

DETERMINANTS OF THE FINANCIAL GENDER GAP IN AFRICA

BY

LINET M MUTEGI

MASTER OF SCIENCE (DEVELOPMENT FINANCE)

KCA UNIVERSITY

NOVEMBER, 2023

DECLARATION

I declare that this dissertation is my original work and has not been previously published or submitted elsewhere for award of a degree. I also declare that this contains no material written or published by other people except where due reference is made and author duly acknowledged.

Sign: _____ Reg. No _____

Date: _____

I do hereby confirm that I have examined the Master's Proposal of

Linet Mukami Mutegi

And have certified that all revisions that the dissertation panel and examiners recommended have been adequately addressed.

Sign: _____ Date: _____

Dr. Christine Simiyu

Dissertation Supervisor

DETERMINANTS OF THE FINANCIAL GENDER GAP IN AFRICA

ABSTRACT

In recent years, there have been increased efforts from countries to bridge their existing gender gap through the drafting and implementation of policies, as such, it is crucial to examine the success of these efforts and determine where the African continent stands in regards to the gender gap. Numerous studies have been conducted on gender inequality leaving a research gap in the financial aspect of the gender gap, a gap that this research sought to fill. The study used the financial literacy gender gap, the financial inclusion gap, the pay gap, and the labour participation of women in Africa as the independent variables and examined their impact on the financial gender gap. The target population of the study was 40 of the 54 countries in Africa with census sampling being the preferred choice of sampling technique due to the small number of the target population. The research used secondary data from renowned publications such as the World Bank, and the global gender gap index reports. Ms-Excel and STATA were used to clean, explore and analyze the collected data. Data was then analyzed using panel regression methods as neither cross sectional data nor time series data analysis gave the best result because of existing variations in the independent variables over time. The study found that the financial literacy gender gap and the labour force participation of women had a significant effect of the financial gender gap. All four independent variables were positively correlated to the dependent variable. The study found that there was a need to encourage women participation in the labour markets by doing away with discriminatory policies as well as the need for reskilling to enable women position themselves for more opportunities in the job market. The study recommends continued investment in men so as to ensure they are not falling back as more women centered programs are adopted. The study recommends the emulation of countries like Rwanda which is the best performing country in Africa in regards to bridging its existing Gender gap.

Key Words: Financial gender gap; global gender gap index; pay gap.

ACKNOWLEDGEMENT

It is with great honor that I express sincere gratitude to everyone who contributed to the completion of my research work. I thank my parents, Mutegi Iringo and Dores Kiria for their continued encouragement and support to complete my studies as well as my siblings, Gitonga and Murugi for their academic and emotional support. I am grateful to Dr. Christine Nanjala for her dedicated guidance and advice which was undoubtedly key to completing my research work. Additionally, I am grateful to my friend Musyimi Muthini who helped my research be comprehensive and well detailed. Lastly, I thank God for the strength and continued blessings that enabled me to finish my research.

TABLE OF CONTENTS

DECLARATION	ii
ABSTRACT.....	iii
ACKNOWLEDGEMENT	iv
LIST OF TABLES	vii
LIST OF FIGURES	viii
LIST OF APPENDICES	ix
ACRONYMS AND ABBREVIATIONS	x
OPERATIONAL DEFINITION OF TERMS	xi
CHAPTER ONE: INTRODUCTION.....	1
1.1 Background of the Study	1
1.2 Problem Statement	8
1.3 Research Objectives.....	10
1.3.1 General research objective	10
1.3.2 Specific research objectives	10
1.4 Research Questions	10
1.5 Justification of the Study	11
1.6 Scope of the Study	12
CHAPTER TWO: LITERATURE REVIEW	14
2.1 Introduction.....	14
2.2 Theoretical Review	14
2.2.1 The Human Capital Theory	14
2.2.2 The Structural Functionalism Theory	17
2.2.3 The Feminist Theory	21
2.3 Empirical Review.....	25
2.3.1 Financial Literacy Gender Gap	25
2.3.2 Financial Inclusion Gap	30
2.3.3 The earnings gap	35
2.3.4 Labour Participation Rates among women in Africa.....	42
2.4 Conceptual Framework.....	46
2.5 Operationalization of Variables	46
CHAPTER THREE: RESEARCH METHODOLOGY	49
3.1 Introduction.....	49
3.2 Research Design.....	49
3.3 Target Population.....	49
3.4 Sampling and Sampling Procedure	50

3.5 Research Instrument.....	50
3.6 Data collection procedure	50
3.6 Data Processing and analysis	51
CHAPTER FOUR: DATA ANALYSIS AND FINDINGS	56
4.1 Introduction.....	56
4.2 Descriptive Statistics.....	56
4.3 Study Variables.....	60
4.4 Diagnostic Tests.....	62
4.5 Model Fitting	65
CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS	67
5.1 Introduction.....	67
5.2 Summary	67
5.3 Conclusion	75
5.4 Recommendations.....	77
5.5 Recommendations for Future Research	79
REFERENCES	80
APPENDIX I: Target Population Guide.....	86
APPENDIX II: Secondary Data.....	87

LIST OF TABLES

Table 1: The global gender gap index rankings	7
Table 2: Operationalization of Variables.....	47
Table 3: Summary Panel Data Regression Analysis	53
Table 4: Descriptive statistics.....	58
Table 5: Fixed Effects Panel Regression on The Financial Gender Gap.....	59
Table 6: Correlation Matrix of the Study Variables.....	63
Table 7: Breusch-Pagan LM Test Results.....	63
Table 8: Test For Time Related Fixed Effects.....	63
Table 9: Test Results for Heteroscedasticity.....	64
Table 10: Test Results Serial Correlation.....	64
Table 11 Test Results for Multi-collinearity.....	65
Table 12: Results for the Hausman test.....	65
Table A1: Raw Data.....	87

LIST OF FIGURES

Figure 1 Wage Equality for Similar Work.....	37
Figure 2 Firms with Female Vs Male Top Managers (%).....	40
Figure 3 Conceptual Framework.....	46
Figure 4 Growth Plot of Each Country’s Financial Gender Gap.....	57
Figure 5 Overlain Plots for the Financial Gender Gap.....	57
Figure A1 SSA Countries.....	87
Figure A2 North Africa Countries.....	87

LIST OF APPENDICES

Appendix I: Target Population.....86

Appendix II : Secondary Raw data.....87

ACRONYMS AND ABBREVIATIONS

SMEs: Small and Medium Enterprises

UNDP: United Nations Development Program

SSA: Sub-Saharan Africa

GBV: Gender Based Violence

STEM: Science, Technology, Engineering and Mathematics

CFLE- Africa: Centre of Financial Literacy Education - Africa

OECD: Organization for Economic Co-operation and Development

LDCs: Least Developed Countries

ILO: International Labour Organization

FGG: Financial Gender Gap

OPERATIONAL DEFINITION OF TERMS

This study adopted the following definition of key terms:

The Gender gap: The gender gap is the difference between women and men as reflected in social, political, intellectual, cultural, or economic attainments or attitudes (Harris, 2017).

The Financial Gender Gap: The gender gap in financial attainments, wealth and income accumulation.

The Financial Literacy Gender Gap: The difference between men and women in grasping financial terms such as money, inflation, interest rate, credit and others, and the abilities and skills to use all this information in personal life, being aware about the consequences of its financial actions (Oanea, & Dornean, 2012).

The Financial Inclusion Gender Gap: The gender gap in access to crucial and required financial services and products as needed by society at an affordable cost in a fair and transparent manner (Chakrabarty, 2010).

The Earnings/Pay Gender Gap: The overall disparity in income between women and men, it factors in the types of jobs, and the experience that an individual has (Graovac, 2016).

The Wage Gap: A raw statistic that shows the difference between women's earnings as compared to men's earnings; it is the comparison between the median income of women who work full time to the median income of full time men workers. It ignores crucial variations among individuals such as level of education, years of experience, industry average and time spent away from work/ leave (Graovac, 2016).

Sub-Saharan Africa: is the region of the African continent south of the Sahara Desert. It has 48 countries with just over a billion people (United Nations, 2020).

LDCs: in Africa include Democratic Republic of Congo, Tanzania, Burundi, Guinea, Angola, Togo, Zambia, Mali, Benin, Lesotho, Malawi, Chad, Ethiopia etc.

CHAPTER ONE: INTRODUCTION

1.1 Background of the Study

The gender gap refers to the difference between the way men and women are treated in the society, or between what men and women do and achieve (see Cambridge University Press, 2023). The financial gender gap, therefore, refers to the difference between women and men as reflected in their financial attainments. Monitoring the gender disparity is useful as it explains the differences between men and women in accessing resources and opportunities.

Gender indexes are used to measure the existing differences, one such index is the *global gender gap index* which benchmarks the current state and progress of the gender gap in four dimensions namely: - economic participation, political empowerment, health & survival and educational attainment (World Economic Forum, 2022). The index has been tracking the four dimensions since its inception in 2006 by the World Economic Forum and reports its findings in the global gender gap report annually with a scoring system of 0 to 1; where 1 shows that a country has achieved gender parity. Its aim is to provide cross-country comparisons to identify the most effective policies in closing the gender gaps (World Economic Forum, 2022).

To contextualize the gender gap, the issue of existing gender gaps has been a dominant problem from as early as 1900 with recent studies finding that women were disadvantaged in comparison to their male counterparts. Whereas men enjoyed voting and property rights, women had to struggle and fight for their rights with the first wave of feminism spearheading the fight for both voting and property rights for women. In the 1960s, the second wave of feminism emerged, and it was targeted at eliminating workplace and legal inequality (Sharma, Chawla, & Karam, 2021). Historically, in the 14th to the 18th century, women in influential positions, from Cleopatra VII in Egypt, Queen Elizabeth of England and Queen Christina of

Sweden, were born into influential and reputable families or become married into them (Monter, 2012).

According to the global gender gap report in 2022, gender parity is a far dream with the report approximating that it will take another 132 years for the gap to be eliminated (World Economic Forum, 2022). As of 2022, no country had yet achieved gender parity; underdeveloped, developing, and developed countries are all struggling with a gender gap aspect. Iceland leads the list of countries with the narrowest range of gender gap with a 90.8% gender parity score whereas South Asia ranks lowest in closing its gender gap with only 62.3% of its gender gap being closed as of 2022 (World Economic Forum, 2022).

The World Economic Forum (2022) credits the gaps in the labour market, leadership by industry, political representation, socio-cultural influences, wealth accumulation, and skills prioritization as some of the drivers of the global gender gap. This research aims to focus on the financial aspects of the gender gap; to begin with the existence of a gap in financial inclusion is a major impediment to accumulating and growing wealth. Secondly, the gender gap in financial literacy greatly influences the making of financial decisions which in the long run affect wealth accumulation. Lastly, the earnings gap which has increasingly become a controversial topic, is a key contributor to the financial gender gap with the gender that is advantaged being more likely to attain financial freedom and comfort.

From a global perspective, the United States of America (USA) has had a long history of gender disparity due to its legal framework and moral perception. In the early 1700s, women were not considered legal citizens and any property owned by a woman would become her husbands' after marriage. Legally, women could not own property in their own name up until 1839 in the state of Mississippi and it was not until 1862 when the first bank loan to a woman was made (Kwolek-Folland, 1998). Despite of its status as a powerful economy, there still

exists a significant gender gap in earnings, social norms & practices, education, and political & social participation.

One of the first attempts to fight the gender discrimination in the USA was made by Abigail Adams who made a plea to the congress to form a government that was inclusive and not discriminative to women. In 1920, a constitutional change that recognized women's political rights was made; women were now eligible to vote and voice their political opinions without fear of persecution (Quffa, 2016). Fast-forward in 2013, the Democratic party nominated Hillary Clinton as the presidential candidate depicting a major improvement in political participation among women.

Financially, President Nixon signed into law the prohibition of gender discrimination when availing federal financial assistance in 1972 which made it unlawful to deny financial services to an American due to their gender. Today, the access to financial services has improved with 20% of Americans having access to a bank account in 2014 as compared to 1989 where only 14% of households had access to a bank account (Morpeth, 2018). Despite showing potential, business owners in the USA face major impediments in accessing capital and resources they need for development and expansion.

In the USA private sector today, women are thriving too with 41 women being at the helm of the leading fortune 500 companies as of 2022, they are at the helm of major US banks such as Jane Fraser at Citi Group. Karen Lynch at CVS Health is head of a \$268 billion health-care fortune. The number of women at the helm in these companies stands at just 8.1% (Gap, 2022). While this percentage represents an increase from previous years, it is still comparatively low and does not reflect the effort that has been input to fight gender imparity. As evidenced, women are now able to hold powerful positions in both the private sector and the government.

Extant literature shows that in situations where the difference in educational attainment between men and women is large, there is a likelihood that the less educated gender will have challenges in accessing financial products and services as effectively as the other gender. As of 2022, 72% of men have an account in a bank or micro-finance institution compared to 65% of women (World Economic Forum, 2022). Leveraging technology is crucial in digitizing loans and other financial services to integrate more women into the formal economy and boost their economic participation.

In the USA, the levels of financial literacy are low with the wall street journal reporting that only 57% of Americans passed a basic financial literacy test. In addition to this, there is a 10% financial literacy gap between men and women. As more and more women enrol in professional schools in numbers almost equal to men, they still are less likely to reach the highest pinnacles of their chosen professions. In economics, for example, women make up a third of the PHD recipients despite a high number of women taking the Economics in major universities in the USA. Interestingly, households headed by an individual with a high school education have less transactions in their financial accounts as compared to those headed by college graduates depicting a positive correlation between education and income in the USA (Morpheth, 2018).

