components*.
- Schultz, T. P. (1994). Human capital investment in women and men: Micro and macro evidence of economic returns. *International Center for Economic Growth Occasional Paper*, (44).

- Schultz, T. P. (1995). 'Investments in Schooling and Health of Women and Men: Quantities and Returns', in Schultz, T. P. (Ed.). (1995). *Investment in women's human capital*. University of Chicago Press, Chicago, IL.
- Schultz, T. P. (2002). Why governments should invest more to educate girls. *World development*, *30*(2), 207-225.
- Seguino, S. (2000). Accounting for gender in Asian economic growth. *Feminist Economics*, 6(3), 27-58.
- Shaheen, R., Shabir, G., Faridi, M. Z., & Yasmin, F. (2015). Determinants of female employment status in Pakistan: A case of Sahiwal District. Pakistan Journal of Commerce and Social Sciences (PJCSS), 9(2),4 18–437.
- Smith, L. C., & Haddad, L. J. (2000). Explaining child malnutrition in developing countries: A cross-country analysis (Vol. 111). International Food Policy Research Institute, Washington DC, U.S.A.
- Sohail, M. (2014). Women empowerment and economic development-an exploratory study in Pakistan. Journal of Business Studies Quarterly, 5(4), 210.
- Solow, R. M. (1956). A contribution to the theory of economic growth. *The quarterly journal of economics*, 70(1), 65-94.
- Standing, G. (1981). Labor Force Participation and Development (2nd ed.). Geneva, Switzerland: International Labour Office.

- Stenberg, K., Axelson, H., Sheehan, P., Anderson, I., Gülmezoglu, A. M., Temmerman, M., Mason, E., Friedman, H., Bhutta, Z., Lawn, J., Sweeny, K., Tulloch, J. (2014). Advancing social and economic development by investing in women's and children's health: a new Global Investment Framework. *The Lancet*, 383(9925), 1333-1354.
- Stiglitz, J., Sen, A., & Fitoussi, J. P. (2009). The measurement of economic performance and social progress revisited. *Reflections and overview*. *Commission on the Measurement of Economic Performance and Social Progress, Paris.*
- Stotsky, M. J. G. (2016). *Trends in gender equality and women's advancement*. International Monetary Fund, Washington DC.
- Stotsky, M. J. G., Kolovich, M. L., & Kebhaj, S. (2016). *Sub-Saharan Africa: A Survey of gender budgeting efforts*. International Monetary Fund, Washington DC.
- Strober, M. (2003). Rethinking economics through a feminist lens. Women and the Economy: A Reader, E. Mutari and DM Figart (eds.), Armonk, NY: ME Sharpe, Inc, 5-12.
- Sumner, A. (2004). Economic well-being and non-economic well-being: A review of the meaning and measurement of poverty (No. 2004/30). Research Paper, UNU-WIDER, United Nations University (UNU).

- Sung, H. E. (2003). Fairer sex or fairer system? Gender and corruption revisited. Social Forces, 82(2), 703-723 https://doi.org/10.1353/sof.2004.0028
- Sustainable Development Goals Report (2018). Progress of Goal 5 in 2018 retrieved from https://sustainabledevelopment.un.org/sdg5
- Swamy, A., Knack, S., Lee, Y., & Azfar, O. (2001). Gender and corruption. *Journal* of development economics, 64(1), 25-55.
- Tansel, A. (2001). Economic development and female labor force participation in Turkey: Time-series evidence and cross-province estimates. ERC Working Papers in Economics, Economic Research Centre, METU. Turkey.
- Teignier, M., & Cuberes, D. (2014). Aggregate costs of gender gaps in the labor market: A quantitative estimate. Retrieved from http://www.ub.edu/ubeconomics/wp-content/uploads/2014/02/308-Web.pdf
- Teixeira, A. A., & Fortuna, N. (2010). Human capital, R&D, trade, and long-run productivity. Testing the technological absorption hypothesis for the Portuguese economy, 1960–2001. *Research Policy*, 39(3), 335-350.
- Thomas, D. (1990). Intra-household resource allocation: An inferential approach. *Journal of human resources*, 25(4) pg.635-664.
- Thomas, D. (1993). The distribution of income and expenditure within the household. *Annales d'Economie et de Statistique* 29: 109-135.