In 1963, the then president, John F. Kennedy signed into law the equal pay act which abolished wage discrimination on account of gender. It particularly abolished the earnings gap between men and women who did the same job at the same workplace. Despite the effort, the pay gap continues to be a persisting challenge with women earning 20% less than their male colleagues in the USA. Women are also entitled to lower social security payments in their sunset years as a result of lower earnings in their prime years (Piskadlo, 2016). The norms of the workplace do not support a healthy work-life balance which hampers equal opportunity for women and men in the workplace. There is a 10% pay gap between men and women in the

same occupations and similar job experiences. In 2021, women earned 84% for every dollar that men earned (Mishra, Likitlersuang, Wilmer, Cohan, Germine, & DeGutis, 2019).

Generally, in the USA, recent data shows that the overall financial health among US citizens has improved but the gap between men and women widened. 20% of women are financially healthy compared to 29% of men and even after controlling for income and other demographic factors that influence financial health, women still lag behind their male counterparts with 5 percentage points. Further, women are also more likely to be financially vulnerable than men with 24% of women are struggling with nearly all aspects of their financial lives as compared to 17% of men. Lastly, women registered worse outcomes on all the measures of financial health; that is, savings & spending behaviours, borrowing habits as well as financial planning (Greene, Warren, & McKay 2022).

Sub-Saharan Africa has so far bridged 67.9% of its gender gap as per the global gender gap report of 2022, it is ranked ahead of the Middle East and South Asia. Notably, Rwanda, Namibia, and South Africa are the best performers in bridging the gender gap whereas Mali, Chad and DRC rank the lowest. Globally, women account for 60% of the work done and earn only 10 % income depicting a great disparity in the level of input versus output. In Africa, the roots of gender disparity can be traced back to the times of slavery and colonialism with the global gender gap index indicating that it would take 135 years to close the gender gap in Africa.

African women work for approximately 50% more hours in comparison to their male counterparts, despite of this the pay gap between the two genders is significantly wide. Similar to the continent of Europe, the average African woman makes 70% for each dollar made by a man. Generally, women earn lower wages than men in Africa with social traditions exerting great pressure on equal pay with North Africa having the biggest wage gap compared to the

rest of the continent. Despite more women attaining high levels of education that position them in line for high paying jobs, the The International Labour Organization (2019) estimates that it will take up to 70 years to eliminate the wage gap among the men and women in Africa completely.

70% of women are excluded from financial access with an existing US \$ 42 billion financing gap between men and women (Africa Development Bank Group, 2022). While some countries are doing better than others, Africa has major milestones to undertake so as to achieve gender parity; There is still a 9% percent gap in women and men access to finance with 37% of women in Sub-Saharan Africa having a bank account compared to 54% of their male counterparts, a gap that continues to widen (World Economic Forum,2022). A majority of Sub-Saharan Africa (SSA) citizens have an account in a financial institution with a 27% increase from 2011 to 2021, however, the increase has been rapid for men and slower for women. Access to credit in the SSA has also been on the rise with the gender gap now standing at 3% in 2020 (Asongu, Nnanna, & Acha-Anyi, 2020).

According to the World Economic Forum (2022), Togo has some of the most financially literate women in Africa, which shows that women are doing better than men in some areas. For the average African woman, financial literacy is a luxury, one that the women lack and do not know they need. 70% of the women in Africa are financially illiterate which excludes them from making financial decisions and denies them the upper-hand in making their own financial decisions (Mukanda, 2020).

According to the global gender gap survey index, Rwanda is the best performing country with a score of 0.811 out of the possible 1. It is the African country that is likely to close its gender gap earliest. Two thirds of its parliamentarians are women and 52% of the cabinet is made up of women. 45% of women and 55.7% of men in Rwanda have access to financial

services and women make up 35.4% of individuals employed as middle and senior management (World Economic Forum, 2022). It has also bridged 80.9% of its wage equality gap and had doubled its share of women in senior and managerial positions from 2014 to 2019 by 28.6% (World Economic Forum, 2022).

In contrast, the DRC, lags in closing its gender gap with a score of 0.575, it has a weak political system with participation in economic and political progress for women being low at 0.099. Women make up 53% of the population in Congo, their position in society is however, undermined by their exclusion when critical decisions are being made especially in the rural tribal communities. As of 2021, 61.2% of women in the DRC live in poverty compared to 51.3% of men.

The pre-existing social and economic bias hurts women’s livelihood with majority of women spending half of their days doing unpaid household labor, interestingly when women operate lucrative ventures like the wholesale trade, they reported profits that were four times lower than men. Less than 14% of women have their own financial accounts which limits their access to finance (World Economic Forum, 2022). Low financial access certainly brings about a difference in the earnings and economic empowerment between the men and women. With such existing disparities, this paper focuses on the factors that seemingly impact the financial gender gap among countries in Africa. The table below shows the regional and global rank of the top and bottom ten SSA countries

TABLE 1
The Global Gender Gap Index rankings in SSA & North Africa, 2022

Country	Regional Rank	Global Rank	Gender Parity Score	Country	Regional Rank	Global Rank	Gender Parity Score
Rwanda	1	6	0.811	Nigeria	27	123	0.639
Namibia	2	8	0.807	Angola	28	125	0.638
South Africa	3	20	0.782	Niger	29	128	0.635

Burundi	4	24	0.777	Malawi	30	132	0.632
Mozambique	5	34	0.752	Côte d'Ivoire	31	133	0.632
Cape Verde	6	45	0.736	Comoros	32	134	0.631
Madagascar	7	48	0.735	Benin	33	138	0.612
Zimbabwe	8	50	0.734	Mali	34	141	0.601
Kenya	9	57	0.729	Chad	35	142	0.579
Eswatini	10	58	0.728	Congo, Democratic Rep	36	144	0.575
Tunisia	4	120	0.643	Algeria	13	140	602
Morocco	10	136	0.524	Egypt	7	129	635

Source: The Global Gender Gap Index 2022

1.2 Problem Statement

With the African continent slowly realizing its potential, it is frugal to bridge the existing financial gender gap that is costing Africa billions of dollars annually. Women in Africa are credited as the most economically active women in the world as farmers, entrepreneurs, and workers. Regrettably, the global gender gap summit of 2019 revealed that up to 70% of women in the continent are excluded financially and that there exists a \$ 42 billion financing gap which binds women to low-value economic activities and small-scale agriculture which results in meagre returns for the women. The World Economic Forum (2022) estimates that Africa will take up to a century to close its gender gap and achieve gender parity which until then, the continent will lose an estimated \$ 95 billion annually. This is costly for Africa considering that it is yet to unlock its economic prowess, an activity that will require the input of both men and women.

Arguably, the financial sector is crucial to the economy of a country with financial aspects such as literacy and accessibility being key to achieving better financial health and wellness. Africa has a 9% gender gap in access to finance. North Africa has a 18% gender gap in access to finance which makes it the worst in the world. Further, 70% of women in Africa are financially illiterate which impedes their financial growth. Working women only earn 70% of

what men in the continent earn and lastly, in North Africa, only a quarter of working age women participate in the labour market.

This paints a picture of continued disparity despite continuous implementation of policies to bridge existing gender gaps. It is therefore important to identify the factors that impact the financial gender gap and bridge them to achieve economic prosperity in the African continent. Despite of gender gap problems existing for decades now, and a variety of policies being implemented to bridge the gap, the issue persists with some countries being badly off than others.

Further, the scarce extant literature on the financial gender gap in Africa offers conflicting results with some researchers arguing that the gender gap in the financial sector is a result of self- perception by the women who discredit themselves thus becoming largely disadvantaged (Morsy, 2020). On the other hand, the African Development Bank Group (2022) argues that systemic cultural perceptions are largely responsible for lack of equal access to credit among women (see African Development Bank Group, 2022).

Variables such as the earnings gap are controversial with some researchers arguing that it simply does not exist due to gender but because men and women tend to do slightly different jobs, other researchers, however, found that the gap does exist and continues to persist in developing countries such as South Africa (Kollamparambil, & Razak, 2016). The earnings and pay gap is a historical problem that has narrowed down in recent years, it remains controversial as it is subject to a myriad of factors such as level of education. A study found that the pay gap between less educated women and less educated men had narrowed down as well as the pay gap between highly educated women and highly educated men which shows positive progress (Blau, & Kahn, 2006). Haan (2023), argues that in 2022, women earned 17% less than their male counterparts.

This paper discusses the earnings/ pay gap, financial literacy, labour participation rate, and access to finance in an in-depth manner and carefully examined how the variables affect the continent economically, thus answering the question of whether they are crucial factors in the fight for gender parity. Lastly, this paper aimed to have a specific focus on the financial aspects of the gender gap which have scanty literature as most researchers focus on gender inequality. Lastly, the study aimed to analyse the variables to determine their relevance in the African continent and offer insight into highly debatable variables such as the earnings gap.

1.3 Research Objectives

The general objective of the paper and the specific objectives are listed below:

1.3.1 General research objective

To identify the determinants of the financial gender gap in Africa

1.3.2 Specific research objectives

1. To assess the effect of financial literacy on the financial gender gap in Africa
2. To determine the effect of financial inclusion on the financial gender gap in Africa
3. To evaluate the pay gap effect on the financial gender gap in Africa
4. To determine the effects of labour participation rates among women on the financial gender gap in Africa

1.4 Research Questions

1.5.1 How does financial literacy affect the financial gender gap in Africa?

1.5.2 How does financial inclusion impact the financial gender gap in Africa?

1.5.3 How does the pay gap impact the financial gender gap in Africa?

1.5.4 How do the labour participation rate among women affect the financial gender gap in Africa?

1.5 Justification of the Study

It is important to discuss the determinants of the financial gender gap in Africa due to the prospective gains that various institutions and entities stand to gain from it. Key beneficiaries of the study are discussed below:

1.5.1 Contribution to knowledge base

The study is important in contributing to the scarce literature that exists on the financial gender gap, majority of existing research has been focused on gender equality and discrimination. Further, existing literature on the global gender gap index focuses on economic & political participation, education and health & mortality indicating that there is little research done on the financial aspect of the gender gap. This study, therefore, researched and detailed the financial aspects of the gender gap in an effort to contribute to the existing knowledge base.

1.5.2 Contribution to stakeholders

Most countries in the African continent have a department or ministry that is tasked with gender and equality, in Kenya for instance is the Ministry of public service, youth and gender affairs whose mandate is to come up with gender policy management, special programs for women empowerment and policy & programs on gender-based violence (GBV). These departments can benefit from a research on the existing global gender gap and how it can be bridged in an attempt to attain gender parity.

Secondly, there are non-profit organizations that are dedicated to bridging the gender gap, the United Nations Development Program (UNDP) is one such non-profit and non-governmental organization whose digital strategy is to bridge the gender gap by ensuring that no one is left

behind in the digital age. So far, the NGO has helped more than 100 countries adopt strategies aimed at addressing women and girls' empowerment. Such organizations can greatly benefit from a research analysis on the factors driving the financial gender gap which they aim to help reduce. The research analysis can help them determine which strategies to adopt and which ones to do away with in an effort to achieve their mission and goals.

Women are key drivers of their future, this study can be of benefit to women who aim to attain or reach their financial goals such as financial literacy. This study will help by identifying the background of the problem and why it has become a major impediment to attaining financial freedom. With some researchers arguing that the position of women in the society is due to self-perception, women can understand the importance of self-confidence and self-representation in the quest to attain financial freedom. Generally, they can also learn why the financial gender gap exists, how it disadvantages them and the recommendations on how to bridge it.

1.5.3 Contribution to theory and practice

The findings of the study are beneficial to those in the field of gender studies, as well as those who are in charge of making policies by helping them understand the impediments that block the achievement of gender parity in the continent. The study also provides input for policy drafting and policy implementation.

1.6 Scope of the Study

The study focused on the financial gender gap in African countries, 40 out of the total 54 countries are analyzed. For comparison purposes, countries ranking high in the gender gap index, such as Rwanda were compared to those that have a low gender parity score such as DRC. The study focused on the earnings gender gap, financial inclusion gender gap, the labour

force participation gap, and the gender gap in financial literacy in Africa. As the study was focused on the 40 out of 54 countries in Africa, the results may not be replicable in the remaining 14 countries. Further, the study considered gender to be either female or male which has been progressively been changing and challenged in modern society as the LGBTQIA+ movement gains traction. As a result, the study is limited in that it only considered the female and male genders only and excluded the rest.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

Chapter two of this study demonstrates how the research problem has been morphed into vast knowledge over the years. The chapter reviews the existing knowledge on the financial gender gap in Africa with the first section discussing theories that are significant to the study whereas the second section reviews scholarly articles that are relevant to the objectives of the study.

2.2 Theoretical Review

2.2.1 The Human Capital Theory

Becker (1993) defines human capital as the sum of the congenital and externally acquired skills, knowledge, abilities and experiences accumulated by an individual. The human capital theory argues that investment in human capital factors such as education, skills and responsibility bring about better success to a worker. The theory is an extension of Adam Smith's explanation of wage differentials where the cost of learning or upscaling on the job bring about an advantage to both the employer and employee. Economists Gary Becker and Theodore Schultz began their research on human capital in the 1960s and are largely credited with pointing out that education and training are key factors to improving productivity.

Becker and Schultz argued that, with other things being constant, the personal income of an individual will be dependent on the investment in human capital made, additionally, increased investment in human capital propels economic growth by creating a well skilled labour force. The theory assumes that education determines the marginal productivity of labour which in turn influences the earnings. The theory has been dominant in economics and policy making since the 1960s with policy makers and supporters of the theory assuming that intellectual formation constitutes a mode of economic capital, higher education prepares individuals for

work and primary education is significant in determining graduate outcomes (Marginson, 2019).

The human capital theory has increasingly been scrutinized and criticized for being too simplistic and failing the test of realism, in 1976, Harvard economist Richard Freeman was of the notion that human capital does not increase productivity but instead, it acted as a signal on talent and ability. He argued that human capital did not bring about productivity and as such, it did not qualify as a factor of production. In 1967, Marxian economists, Bowels and Herbert also argued against the human capital theory, they argued that factoring people into capital does not compliment workers' rights and discredits class conflict.

To date, there has been increasing criticism on the theory due to its assumption that human beings are rational beings which arguably is flawed seeing as human beings will act based on their ulterior motives, goals and personal desires. The theory also offers a simple explanation to everyone's wages and salaries, that is, it provides a universal connection between human capital, productivity and salary and/or/ income. This is too simplistic and poses questions like how productivity differences between individuals are measured accurately (Tan, 2014).

Despite of its shortcomings, the human capital theory is instrumental in explaining the existing financial gender gap in Africa. According to the World Bank (2020), in 43 African countries, female managers had less work experience than their male counterparts which influenced their wages and promotions. The difference between men and women ultimately brings about differing experiences in the job markets for the two genders as employers are keen on hiring experienced candidates for a job (Amin & Kushnir, 2013). The more experienced a worker is, the higher their wages are likely to be. As such, the theory can offer an explanation to the existing wage gap in the African continent.

Further, the link between education and earnings has been established both theoretically and practically. Researchers have estimated the return on investment in education to be 9.1% of every 8.6 years of studies. The returns to education are estimated using the earnings function and applied in a single-equation model that explains wage income as a function on education and experience which means that earnings on the labor market are dependent on education level and amount of experience. As the level of education increases, additional experiences are gathered and the productivity increases, which gives way for higher earnings (Psacharopoulos, & Patrinos, 2018).

The gender gap in education in SSA is higher than the global average with only 7.19% of women enrolled in universities and colleges compared to 10.41% of men enrolled. Notably, SSA countries have significant gender differences in STEM (Science, Engineering, Technology and Mathematics) courses which provide entry to key and high paying jobs in the labour market. Women are more likely to undertake courses related to humanities and arts as opposed to STEM courses due to discriminatory barriers beyond their control and cultural gender stereotypes (Elu, & Price, 2017). This positions more men than women in high paying careers which consequently leads to the gap in financial literacy and earnings.

Lastly, women are more likely to take time off from their careers to focus on family related issues such as taking care of newborn infants, while each country has its own provisions for maternity leave, women generally take extended periods of maternal leave than their male counterparts take paternal leave with some countries offering 61 weeks of paid maternal leave. The longer the women stay on leave, the less likely they are to get pay rises, move to management, and get promotions. Women who take longer maternity leave are viewed as less committed to their jobs and are at a higher risk of being demoted (Hideg, Krstic, Trau & Zarina, 2018).

With women having lower educational levels, lesser professional experience and interrupted careers, the human capital theory offers an explanation as to why their income is lesser than that of their male counterparts which contributes to the financial gender gap. The human capital theory contributes to the discussion of this paper as it offers a possible explanation on the existing wage gap and the labor participation differences among the genders. This is because it breaks down the relationship between educational attainment, experience, productivity and the amount of earnings among working individuals. As per the improvements in the model in 1985, Becker argued that the more the hours that women spend on unpaid housework, the lower the hours they spend in the labour market thus earning less than their male counterparts. The exclusion of women from jobs that were deemed to be for males results in an oversupply of labor in jobs that were deemed to be for females therefore depressing the wages of otherwise equally productive workers. (Bergmann, 1974).

2.2.2 The Structural Functionalism Theory

Structural functionalism is a theory primarily developed by Emile Durkheim and Talcott Parsons in the 1800s, Durkheim argued that for a society to be strong, functional differentiation was needed to foster social cohesion among the society members. Parsons on the other hand, identified four functional imperatives that are crucial for a social system to function effectively, to begin with, he argued that a social system need be adaptable to the emerging demands of its environment, secondly, he argued for integration among all societal components. Further he argued that a society was responsible for setting and accomplishing its own goals and lastly that a social system needed to enhance and increase motivation among its people through maintenance of social patterns.

The structural functionalism theory, commonly referred to as *functionalism* emphasizes on social structure, and social institutions; how the two interrelate and the implications of the

relationship between the two in society. The theory is based on the principle of social stability, collective functioning, and social evolution. The social structure is comprised of the social norms and values practiced, and the social institutions. The two are dependent on each other with each component in the social structure playing a specific role, altogether, the components bring about a stable and functional society. If any part of the social structure is dysfunctional or altered, then the society loses its equilibrium, does not function effectively, becomes unstable and is at the risk of collapsing.

The functionalist theory sees society as a complex system broken down into smaller functional units which altogether ensure the prosperity, solidarity, and stability of the society. Each segment of the societal population has clearly defined responsibilities, there is division of labour which Durkheim found to be a tool for economic and social advancement in society, he argued that where there was absence of functional differentiation and division of labour, economic advancement was slow and insignificant. Additionally, structural functionalists considered social stratification as an essential prerequisite of society which divided the societal population into stratas that are interconnected but differentiated based on their social status and role.

Stratification emerges as a crucial necessity as a single individual cannot perform all tasks in a society therefore necessitating the need for different individuals performing different tasks (Turner, 2014). Practically, a manual laborer and a doctor both have significant roles in a society, both have different responsibilities and are crucial to an effective functioning of a society, however, a doctor is placed higher in the occupational hierarchy than the manual laborer. Stratification factors in the status quo in a system of positions where some positions are regarded to be more respectable, superior and prestigious than others. This system

encourages people in a society to work harder and be in positions of respect and prestige as opposed to those deemed as degrading.

According to the World Economic Forum (2022), the global pay for STEM related careers is the highest in both developed and developing nations. Those in the field of Engineering (Architectural, Civil, Computer & Aerospace) are at the highest paid and most valuable college degrees while those in the fields of humanities such as clinical psychology, drama & performing arts, and fine arts were the lowest paid as of 2022. As pointed out earlier, SSA countries have more men than women enrolled in STEM courses implying that a higher number of men is at a better position to earn higher earnings than the number of women. In line with stratification, the number of men holding prestigious jobs is higher than that of women posing a difference in not only the aggregate earnings but also the status quo of the genders.

In Kenya, for instance Members of Parliament and Cabinet Secretaries are some of the highest in the World, only seven out of 22 women are cabinet secretaries despite President Ruto's campaign pledge that 50% of his cabinet will be comprised of women. Similarly, of the 290 elected MPs, only 47 women were elected with the rest being men (Parliament of Kenya, 2022). This represents a disparity in the genders in the top paying jobs in the country. Further, as of 2022, Kenya's biggest banks in terms of assets under management and number of customers, i.e., Co-operative Bank, ABSA Bank, Equity Bank, Standard Chartered, and KCB Bank were all headed by men who earned millions in salaries each monthly. In addition, a look at the top ten universities in Kenya results to the conclusion that most Vice Chancellors (VCs) are male with only Jomo Kenyatta University (JKUAT), and USIU-Africa having female VCs at the helm (Maranga, 2021). This indicates a higher concentration of the male gender in the high paying prestigious jobs in comparison to the female gender, a phenomenon that undoubtedly results to gender disparity in terms of the pay gap.

The functionalism theory regards family as the core component of society and division of labour in families normalizes gender norms to bring about the successful functioning of a household and societal stability. In this approach, girls and boys are molded on different attitudes during their upbringing. Boys on one hand have instructed instrumentality that is, they are trained to gain the ability to be goal-oriented, task focused and mindful of the family's connection to the external society. On the other hand, girls are trained to be vocal about their feelings and respond to other's emotions. The functionalist perspective of gender inequality was developed by Talcott in the 1940s and 1950s, he argued that inequalities exist as an efficient way to create division of labor and ensure optimal societal functioning. (Azuh, Egharevba, & Azuh, 2014).

The gender roles are already predefined and complementary, for instance, the norm in many households is that women take care of their home while men provide for the family financially. An attempt to enforce social change or alter the predefined norms can destabilize the society. This is evident in modern society where women are now preferring to be providers and opting out of the traditional housewife role, a phenomenon that has led to the disruption of the family structure and increased failed marriages and families.

The World Economic Forum (2022) data shows that 104 countries have strict labour laws that limit or restrict women participation in certain jobs, this affects the employment choices of 2.7 billion women. In Angola, women are not allowed to work in gas production at all, in Nigeria, women are not allowed to work at night in gas plants, in Egypt, they are not to work with fertilizers, insecticides or hormones, and in Guinea, they are not allowed to work with certain hammers. These restrictions stem from traditionalists laws which are yet to be repealed, for instance, the restriction on women working at night has its origin in the Industrial Revolution & International Labour Organization laws in 1948. In Egypt, women still suffer

due to traditional gender roles which force them to assume the sole task of childcare and household responsibilities and a high wage gap between the two genders with men consistently earning more (Louay, Ifeanyi, Glick, Martini, Chandra, 2020). This positions them behind the men in going to school, getting prestigious jobs and financial freedom impeding their future financial wellness.

The theory has been heavily criticized for glorifying rather than rectifying the gender roles with critics arguing that sexist and discriminatory gender roles should not be upheld. Many sociologists like Italian theorist Antonio Gramsci argue that functionalism justifies status quos and gratifies cultural hegemony. It also does not encourage society members to be active in changing their social environment as it advocates for the upholding of social norms despising social change. Modernists argue that the structural functionalism theory is slowly losing its relevance in modern society as gender roles are not strictly adhered to as Africans and the rest of world slowly disengages from gender stereotypes.

Extant literature, however, shows that existing cultural factors arose from the pre-colonial and colonial customs and that some cultural norms persisted even after the initial circumstances that led to their adoption and prevalence changed. (Basse & Bubu, 2019). This supports the use of the functionalism theory in today's society. The functionalism theory contributes to this research paper as it provides background on key issues such as how stratification and societal influences bring about gender divisions and cultural hegemony from an early age. These gender divisions persist even as individuals get older.

2.2.3 The Feminist Theory

Feminism is the belief in social, economic, and political equality among men and women (Webb, 1993). The feminist theory is comprised of both traditional and modern feminism and is focused on understanding the aspects of inequality among the genders. It actively examines

the social roles, experiences, and interests of the genders by exploring key thematic areas such as objectification, discrimination, patriarchy, and stereotyping among others.

Since it began, the feminist movement experienced three waves; the first wave championed for the right to vote and the right to own property, the second wave was centered on equality and anti-discriminatory practices whereas the third wave fought for equality among women as white were deemed to be more privileged compared to women of other races. Interestingly, feminism has now evolved into many aspects and types and is no longer one unified concept. The most common types are black feminism, radical feminism, cultural feminism, liberal feminism, Marxist feminism and Social feminism among others

The emergence of feminist theories can be traced back to 1794 when publications such as *A Vindication of the Rights of Woman* by Mary Wollstonecraft were published. Susan B. Anthony was among the protagonists of the movement with her activism beginning when she questioned the authoritative constitutional laws and how male-gendered the language used was. She argued that it was illogical that women were punished under law but were not protected by the same law as they could not own property, could not vote, and even maintain custody of themselves after they were married.

As for the male-gendered language, she argued that women should not be subjected to abiding to laws that were not specifically drafted and passed as for women. Since then, the feminist theory has evolved with the most recent improvement being modern feminism theory. The modern feminism theory differs from the old feminist theory in that the latter focused on women as universal entities whereas the former focuses on social differentiation and pays attention to individuality. Additionally, it addresses gender identity and the relationships between the male and female genders (Lay & Daley, 2007).

The feminist theory in its entirety is not about women only, it focuses on the world and how the genders engage through intersectional perspectives in their day to day lives. The most feral arguments of all the feminist theories is grounded on the best ways to understand and consequently improve the lives of women, men, children, all species, and the planet as a whole (Ferguson, 2017). The theory is mostly associated with the rights of women which is very simplistic and reductionist as the theory aims to explain how gender differences affect human behaviors both socially, culturally, and politically. The theory argues that oppression is deep rooted in the culture and society and is not necessarily a result of 'bad attitudes' in the society.

All feminist theories have common widely shared characteristics, to begin with, the theories are suspicious of dualistic thinking; they are of the opinion that dividing the world into two opposing divisions such as male and female; mind and body among others oversimplifies truly complex structures. The division further brings about inequality and hierarchy as one group dominates over the other thus helping bring about the prevailing power relationships which are hard to change or do away with.

In Western thought, the body was associated with women whereas the men were associated with the mind. One modern feminist, Susan Bordo, argued that the association of women with the body resulted in the objectification of women where they were seen and treated by men as property, objects and commodities that could be exchanged. This is in contrast to the male perception where men were seen as moral agents and intellectual beings. Bordo in her writings elaborated the dualistic character of the mind and body perspective by referencing the early works of philosophers such as Descartes, and Aristotle.

The second common characteristic of the feminist theory is the acceptance of fluid and flexible processes and thinking as opposed to conforming to one static way of thinking especially among cause-and-effect relationships. Patriarchal thinking brought about fixed

perceptions on women, a phenomenon that Beauvoir (2011) referred to as the “myth of the Eternal Feminine”. Women were viewed as objectified creatures who were expected to be dominantly feminine and subjective to men. The feminist theories argue for dynamic and static thinking all while embracing and understanding past and historical perspectives.

Thirdly, the feminist theories are both intellectual and political enterprises. The theories are responsible for the emergence and continued fight for political, social, and economic equality and justice. The theories work to change the world and are rooted on a “both/and” thinking as opposed to the “either/or” perspective. The theory since its onset voiced concern and fought for political rights such as the right to vote among others and was instruments in fighting for both racial and political justice especially in Europe and the United States.

The theory has not been devoid of criticism, by the 2000s, writers that were part of the feminist movement as well as those who weren’t argued that the feminist movement had lost its meaning and that the new wave of feminists did not contribute anything of value to the advancement of social, political, and economic equality among the genders. Today, the concern on sexualized behavior especially among women who claim to be empowered by feminism in their dressing attitudes brings about the question of whether or not this represents true liberation or oppressed thinking. The biggest criticism of the feminist theory is that it is heavily invested in fighting for female rights in an effort to level the playing field for the two genders. This focus has seen men overtake women in some aspects of life, despite of this, the theory does not fiercely fight for the rights of men as it does for women.