- Thomas, D., & Frankenberg, E. (2002). Health, nutrition and prosperity: a microeconomic perspective. *Bulletin of the World Health Organization*, 80, 106-113.
- Tiwari, A. K., & Mutascu, M. (2011). Economic growth and FDI in Asia: A paneldata approach. *Economic analysis and policy*, *41*(2), 173-187.
- Transparency International (2014). Corruption Perceptions Index 2014 Results retrieved from https://www.transparency.org/cpi2014/results
- UN Women (2014). Collecting and carrying water, burdensome reality for women Retrieved from http://www.unwomen.org/en/news/stories/2014/3/collectingand-carrying-water-burdensome-reality-for-women
- United Nations Development Programme (UNDP) (2006). Human Development Report 2006: Beyond Scarcity: Power, Poverty and the Global Water Crisis. New York: Palgrave MacMillan, p. 47.
- United Nations Population Fund (2012). UNFPA Annual Report 2012 retrieved from https://www.unfpa.org/publications/unfpa-annual-report-2012.
- Verick, S. (2014). Women's labour force participation in India: Why is it so low. International Labor Organization. Retrieved from https://www.ilo.org/wcmsp5/groups/public/---asia/---ro-bangkok/---sronew_delhi/documents/genericdocument/wcms_342357.pdf

- Verick, S. (2018). Female labor force participation and development. IZA World of Labor. Retrieved from https://wol.iza.org/articles/female-labor-forceparticipation-and-development/long
- Visvanathan, N. (1997). "Introduction to part 1", in The Women, Gender and Development Reader, Visvanathan, N., Nisonoff, L. & Wiegersma, N (eds) London: Zed Books, 17-32.
- Vlasblom, J. D., & Schippers, J. J. (2004). Increases in female labour force participation in Europe: Similarities and differences. *European Journal of Population/Revue Européenne de Démographie*, 20(4), 375-392.
- Walton, J., Domfeh, S., Rees, M. & Shannon, C. (2013). Where's the best place to be a woman? Available at https://www.bbc.com/news/world-24650912
- Warth, L., & Koparanova, M. S. (2012). Empowering women for sustainable development. United Nations Economic Commission for Europe, Geneva, Switzerland.
- Weil, D. N. (2007). Accounting for the effect of health on economic growth. *The quarterly journal of economics*, *122*(3), 1265-1306.
- Women, U. N. (2018). Turning promises into action: Gender equality in the 2030 Agenda for Sustainable Development. New York: UN Women retrieved from http://www.unwomen.org/-/media/headquarters/attachments/sections/library/

%20publications/2018/sdg-report-fact-sheet-sub-saharan-africa-en.pdf?la= en&vs=3558%20

World Bank (1980). World Development Report. Washington, DC: World Bank

World Bank (2001). World Development Report. Washington, DC: World Bank

- World Bank (2012). World development report 2012: Gender equality and development (Washington, DC) 2010. Ready for work: Increasing economic opportunity for adolescent girls and young women, factsheet (Washington, DC).
- World Bank (2014). Gender at work: A comparison to the world development report on jobs. Geneva, Switzerland: World Bank.
- World Economic Forum (2013). The Global Gender Gap Report 2013 retrieved from http://www3.weforum.org/docs/WEF_GenderGap_Report_2013.pdf
- World Economic Forum (2014). The Global Gender Gap Report 2014 retrieved from http://www3.weforum.org/docs/GGGR14/GGGR_CompleteReport_2014.pdf
- World Economic Forum (2015). The Case for Gender Equality. The Global Gender Gap Report 2015 retrieved from http://reports.weforum.org/global-gendergap-report-2015/the-case-for-gender-equality/

- World Economic Forum (2017). The Global Gender Gap Report 2017. Available at https://books.google.com.cy/books?hl=en&lr=&id=Gk1oecRaQc8C&oi=fnd &pg=PP8&dq=closing+global+gender+gap&ots=sITAQrm2pC&sig=KsKVn 4e9xP5Ef3fYiS4BCXLdszo&redir_esc=y#v=onepage&q=closing%20global %20gender%20gap&f=false. Access date (24/12/18).
- World Health Organization (WHO) (2018). Fact sheets on Maternal Mortality retrieved on 6/5/19 from https://www.who.int/news-room/factsheets/detail/maternal-mortality
- World Population Review (2019). Continent and Region Population retrieved 01/05/19 from http://worldpopulationreview.com/continents/
- Worldometers (2019). Africa Population. Elaboration of data by United Nations, Department of Economics and Social Affairs, Population Division. Retrieved on 30/04/2019 from https://www.worldometers.info/world-population/africapopulation/
- Yang, H. (1992). Female Labor Force Participation and Earnings Differentials in Costa Rica. Case Studies on Womens Employment and Pay in Latin America, edited by Psacharopoulos, George and Zafiris Tzannatos, The World Bank, Washington DC, 209-222.