In relation to the study of the financial gender gap in Africa, the feminist theory can be used to explain the occurrence of certain phenome such as the origin and current state of the earnings gap. The feminist movement was critical in pushing for equal pay for equal work before it was signed into law by President Kennedy of the USA. Increased efforts from the activists can also

be used to explain the narrowing of the earnings gap in the early years. Similarly, the adoption of policies that narrowed the gender gap such as training centers and programs that aimed to improve basic female literacy as well as financial literacy is commendable and has been key in bridging the financial gender gap in countries such as Togo and Rwanda. This can act as a roadmap for other African countries to emulate.

The feminist theory aspect of fluidity in thinking as opposed to static thinking is helpful in increasing the numbers of women participating in the labor market, the number of women working in male-dominated jobs such as those that are STEM related. Similarly, it can help increase the number of men participating in female-dominated jobs such as hair dressing and customer care. Women and men ought not to be limited by historical and cultural practices when choosing their preferred career options but instead should follow their passion and develop their desired skills and be active in the labor market.

In parts of Africa where cultural practices are still dominant, statistic thinking which the feminist theory opposes is prevalent and can explain why the levels of female labour participation are lower than those of men, why women access to credit is still a pipe dream, and why women earn less than their male counterparts. The theory further helps bridge the financial gender gap by championing for the inclusion of both genders (and other emerging genders) in the social, economic, and political welfare of a country.

2.3 Empirical Review

2.3.1 Financial Literacy Gender Gap

Financial literacy is not a new term. However, its use and popularity has increased in recent years. Currently, institutions with a sole focus on financial literacy have emerged and gained prominence, one such institution is the Centre for Financial Literacy Education Africa (CFLE

Africa) whose mission is to empower Ghanaians and Africans to make financially sound decisions; develop financial literacy skills in young people; create massive financial awareness and financial literacy education and unite organizations that are championing financial literacy. To begin with, Literacy is difficult to define as it is a social construct whose meaning differs among individuals. Generally, however, it denotes the ability to read and write; it is also an integrated complex aspect of processes, skills, habits, attitudes and interests. (McKenna, & Robinson, 1990). As per the global gender gap index, SSA has an 85.3% gender gap in educational attainment, ranking as the worst performing in the globe. Theoretically, women can start businesses just like their male counterparts, however, they are not well versed with expansion opportunities and funding opportunities as they scored lower than men in the financial literacy test.

Noctor, Stoney, and Stradling (1992) were among the first individuals to provide a definition for financial literacy as the financial knowledge that leads to informed and sound decision making. According to them, it is a successor of financial educational programmes and entails the ability to apply financial knowledge acquired properly to make prudent decisions. The Organisation for Economic Co-operation and Development (OECD) (2013) defines financial literacy as the acquisition of financial knowledge, understanding of the knowledge and the effective use of the knowledge in making sound financial decisions. According to the World Bank, for an individual to be deemed financially literate, he or she should meet the criteria as detailed by the OECD, that is, be able to acquire, understand and use financial knowledge effectively. It is common for individuals to have the financial knowledge yet fail at identifying the most suitable financial products that best suite an individual. Oanea and Dornean (2012) formulated a financial literacy framework that detailed the key determinants of determining financial literacy as:

“Financial literacy implies a persons’ minimal knowledge about financial terms such as money, inflation, interest rate, credit and others, but besides this is the abilities and skills of that person to use all this information in personal life, being aware about the consequences of its financial actions” (p.116).

Financial literacy is beneficial to individuals as it enables them to plan for their retirement, rationalize their savings, assess their consumption, increase their bargaining power, and improve their financial health and wellbeing. Financial literacy also benefits the financial system by increasing discipline & participation in the financial markets, increasing debt management in an economy, innovation and provision of quality products, and better healthy competition among financial providers. To the community, financial literacy increases financial inclusivity, better understanding of governmental fiscal and monetary policy which eases the process of holding governments responsible for their policies (OECD, 2013). The absence of financial literacy robs the common man of awareness regarding financial products that can be used to improve their living standards.

In the least developed countries (LDCs), majority of the population relies on small to middle income enterprises and climate dependent economic activities such as agriculture which leaves them exposed to regular income inconsistencies and irregular climate patterns. In these situations, savings for rainy days, utilizing financial products such as insurance can cushion them from the adverse effects. Financial literacy can be instrumental in helping identify and take up financial products that provide protection from both foreseeable risks like climate change and unforeseeable risks such as inflation.

According to the financial literacy survey, the level of literacy in matters finance in Africa are alarmingly low. Most Africans lack basic knowledge on key financial concepts such as interest rates, loan requirements, savings, budgeting and inflation. The level of financial literacy in Kenya, South Africa and Nigeria is 38%, 42% and 26% respectively.

This is a significant contrast to countries in Europe which had a financial literacy level of 65% to 75% indicating that despite increasing efforts, the continent still lags behind in eliminating financial illiteracy. Those in LDCs lack the capacity to plan, and invest in their future due to lack of knowledge (Refera, Dhaliwal, & Kaur, 2016).

According to CFLE Africa, there is a financial illiteracy epidemic in Ghana & Africa as most Africans are not taught basic smart money management both at home and in school. The organization indicates that most lack the proper tools to address everyday money decisions in an informed and sound manner which jeopardizes their financial health and impedes their achievement of their financial goals. Similarly, Xu and Zia (2012) in their review of financial literacy in the globe found that SSA countries like Uganda had large numbers of people who lacked awareness on financial concepts such as savings and insurance. The Financial literature survey of 2022 found that levels of financial literacy were low in the world with numeracy and inflation being the most understood concepts whereas risk diversification is the least understood concept (Global Financial Literacy Excellence Centre, 2022).

On the gender front, globally, only 35% of men are financially literate while only 30% of women are financially literate, in theory, women can start a business just like their male counterparts, however, they are not well equipped and informed to expand their business ventures in the long run due to reduced knowledge on financial products and services (World Economic Forum, 2022).

In the adult financial literacy survey, OECD (2020) found that men have greater financial knowledge and financial health scores as compared to women. In developing countries like Rwanda, the difference in financial literacy is not statistically significant.

Across the board, women are more disadvantaged than men as they tend to live longer thus being more exposed to financial hardships in their old age.

In Africa and other developing countries, women face distinct challenges due to longer life expectancies than men which increases their chances of spending their golden years in widowhood, lower aggregate income, and frequent career interruptions due to childbearing. These unique challenges coupled with low financial literacy puts in jeopardy their financial well-being as they are less likely to pay attention to charges and fees, borrow at low costs, accumulate wealth and diversify risk (Lusardi & Mitchell, 2008).

According to the World Economic Forum (2022), gaps in early learning and skills prioritization among men and women have resulted in unequal career projections thus a wealth gap between the genders. With an increase of financial products in the global economy, there has been a surge in the complexity of making prudent financial decisions, as such, financial literacy is crucial in decision making with studies finding that a high level of financial literacy leads to great financial well-being and overall better financial health (Taft, Hosein, Mehrizi, & Roshan, 2013). Further, financial literacy is key in achievement of set goals and objectives; by having a better understanding on how to budget and save, an individual can create and implement plans that bring them closer to their financial goals. Having financial literacy increases the odds of attaining the set goals.

Being financial literate is instrumental in increasing ones' ability to make prudent decisions, effectively manage money and debt, reduce unnecessary expenses, lessen financial stress and burden especially in the golden years, better & ethical selection of financial services and products such as loans, insurance and using credit cards (Piskadlo,

2016). Additionally, individuals with higher levels of financial literacy are more likely to be engaged in positive savings behaviours and less likely to be borrowing from informal unregulated sources (Lusardi, & Mitchell, 2014).

With the benefits discussed being the resultant of financial literacy, it means that the absence of financial literacy or lower levels among women means that more women than men can enjoy the benefits of being financially literate. Lusardi & Mitchell (2007), argued that financial literacy influences planning behaviour which in turn influences wealth accumulation. There exists a research gap on how the components of financial literacy directly affect the financial attainments of the genders and as such this paper aimed to address that. Further, there exists conflicting ideologies with some researchers arguing that schooling attainment is enough for one to be financially healthy whereas some argue that schooling only becomes effective when interacted with financial literacy (Behrman, Mitchell, Soo, & Bravo, 2012).

2.3.2 Financial Inclusion Gap

Financial inclusion is the process of providing access to crucial and required financial services and products as needed by society at an affordable cost in a fair and transparent manner (Chakrabarty, 2010). For financial inclusion to be realized, timely and adequate products and services need be availed to the vulnerable members in the society such as the low-income earners. As per the United Nations (UN), financial inclusion provides access to a range of financial services such as insurance, saving, credit & loans, remittance, mortgage financing services among others all at a reasonable cost. The absence of financial inclusion results in financial exclusion which represents a state where certain members of the society lack access to safe, appropriate fairly priced financial products and services. As such financial inclusion in its true essence ensures that individuals are not only able to access

financial services & products but also able to understand and use them prudently. Financial exclusion is mostly as a result of lack of awareness, poverty, and illiteracy; the procedural hassles that formal financial institutions require also push individuals to informal financial sources which in turn increases their exposure to unsafe and unethical providers who leave them exposed to uninsured risks. Financial inclusion is therefore a broad concept that entails awareness of financial products, education on money management and selection of appropriate financial products (Damodaran, 2013).

In 31 Sub-Saharan African Countries, the level of financial inclusion has increased significantly from 2011 with variations in levels among the countries. Studies found that age, education, gender and wealth as well as macro-economic factors such as gross domestic product growth rate were key determinants and predictors of financial inclusion. Women and young people were left behind compared to male and older counterparts thus necessitating the need for financial inclusion policies that focused on the needs of women and young people (Asuming, Osei-Agyei, & Mohammed, 2019). In SSA countries, 37% of women have a bank account compared to 48% of men, North Africa has the largest access to finance gender gap in the world at 18%. The main argument is that the supply side poses great restrictions to women in need of financial services and products such as high interest rates on borrowers and strict collateral requirements. The high interest rates ration the credit thus discouraging women from applying for credit and when women have access to credit, they face stricter loan arrangements compared to their male counterparts (Morsy & Youssef, 2017).

Interestingly, the behavior of women when making financial decisions plays an important role in the financial inclusion gender gap, African women, most especially entrepreneurs, choose not to apply for loans due to low financial literacy, fear of failure and even low risk appetite. This results in a situation where women are self-selecting themselves out of financial

market products and services offered by financial institutions. In 47 Credit markets in Africa, women are more likely to self-select out of the credit markets due to low self-perceived creditworthiness; these women opt to not apply for loans and other financial products as they are discouraged by their own perceptions that their applications will be turned down. Morsy (2020) found that women self-selection was not directly related to their creditworthiness or that of their businesses and that the self-selection persisted even in absence of discriminatory lending practices implying that the behavior was not a direct response to discrimination by the financial institutions and other lenders.

Financial Inclusion is a crucial driver for economic growth and consequently economic development (Morsy, 2020). It largely contributes to individual and social welfare, allows for business expansion resulting in jobs creation. Financial inclusion improves the community's welfare, reduces the likelihood of poverty, increases productivity and even positively impacts the macro-economy. SSA is the only region in the world where more women than men are entrepreneurs, despite of this access to capital is much harder for an average woman compared to a man and as a result, investors overlook many potentially lucrative ventures. In SSA, the fashion industry is largely dominated by women, most women in the industry run small and medium enterprises which collectively, account for \$31 billion annually in the cotton-textile-garment division alone. These female entrepreneurs'/ business owners still face challenges in accessing financing, and insurance for their businesses which consequentially undermines their business potential and limits their ability to tap into the high return areas of the industry. As such, the lack of access to capital for both expansion and start-up purposes impedes the growth of their businesses and affects their business profits and earnings negatively. Similarly, women are dominant in the agriculture sector in the African continent, despite their dominance, they still face challenges accessing credit from formal financial institutions and as a result are unable

to invest in modern technologies which can increase efficiency. They are unable to grow high-value crops and diversify their economic activities which reduces their ability to do better financially as compared to their male counterparts in the long run, this widens the financial gender gap (Morsy, 2020).

According to the global wealth report of 2022, women have a larger share of their assets in a non-financial form and hold only a small percentage of their financial wealth in risky assets such as corporate shares, this contrasts to their male counterparts who showed a higher risk appetite and had holdings in risky assets such as corporate shares (Credit Suisse Research Institute (CSRI) (2022). Women are more than men are more likely to save informally thus incurring the opportunity costs of saving formally. Due to informal savings, they are likely to have bad or no credit ratings which impedes their borrowing capacity and increases their chances of losing their savings due to security & safety issues. This negatively affects their individual welfare and financial positions and necessitates the development of tailor-made financial products which factor in the needs of borrowers. In households led by women, the intake of financial products such as insurance and loans was lower compared to those led by men. Women are also less likely to take a high interest loan than men as they would prefer to adopt cost cutting measures to reduce their expenses than borrow from a financial institution (Kimaru, 2021). According to the AfDB, 13.1% of women compared to 8.2% of men cited high interest rates as the reason for failing to apply for a bank loan. The behavioural tendency to opt for less risky investments and assets implies lower returns in comparison to the male counterparts who invest in risky investments in anticipation of higher returns. Similarly, the uptake of financial products that cushion individuals from unforeseen risks was higher among men than women. According to a study that sought to research on the uptake of insurance in developing countries in Africa, 57.6% of men had an insurance policy compared to 42.4% of

women (Langat, Naibei, Getare, 2017). This positions men at a better position to retain their initial financial positions in case of accidents or unforeseen events not to mention the financial benefit that the insured receives from their insurer. With more men than women benefiting from this uptake, the financial gap between the two becomes increasingly harder to narrow.

The gender gap in financial inclusion in Africa can have significant impact on both social and economic progress and as such decision makers can and should address the key barriers to gender balanced financial inclusion including collateral challenges, the gender-blind approach to financial inclusion by lenders, assets ownerships challenges by women especially in traditionally oriented cultures, poor documentation and record keeping among women entrepreneurs and self-doubt among others. In 2019 at the global gender summit, the African continent dedicated to work towards the financial and economic empowerment of women in an effort to narrow the gap between men and women, through innovative solutions to provide financial access to women. The goal for the Decade on Financial and Economic Inclusion for African Women is that every woman should be able to work, be compensated through wages and participate in the economy of her country. This involves examining and revising regulatory and legislative policies as well as helping financial institutions to adopt products and services that are tailor made to cater for women needs. As per the world bank (2020), financial inclusion reduces extreme poverty and boosts shared prosperity; the exclusion of majority of women diminishes their capacity to escape poverty and contribute to economic growth. Providing access to financial services to women means greater participation, opportunities, and control of resources for women. When women generate their own income, it trickles down to their families and communities thus improving both individual and societal welfare. Accessibility to transactional accounts in banks and other financial institutions is a step towards financial inclusion as it allows individuals to store money, send & receive payments and acts as a

gateway to other financial services. As accountholders, both men and women can start and expand businesses, invest in health & education, manage risks, counter weather financial shocks and improve the overall quality of their lives. Majority of studies on financial inclusion have been to gauge its impact on economic growth or development with the main variable examined being access to credit; this study looked at how financial inclusion impacts an individual's financial attainment and consider other sub-factors of financial inclusion such as access and usage of financial products such as insurance.

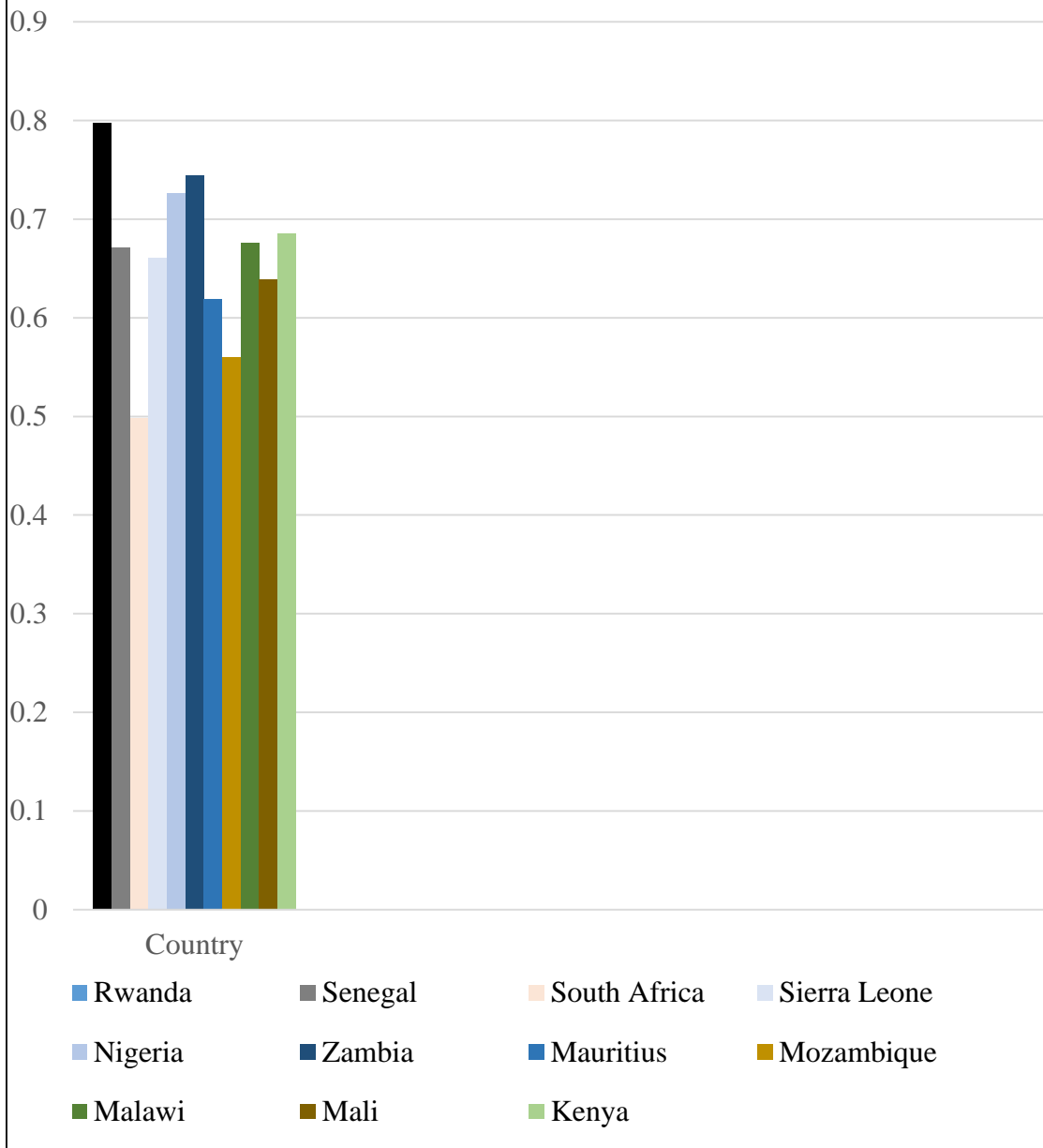
2.3.3 The earnings gap

The wage gap is a raw statistic that shows the difference between women's earnings as compared to men's earnings; it is the comparison between the median income of women who work full time to the median income of full time men workers. It ignores crucial variations among individuals such as level of education, years of experience, industry average and time spent away from work/ leave. The earnings gap on the other hand, refers to the overall disparity in income between women and men, it factors in the types of jobs, and the experience that an individual has (Graovac, 2016).

The existing gap in earnings shows a persisting inequality between men and women at all levels in our communities. The gender earnings gap stands at 30% in SSA compared to 24% globally for both the formal and informal sectors (UN Women, 2022). This is despite women being the backbone of the African economy; the continent has the highest percentage of women entrepreneurs in the continent with one in every four women starting or managing a business in SSA according to UN Women. The gender pay gap has been an area of interest for economists who are concerned with the economics of gender. This is because of the fundamental importance of wages as a measure of economic welfare among employed/salaried individuals.

According to the International Labour Organization (ILO), in SSA, the median monthly income of men is twice more than that of women and female entrepreneurs earn only two-thirds of what male entrepreneurs earn (ILO, 2019). One of the most persistent challenges is unequal pay for similar jobs with women being the disadvantaged gender, the chart below shows the level of inequality in earnings and wages for similar work in some SSA countries; notably no SSA country has equal pay for similar jobs.

FIGURE 1
Wage Equality for Similar Work



Source: The Global Gender Gap Index (2022)

The social and cultural norms are a key player in the types of jobs & careers that men and women pursue and how the work is valued and remunerated, to date male-dominated industries and female dominated industries are not valued the same (UN Women, 2022). In SSA, more than 89% of African women work in the informal economy with agriculture being the most important source of income in the continent. The sector employs more than 50% women. With only 7.19% of women enrolled in colleges and universities compared to 10.41% of men, it is likely that more women than men will end up taking informal jobs that do not require a university degree. On the influence of socio-cultural factors on career choice, a study found that 87% of students in a Kenyan university cited socio-cultural factors as critical influences when selecting their career choice (Munyingi, 2012). As per the Ohio Career Development Systems Study (2009), family has the greatest influence on career decision making among youths, similarly, the study by Munyingi (2012), found that 37% of the respondents agreed that gender was a key factor in choosing their career choices and 30% agreed that their cultural background was influential in choosing their career paths.

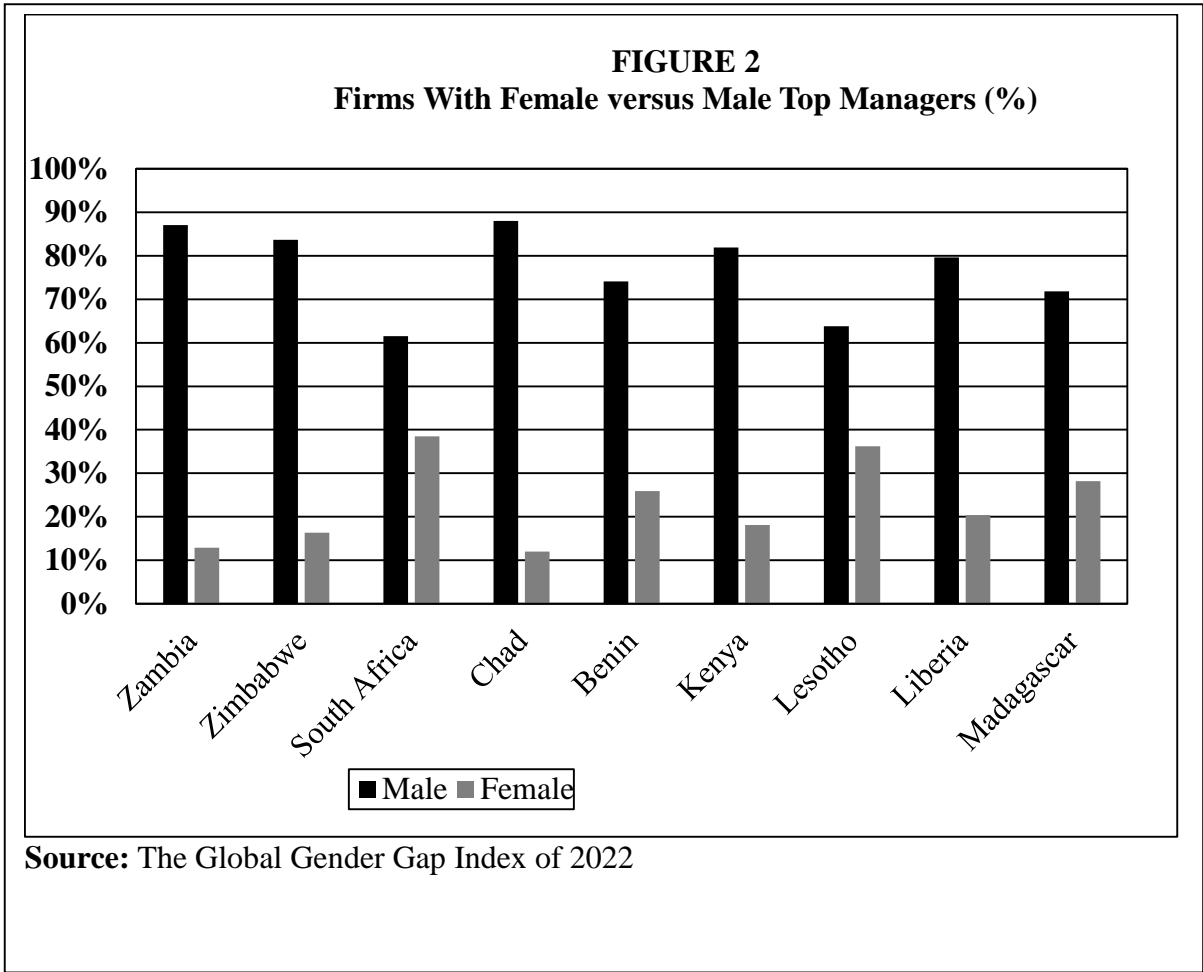
Traditionally, women were economically dominated by men and men gained professional status and inclusion due to their economic resources, they then utilized their status to limit women's entry into professions. Just like in the traditional setting, most African women still depend on agriculture as their main source of income. Today, less than 50% of working-age women are participants in the labour market with the rest doing unpaid domestic work and care work (United Nations, 2020). With such numbers it will be an uphill task to bridge the earnings gap between the two genders and it is likely that if the cultural norms continue to be adopted, the financial gender gap will persist.

In SSA countries, female students are more likely to undertake humanities and arts whereas more men take STEM courses (Elu et.al., 2017). This results in differences among

the number of women and men employed in top jobs in the various SSA countries. Notably, there are more men than women in top jobs in SSA countries and women have minimal presence on boards in African companies with majority of boards comprising of one woman, additionally, only one-third of companies have no woman in their boards and 33.6% have only one female director (UN Women, 2022). Statistically, women dominate low –paying jobs in industries like social services, office administration, health care, retail and education whereas men are more dominant in high paying industries like the finance and technology industries; of the 30 highest paying professions, men are dominant in 26 of them whereas of the 30 lowest paying ones, women are dominant in 23 of them (Diagana, 2022).

The wage gap is fueled by unequal access to high-paying professions and as a result women’s professional advancement stalls. The link between high paying jobs in highly valued industries and financial attainment among the genders in Africa is not clearly established in existing studies has not been clearly discussed in existing studies; some scholars argue that financial literacy is more crucial in attaining financial goals as opposed to higher incomes (Budig, Lim, & Hodges, 2021).

According to the global gender gap index of 2022, the number of firms with top female managers is significantly low as compared to the number of firms with male managers as depicted in figure 2. With more men than women dominating the high paying jobs, then men will continue to collectively earn more than women thus widening the existing financial gender gap, this is because a higher income enables an individual to have surplus income which can be invested elsewhere or simply used to improve the existing living standards, on the other hand, a lower income will result into lower savings and less spending on secondary wants and other luxury items.



To some, the disparity in wages is not the result of gender bias, but of the occupational choices women willingly make; Perhaps if women wanted higher-paying jobs, worked more hours, or chose smarter majors in college, then they could have the same earning power as their male counterparts. While the statement above is logically true, there are few career setbacks that women face that are not entirely in their control. In SSA, the gender pay gap is 31% for women with children and 4% for women without children. Existing labor policies have not been in favor of women who take maternity leaves so as to look after their infants (UN Women, 2022). Most women are of the opinion that maternity leave adversely affects their

careers due to an enduring stigma of motherhood in the workplace. According to Harvard Business Review (2018), the longer new mothers are away from paid work, the less likely they are to get a promotion or receive a pay rise on returning to work after maternity leave. There is also a risk of being demoted and reputational risk being soiled. Women who spend longer on maternity leave are deemed to not be committed to their work than women who take shorter maternity leaves. This implies that maternity leave is seen as a career setback and influences the growth of a woman's career in the long run. In some countries, paternal leave is not compulsory and as a result, men's careers are not affected. With accompanying risks of career stagnation or demotion, women wages are likely to stagnate or reduce whereas men remain unaffected or have their wages increased. This implies that men will most likely have a stable or increasing income which helps them in financial planning and advancement of individual welfare. This, ultimately, has a negative impact on the financial gender gap.

Unequal access and control over wealth building resources- such as banking, investment, inheritance, and property bring about the wealth divide, according to the World Economic Forum (2021), women are at a disadvantage in regards to wealth accumulation in their lifetime. For professional and technical type roles, the gender wealth gap stands at 31%, while it stands at 38% for senior expert and leadership roles, these gaps are brought about by salient factors such as the gender pay gap, unequal career progression trajectories, existing gaps in financial literacy and lastly, life events that influence women's participation in paid work and their ability to contribute to wealth accumulation. Having a high income is advantageous in that it helps an individual meet basic needs and makes it possible to realize one's financial goals. Additionally, it provides an avenue for an individual to spend surplus income in secondary needs such as cars and splurge on luxurious items. Persistence of the earnings gap does not narrow the financial gender gap and income equality is crucial if the gender gap in financial

attainments is to be achieved, especially for women and men performing similar tasks and have similar educational attainments.

2.3.4 Labour Participation Rates among women in Africa

The labour participation among women is an estimate of the economy's active female workforce. Labour force participation rate is calculated as the labour force divided by the total working-age population; where the working age population is 15 to 64. The rate is an indicator of the size of the supply of labour that is available to produce goods and services (OECD, 2022). Globally, women are faced with less income generating opportunities, are less likely to work in formal employment, expand businesses and attain career progress compared to their male counterparts (World Bank, 2022). The World Bank also estimates the global labour force participation for women to be 50% whereas that of men to be 80%, a staggering difference. For the last three decades, the labour participation of women has been stagnant with about 50% of working age women participating in the labour market.

In North Africa, only a quarter of working age women participate in the labour market. Notably, higher income countries have a higher rate of female participation in the labour market which in turn, narrows their existing gender gap. Labour participation of women drives development through economic transformation. Where Agriculture is the dominant economic sector, the labour participation of women is higher than that of men, further, in middle-income economies where agriculture does not dominate the economic activities, the labour participation of women is lower whereas female labour participation is high in high-income economies with an increasing shift towards service based economies (World Bank, 2022).

According to the World Bank (2022), labour participation is affected by equal access to good jobs/work. Work can be divided into two broad categories, that is wage work and vulnerable work. The latter is characterized by different forms of self-employment, low

income, and low job security. Wage work on the other hand is working for an employer (either in the private, public, informal or formal sector), high income, greater job security and a conducive working environment. In SSA, working women are more likely to have vulnerable jobs as compared to working men. The COVID-19 Pandemic further reduced the number of females in the labour market with the rate of work stoppage being greater for women than men (Kugler et al., 2021). According to World Bank data, the female labour participation rate using data from women aged between 15 and 64 has experienced fluctuations in recent years but is cumulatively lower than that of men; In 2000, 55% of women were active in the labour market representing the highest percentage since 1990, by 2020, that percentage had fallen to 51%. In SSA, only 61.08% of women are active in the labour market as compared to 72.33% of men.

In Africa, women are dominant in the informal economy which qualifies as vulnerable work can be attributed to gendered roles and unfair land laws which can be traced back to traditional African culture (World Economic Forum, 2022). Despite the increasing improvements in educational attainments in an effort to bridge the financial literacy gap, there still exists gendered patterns of division of labour that greatly reduce the labour participation of women in Africa. Notably, increased educational attainment among women has not directly resulted to increased job opportunities for women's participation in the labour market. As of 2021, women in African countries dominated service-sector jobs such as fashion, hair dressing, and catering (Akpakpan, 2021).

During the COVID-19 crisis, African women were affected negatively due to automation and technological adaptations in the customer care and administrative jobs that they occupied. In Nigeria, women were in a better position than their male counterparts to financially support their families as their male spouses' income dominantly derived from oil and gas declined during the COVID-19 pandemic. Unfortunately, the lack of capability and resources to

transform their dominant sectors robs the women of economic resilience in the long-term. Additionally, in Africa, the existing gender roles across generations reduce the perceived value of women in the workforce, and limit the realization of their full potential (Akpakpan, 2021).

Women participation in the labour market is relatively higher in the African continent as compared to other continents, however, it does vary significantly from country to country. The female labor force participation rate was around 11 percent below the male rate in SSA in 2021. Notably, the male labor participation approximately equaled the world average whereas the female labor participation in SSA was roughly 14 percent above the world female average. According to the ILO, labor force is comprised of "all persons of working age who furnish the supply of labor for the production of goods and services during a specified time-reference period. It refers to the sum of all persons of working age who are employed and those who are unemployed". One constant factor is that women participation in the labour market is dependent on the level of education and social norms prevalent in each country.

SSA has high levels of female employment to population ratios, with the ETP ration being 60% in 2012 whereas Latin-America and the Caribbean the ETP ratio stood at 50% (Comblon, Robilliard, & Roubaud, 2017). Generally, the economic, social, cultural, and institutional restraints that deter women from partaking in the labour market are country specific, however, a study of emerging economies found that a higher educational level and declining fertility increased the rate of women participation with a significant number of women working out of necessity and not career advancement (Klasen, Le, Pieters, & Santos (2021). By the end of 2023, the labor force¹ in Africa is expected to stand at 543 million people (ILO,2023).

In South Africa, the gender gap in employment is wide at younger ages with a decline being witnessed later in the life cycle. the labour force participation has a persistent gender gap over the life cycle. This shows that women are more vulnerable to unemployment at a young age thus absent in the labour market. To counter the problem, it is crucial to lift the burden of care work which is done dominantly by women to enable them participate in the labour market (Klasen, Pieters, & Santos Silva, 2021). Labour participation among women are affected by dominant social norms which pressure women into certain careers with some countries ostracizing women who choose to pursue some careers.

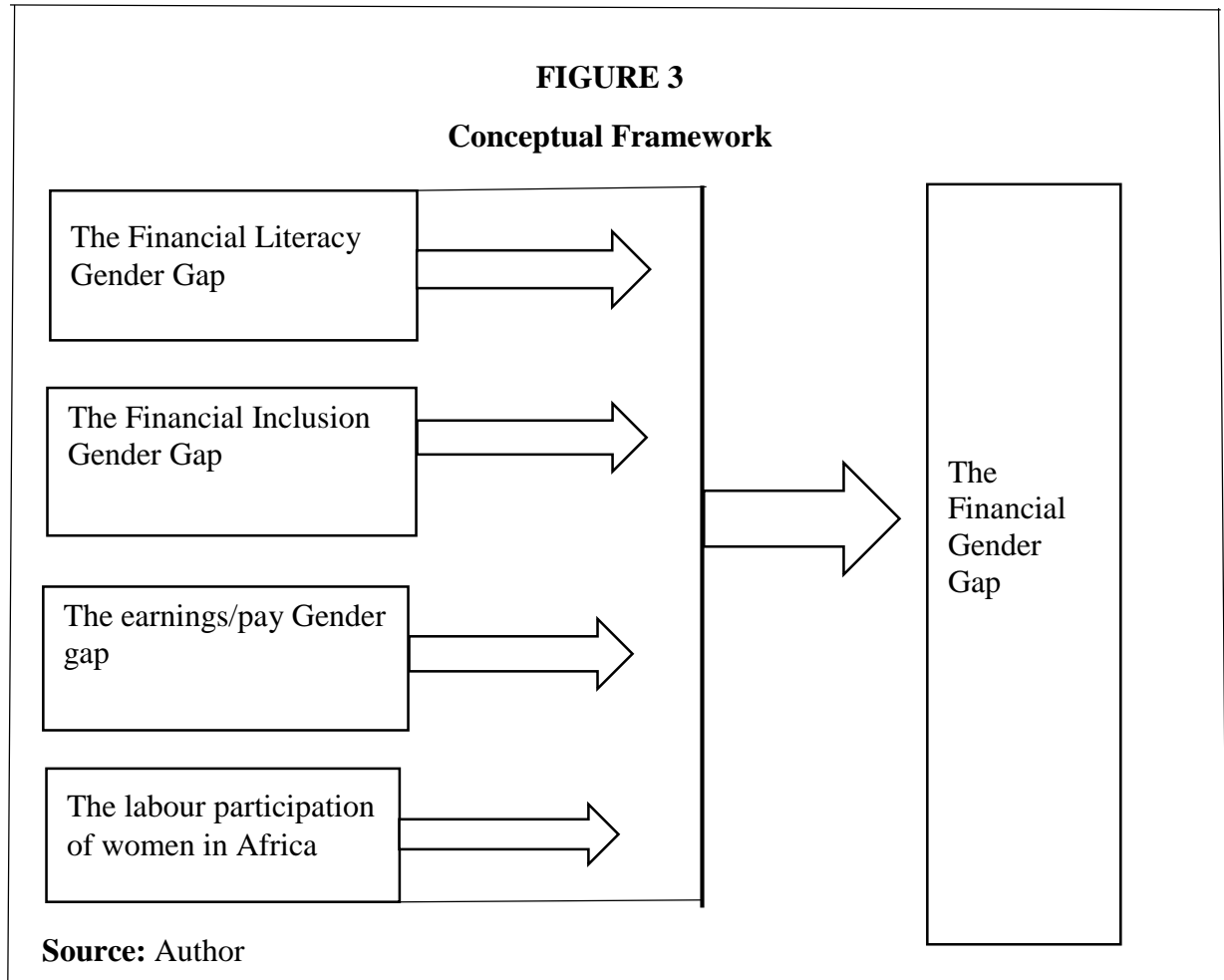
Secondly, womens' internalization leads them to opt out of some careers due to their cultural exposure when growing up. Lastly, in countries where traditional roles are still adhered to, women do not make the decision to participate or not participate in the labour market, that decision is made for them (Sivakumar, & Sharma, 2019). For instance, In 2022, Algeria had a low female labour participation rate of 16%, Egypt has 15%, Morocco had 21%, and Tunisia 26% (ILO,2023).

The World Bank (2022) recommends that to increase the participation of women in the labour markets, there needs to be women reskilling which will enable them to position themselves for more opportunities regardless of the sectors of the economy that these opportunities are in. Organizations such as the Women in Successful Careers (WISCAR) in Nigeria have taken to the task of fostering the advancement of careers among women through mentoring and role modelling. It also recommends a root-cause approach in eliminating labour participation discrimination among women; the professional choices of girls should be shaped during their early education with a targeted elimination of cultural bias and practices that drive women to shun some careers. Women have not been able to penetrate male dominated careers

and have remained outnumbered by men in managerial and other top positions which not only affects their labour participation rate but also the earnings gap.

2.4 Conceptual Framework

Figure 3 below shows the conceptual framework of the study.



2.5 Operationalization of Variables

Operationalization entails defining the identified variables into measurable factors that can be measured empirically and quantitatively (Polit & Beck, 2006). The independent variables identified in this study are the financial literacy gap, the financial access gap and the earnings

gap whereas the dependent variable is the financial gender gap. Data for each country was collected annually. The table below shows how the variables in the study were operationalized.

TABLE 2
Operationalization of the Study Variables

Variable	Definition	Indicator	Reference
Financial Literacy Gender Gap	The difference between men and women in grasping and applying financial knowledge	The S &P Global Financial Literacy Survey and report (Financial Literacy Indicators i.e., the mastery of key financial concepts such as interest rates, inflation & investment, financial attitudes & behaviour)	Oanea & Dornean (2012). Also used by Hasler, & Lusardi (2017).
The pay Gender gap	The overall disparity in income and wages between women and men.	ILO Global Wage Report indicators (The difference in remuneration between men and women in the same job positions and similar experience)	International Labour Organization (2023) Also referenced by Opoku, & Boahen, (2023).
Financial inclusion Gender gap	The gender gap in access to crucial and required financial services and products as needed by society at an affordable cost in a fair and transparent manner	The global Financial Inclusion Index also known as the Global Findex (Account ownership, digital payments, savings, borrowing, financial resilience)	Chakrabarty (2010). Also referenced by Demirgüç-Kunt, Klapper, Singer, Ansar, & Hess, (2022).

The labour participation of women	An estimate of the economy's active female workforce.	ILOSTAT Labour market participation indicators(The difference between women and men between the ages of 15 and 64 active in the labour market)	ILO (2023). Also referenced by Elder, & Smith (2010).
The gender gap	The gender gap is the difference between women and men as reflected in social, political, intellectual, cultural, or economic attainments or attitudes.	The global gender gap index (health & survival, economic attainment, political participation, and educational attainment)	World Economic Forum (2022) Also used by Sharma, Chawla, & Karam. (2021).
The financial gender gap	The gender gap in financial prosperity and attainments.	The gender gap in cumulative income annually	World Economic Forum (2022)

Source: Author (2016)

CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the framework in which data collection and analysis was carried out. It points out the research design, research instruments, the target population, sampling methods and instruments that were used in data collection as well as data processing and analysis methods used.

3.2 Research Design

A research design is the overall plan for obtaining answers to the questions being studied and for handling any difficulties that may be encountered in the course of the research process (Polit, Beck & Owen, 2003). The study adopted a cross-sectional study design which is a type of research design in which data is collected from different individuals at a single point in time. The data collected is then observed without being influenced or manipulated by the researcher. Cross-sectional design is sensible as it enables the researcher to examine the prevalence of an outcome at a certain moment in time. The design also enables the collection of data from a large pool of subjects, data collection on individual characteristics, and comparison on the differences between groups (Levin, 2006). As this study includes 40 African countries, the design was appropriate because it enabled proper comparison between the countries at a given moment in time. Data used was derived for a period of 2012 to 2022.

3.3 Target Population

Lavrakas (2014), argued that a population is defined as any infinite or finite collection of individual elements, similarly, Polit et al (2003), defined a population as the totality of all objects, subjects or members that conform to a set of specifications. Target population is the population in which the researcher can apply their results and conclusions (Dawson,2009).

Mugenda & Mugenda (2003) also defines a target population as the population to which a researcher aims to generalize the findings of the study to.

The population of interest of this study was the 54 countries in Africa. Countries that have no readily available data or have incomplete data on the variables under study were left out leaving a total of 40 countries under study as shown in Appendix I. As countries increasingly adopt policies to bridge the existing gender gap, data analysis was done over a period of time, that is, 2012-2022, to help determine the effectiveness of policies and help in recommendation of policies. The target population comprised of countries in North, West, South and Central Africa. The unit of analysis was African countries and the unit of observation was men and women in the 40 African countries under study.

3.4 Sampling and Sampling Procedure

Kothari (2009), defines a sample as a collection of units chosen from the universe to represent it, sampling, therefore, is the process of selecting a manageable and unbiased sample. Lavrakas (2014) defines a sampling frame as the list of the target population from which a sample is derived from. The study opted to undertake a census because of the small number of countries under study which made it possible to collect data from each country.

3.5 Research Instrument

The study used secondary data which was quantitative in nature. The data was collected mainly from world bank publications, published journals, the global gender gap index and other trustworthy sources so as to increase its accuracy and transparency in context of validity.

3.6 Data collection procedure

Data collection is the process of collecting, measuring and analysing data from the targeted population in a defined process which enables the researcher to answer relevant research

questions (Kothari, 2009). Secondary data refers to data that are collected by an individual other than the user or data that are used for an additional purpose other than the original designated one (Pederson, Vingilis, Wickens, Koval, & Mann, 2020). Such data significantly contributes to the knowledge pool and eliminates bias which may occur when primary data is used. (Pederson et.al., 2020) argues that secondary data is more preferred compared to primary data when carrying out quantitative research and that its popularity has increased in recent years due to its efficiency, clearer categorizations, and is time and budget friendly.

The data collected encompassed a period of 11 years, that is, 2012 to 2022, the time period helped identify any changes that have occurred or have been witnessed in the SSA countries in the decade under study. It also helped in basing the study on recent data. Data constituted both cross-sectional and time series data and therefore was treated as panel data. Panel data presents less collinearity among the identified variables as compared to cross-sectional data thus better suited to study dynamic behaviour (Ditzen, Karavias, & Westerlund, 2021), further, panel data was more suitable for this study as it enabled the researcher to analyse the SSA countries financial gender gap over the time period of 11 years.

3.6 Data Processing and analysis

Blumberg, Cooper & Schindler (2014) describe data processing as editing, coding, classifying, tabulating and representing data graphically Data underwent preparation, analysis, and reporting at this stage. Ms-Excel and STATA were used to clean, explore and analyze the collected data. Data was then analyzed using panel regression methods as neither cross sectional data nor time series data analysis will give out the best result because of existing variations in the independent variables over time. Panel data regression models that were considered for use in the analysis of the data are the pooled ordinary least squares (POLS), fixed effects and the random effects models. The fixed effect model as an analysis tool allows

for the heterogeneity among the subjects by allowing the subjects individually to have its own value for the intercept but assumes that the coefficients of the slope are constant across the countries.

Although individual intercepts may differ across the subjects, each intercept will not vary over significantly over the time period meaning that it is time invariant. In this model, dummy variables can be used to partial out individual effects for each country. This model, however, is limited in that it runs up the degrees of freedom due to the use of too many dummy variables thus a lack of adequate observations to make a meaningful statistical analysis. Additionally, it is impossible to identify the impact of the time invariant variable.

On the hand, the random effects model separates the differences across components (panels) and individual are random and uncorrelated with the independent variables. Hence error term thus captures the random effects due to the panels and the random errors. Random effects are treated as unique errors, for each panel, that have a normal distribution with zero mean and variance σ^2 . The random effects method needs you to specify the individual characteristics which may or may not in any way influence the independent variables. There is, however, a problem where some variables may not be available in the analysis leading to the omitted variables bias in the model. It also allows generalization beyond the sample in the model.

The fitted pooled OLS, fixed and random effects models will be as follows:

1. Pooled OLS: $Y_{it} = \alpha + \beta X_{it} + \varepsilon_{it}$

Where ε_{it} = error term

2. Fixed effects: $Y_{it} = \alpha_i + \beta X_{it} + \mu_{it}$

Where μ_{it} = error term

3. Random effects: $Y_{it} = \alpha + X_{it}\beta + \varepsilon_{it} + \mu_{it}$

Where ε_{it} = within entity error term

μ_{it} = between entity error term

From the equations:

Y_{it} = The Financial Gender Gap for i^{th} country in t^{th} year.

X_{it} = vector representing independent variables (Financial Literacy Gap, Financial Inclusion Gap, The pay gap, and the Labour Participation for Women) for country i in year t

β = Vector of Coefficients of the independent variables

α = the intercept for each entity, $i= 1, 2 \dots 40$ (indicator of the countries) and $t= 1, 2 \dots 11$ (time indicator)

The table below shows a summary of the data analysis carried out;

TABLE 3
Summary Panel Data Regression Analysis

Steps	Justification	Plots
Step One: (a). Exploratory data analysis (i) Within Countries (ii) Between Countries	Helped determine if any time-entity fixed effects were included in the model Overlain plots checked whether the intercepts are similar or different for the countries under study	(i) Within Countries in Africa, trend plots for each country (ii) Between Countries in Africa, overlain plots were used Countries had different intercepts, meaning fixed effects exist and the FE model was more suitable for analysis

<p>(b). Drew a Correlation Matrix for the study Variables</p>	<p>To do away with the problem of Multi-collinearity</p>	<p>The Collin “Varlist” was used to preclude Multi-collinearity</p> <p>No two study variables depicted a high level of correlation, thus none was dropped from the regression analysis</p>
<p>(c) Provided Cross-Statistics for the dependent variable</p>	<p>Summarized data in a more meaningful, simpler, and presentable manner by describing the existing relationship between the study variables</p>	<p>Mean, Median, Mode</p>
<p>Step two: Diagnostic Analysis (a) Checked for the appropriate model to use. Panel Data models (FE or RE) were used.</p>	<p>Identified the most appropriate model for analysis</p>	<p>Hausman test was used to choose between the RE and FE models</p> <p>Modified Chow test to choose between the POLS and FE Models</p>
<p>(b) FE model was chosen, test for time-related fixed effects was done.</p> <p>Use the POLS model to check for robustness</p>	<p>The POLS Model effectively checked for robustness because the FE Model also uses the OLS method for fitting.</p> <p>Robustness checks helped in exploring the stability of main estimates to potential changes in the chosen Model of analysis</p>	<p>Testparm test to check for time-related fixed effects.</p>

<p>Step three: Other Diagnostics FE model was chosen, heteroscedasticity test was conducted .</p> <p>Lastly, residuals were checked for normal distribution</p>	<p>Heteroscedasticity in an analysis model results in biased results and renders the t or f results unreliable</p>	<p>Tested for heteroscedasticity using the modified Wald test was used.</p> <p>Since heteroscedasticity existed, robust standard error was used in the model of choice to report results obtained</p> <p>PP Plots and QQ plots were used to determine whether residual values are normally distributed</p>
--	--	--

CHAPTER FOUR: DATA ANALYSIS AND FINDINGS

4.1 Introduction

This chapter presents findings from panel data analysis of secondary data collected from the 40 African countries. The chapter discusses both the exploratory analysis, the descriptive statistics as well as the diagnostic analysis of the panel data. Under diagnostic analysis, the existence of time related fixed effects is examined as well as tests on heteroscedasticity, serial correlation, and multi-collinearity. Additionally, the section checks for the suitability of fitting a POLs vis-à-vis the panel models as well as an analysis to choose between the FE or RE models. Lastly, panel data analysis of the data is done to determine the effect of the four independent variables on the Financial Gender Gap.

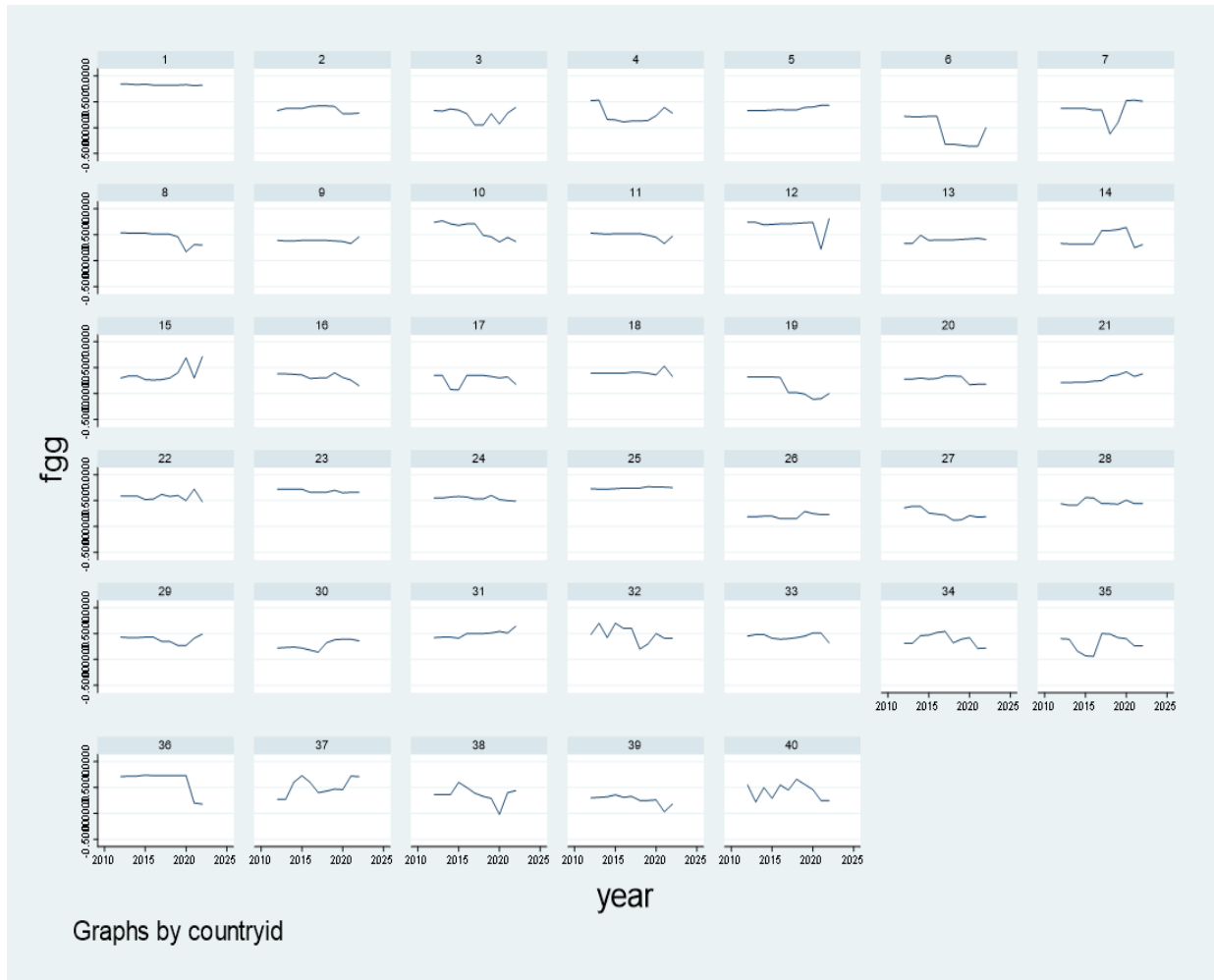
4.2 Descriptive Statistics

Data analysis began with exploration of the study data. Exploration data analysis examined heterogeneity across the firms and over time. This analysis was essential in the making the decision to use either the POLs model or the panel models. Graphs were used to visually represent the trends in the financial gender gap within and across the 40 countries.

To begin the analysis is a growth plot indicating within country analysis for the financial gender gap over the 11-year period (2012 to 2022) as shown in Figure 4 below. The growth plot reveals a change in the financial gender gap among the countries under study. Notably, however, countries such as Benin, Botswana, Burundi, Congo Democratic Republic, Ghana, Liberia, Tanzania, Togo, Uganda, Zambia, and Zimbabwe: (firm 3, 4, 6, 10, 15, 19, 35, 36, 38, 39, 40 respectively) experienced significant decrease in the financial gender gap. This could have resulted from a change in the financial inclusion gender gap which all the above countries reduced significantly. In contrast, countries such as Burkina Faso, Cameroon, Chad, Malawi,

Senegal, and Tunisia: (firm 5, 7, 9, 21, 31, 37 respectively) experienced an increase in the financial gender gap in the period under study. This can be attributed to an increase in the pay and labour gaps.

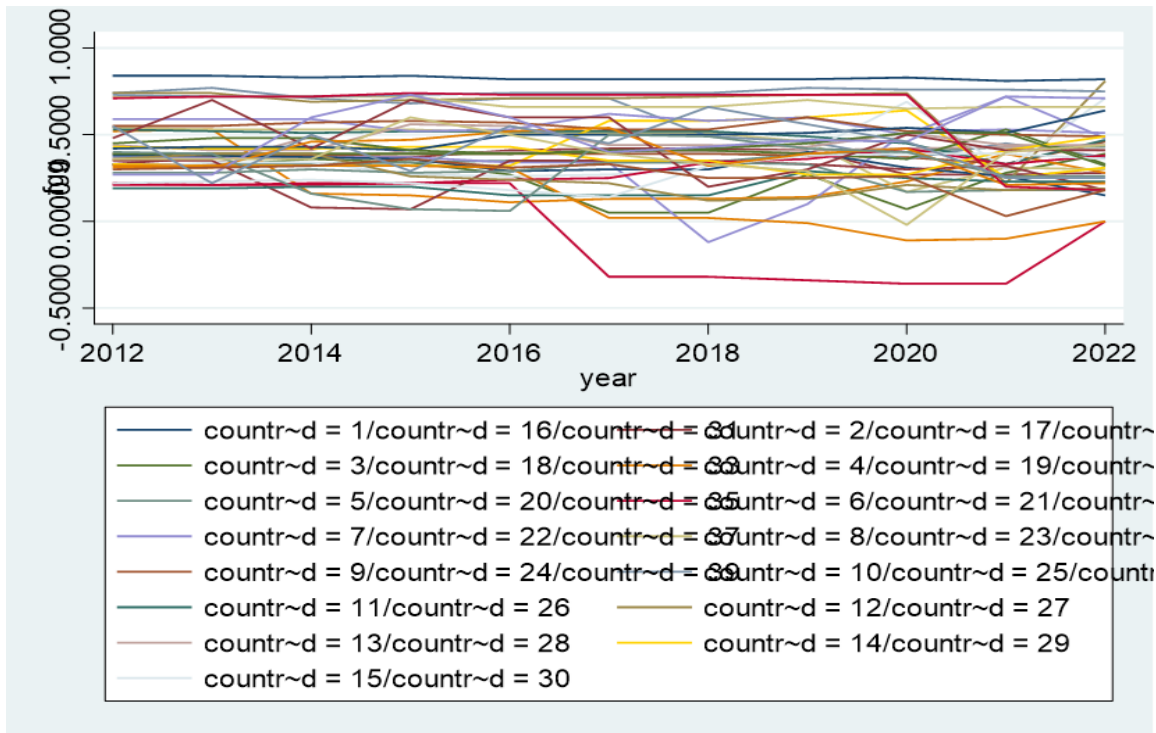
FIGURE 4
Growth Plot of Each Country's Financial Gender Gap



Further, overlain plots were used to show whether the slopes are significantly different between the countries as shown in Figure 5 below. Here, the slopes were similar apart from the intercepts which were different, thus indicating no time-related fixed effects and as a result the FE Model would be appropriate for analysis.

FIGURE 5

Overlain Plots for the Financial Gender Gap



From table 4 below, 31.3% of the financial gender gap is attributable to the Financial Inclusion gap, 33.98% to the pay gap, 20.45% to the labor gap and 11.79% is attributable to the financial literacy gap.

TABLE 4

Descriptive Statistics – Within Country and Between Countries

Variable		Mean	Std. Deviation	Min	Max
Financial Gender Gap	Overall	0.4054318	0.2042304	-0.36	0.84
	Between		0.1705270	-0.0563636	0.8263636
	Within		0.1152954	-0.0572955	0.7354318
Pay Gap	Overall	0.3398409	0.097276	-0.17	0.78
	Between		0.0678508	0.1936364	0.5
	Within		0.70454	-0.1683409	0.8152955
	Overall	0.2064091	0.21406	-0.12	0.79
	Between		0.2086824	-0.0418182	0.7481818

Labour Force Gender Gap	Within		0.0571433	-0.0681364	0.4418636
Financial Inclusion Gender Gap	Overall	0.3130502	0.158329	0	0.8
	Between		0.0864237	0.1237909	0.4782727
	Within		0.133301	-0.0314952	0.7251866
Financial Literacy Gender Gap	Overall	0.1179882	0.1809757	-0.73	0.6923
	Between		0.1036934	-0.1195091	0.3411364
	Within		0.1491469	-0.5665209	0.5924791

Using the fixed effects model, the results for the fixed effects regression for the dependent variable, that is, the financial gender gap are presented in table 11 below; The overall r-squared is 38.99% meaning 38.99% of the variations in FGG are attributable to the independent variables. The within r-squared is 6.68% meaning that 6.68% of the variations within the variables are explained by the model whereas the between r-squared is 55.90% meaning that 55.90% of the variations between the variables were explained by the model. All four independent variables were positively correlated to the financial gender gap. A point increase in the financial inclusion gap increases the FGG by 0.0778 points, a point increase in the FGG increases the pay gap by 0.089 points whereas a point increase in the labor force participation gap increases the financial gender gap by 0.3121 points and a point increase in the financial literacy gap increases the FGG by 0.099 points

TABLE 5

Fixed Effects Panel Regression on The Financial Gender Gap

Fixed-effects (within) regression		Number of obs = 440
Group variable: Countryid		Number of groups = 40
R-sq :	within = 0.0668	Obs per group: min = 11
	between = 0.5590	avg = 11.0

overall = 0.3899				max = 11			
				F(4, 396) = 7.08			
corr(u_i, Xb) = 0.4163				Prob > F = 0.0000			
Financial Gender Gap	Coef.	Std. Err.	t	P>t	[95% Conf.	Interv al]	
Financial Inclusion gap	0.0778047	0.0445865	1.75	0.082	-0.0098512	0.1654606	
Pay Gap	0.0890957	0.0798912	1.12	0.265	-0.0679682	0.2461597	
Labor force participation Gap	0.3121818	0.0995988	3.13	0.002	0.1163734	0.5079902	
Financial Literacy Gap	0.0990815	0.0394258	2.51	0.012	0.0215715	0.1765915	
_cons	0.2746691	0.03411	8.05	0.000	0.2076096	0.3417285	
sigma_u	0.12704615	(fraction of variance due to u_i)					
sigma_e	0.11727072						
rho	0.53994732						
F test that all u_i=0:	F(39, 396) = 9.35			Prob > F = 0.0000			

4.3 Study Variables

The financial gender gap is affected by all four independent variables, that is, the financial literacy gender gap, the financial inclusion gender gap, the pay/earnings gender gap, and the labour force participation of women. The labour force participation rate of women and the financial literacy gender gap are the major contributors to the FGG in that they depicted the highest significance levels compared to the remaining two variables.

An increase in the pay gap increases the FGG as pay directly affects the accumulated income among workers. If men earn more than women in similar positions then by the end of their careers, then men will have earned more cumulative income than women. Cumulative income

directly affects the choice and magnitude of investments among other factors thus further widening the existing FGG.

There is a low correlation between the pay gap and the financial gender gap because as efforts to attain wage equality and narrow the pay gap increase, women still dominate low – paying jobs in industries like social services, office administration, health care, retail and education whereas men are more dominant in high paying industries like the finance and technology industries (Diagana, 2022). Women are also dominant in the informal sector and in some countries still prone to cultural norms (UN Women, 2022). This means that even if wage equality was implemented among the genders, the gap would still exist as a result of men earning more cumulative income as opposed to their female counterparts.

An increase in the financial inclusion gap increases the FGG as women being on the disadvantaged side miss out of financial products and services. Challenges in accessing financing and products such as insurance impedes their personal and commercial growth which consequentially affects their cumulative income and financial wellness thus increased FGG. There is a low correlation between the financial inclusion gap and the financial gender gap. This is because despite the high financial inclusion efforts towards women, women highly self-selected themselves out of the financial markets and services. Morsy (2020) found that women self-selection was not directly related to their creditworthiness or that of their businesses and that the self-selection persisted even in absence of discriminatory lending practices implying that the behavior was not a direct response to discrimination by the financial institutions and other lenders.

Similarly, an increase in the financial literacy gap results to an increase in the FGG, this is owing to the fact that financial literacy helps individuals in making sound financial decisions which improves their financial wellbeing in the long-run. Financial literacy also plays a key

role in proper management of debt and money and ethical selection of financial products and services all of which affect the financial wellbeing and financial position of an individual. The widening of the gap therefore impedes the realization of gender parity, especially financially. In countries such as Togo, women are doing better than men in reference of financial literacy, as a result, the Financial literacy gap between men and women is to the disadvantage of men.

Thirdly, an increase in the labour force participate rate gap increases the FGG as more women than men working informal jobs implies that women will earn lesser cumulative income than their male counterparts in their life-time; this is fueled further by the increasing number of men in high paying jobs than women. Participation in the labour market avails an avenue to earn money which is an incentive to improve the living standards and the level of comfort. As more women than men participate in unpaid housework, they miss out on wages that could have otherwise helped improve their living standards and increase their overall income.

4.4 Diagnostic Tests

This section reports on the suitability of fitting pooled regression models vis-à-vis panel data models, and the existence of time-related fixed effects. Additionally, it tests for correlation, heteroscedasticity, multi-correlation, and serial correlation. Lastly an analysis to help determine whether the random effects or fixed effects models should be used is done. To begin with, a test for correlation was carried out. No two variables were highly or perfectly correlated thus precluding multi-collinearity

TABLE 6
Correlation Matrix of the Study Variables

	FGG	Financial Inclusion Gap	Pay Gap	Labour Force Participation rate Gap	Financial Literacy Gap
FGG	1.0000				

Financial Inclusion Gap	0.2032	1.0000			
Pay Gap	0.2137	-0.0318	1.0000		
Labour Force Participation rate Gap	0.6196	0.1884	0.0708	1.0000	
Financial Literacy Gap	0.0600	0.2495	0.0446	0.0583	1.0000

To examine the suitability of fitting a POLS vis-à-vis panel models, the Breusch-Pagan LM test was used. $P < 0.001$ as shown in table 4 below thus implying the existence of significant differences of the FGG among countries thus illogical to use POLS.

TABLE 7
Chi-Square values for the Breusch-Pagan LM Test

Dependent variable	χ^2-value	p-value
The Financial Gender Gap	318.80	0.0000

Secondly, the testparm test was used to examine the presence of time-related fixed effects. If such effects were present, then one would be required to account for the effects either by inclusion of dummy variables to capture the effects or fitting a two-way random effects model. As shown in Table 5 below, $prob > 0.05$ meaning that there are no time-fixed effects thus no need to use dummy variables or fitting a two-way RE model.

TABLE 8
Test Results for Time Fixed Effects

Dependent variable	F-value	p-value
The Financial Gender Gap	9.34	0.8112

Thirdly, to examine the presence of heteroscedasticity, the Modified Wald test was used. From Table 6 below, heteroscedasticity was present since $p < 0.0001$. Robust standard error was used in the model to eliminate heteroscedasticity.

TABLE 9
Test Results for Heteroscedasticity

Dependent variable	p-value
The Financial Gender Gap	0.0000

The study used the Prais- Winsten procedure to test for serial correlation. As shown in the table below, no two variables depicted high levels of serial correlation.

TABLE 10
Test Results Serial Correlation

Dependent variable	Chi²	Prob>chi²
The Financial Gender Gap	472.20	0.0000

Next, a multi-collinearity test was conducted to help identify highly correlated variables which cause the presence of collinearity. A VIF of 1.06 is low (less than 5) indicating the absence of multi-collinearity. The Table below shows the results.

TABLE 11
Test Results for Multi-collinearity

Variable	VIF	1/VIF
Financial Inclusion Gap	1.11	0.904411
Pay Gap	1.01	0.990037
Labor Force Participation rate Gap	1.04	0.958569
Financial Literacy Gap	1.07	0.934934
Mean VIF	1.06	

The data set contained both time series data and cross sectional data owing to the fact that data was collected for different countries at specific time periods for a duration of 11 years. As earlier pointed out the POLs models were found unfit and the panel models chosen as they capture both time and cross-sectional effects. Panel models can either be the fixed effects model (FE) or the random effects model (RE). The former is appropriate when the panel specific effects correlate with the predictor variables. The model is advantageous in that it enables the estimation of panel specific effects.

On the downside, the FE model reduces the degrees of freedom especially in instances where the number of panels under study are many. The RE model on the other hand, is based on the assumption that panel specific effects are not correlated to the predictor variables. To make a choice between the two, it is crucial to determine whether the panel specific effects are correlated to the predictor variables or not, however, the specific effects are unknown thus the need for the Hausman test which compares the coefficient estimates under the assumptions of RE versus the assumption of correlation panel specific effects. As shown in Table 10 below, $p < 0.05$, reject H_0 , therefore the FE Model is used as opposed to the RE model in presenting the panel data analysis results for the study.

TABLE 12
Results for the Hausman test

Dependent variable	Chi² (4) value	Prob>Chi²
The Financial Gender Gap	24.50	0.0001

4.5 Model Fitting

This section shows the output obtained after the empirical data analysis was carried out.

The fixed effects model was $Y_{it} = \alpha_i + \beta X_{it} + \mu_{it}$ where:

μ_{it} = between entity error term

Y_{it} = The Financial Gender Gap for i^{th} country in t^{th} year.

X_{it} = vector representing independent variables (Financial Literacy Gap, Financial Inclusion Gap, The pay gap, and the Labour Participation for Women) for country i in year t

β = Vector of Coefficients of the independent variables

α = the intercept for each entity, $i= 1, 2 \dots 40$ (indicator of the countries) and $t= 1, 2 \dots 11$ (time indicator)

The equation when fitted for the co-efficients of the independent variables is as follows;

$$Y_{it} = \alpha_i + 0.0778X_{it} + 0.0891X_{it} + 0.321X_{it} + 0.0991X_{it} + \mu_{it}$$

A point increase in the financial inclusion gap increases the FGG by 0.0778 points, a point increase in the FGG increases the pay gap by 0.089 points whereas a point increase in the labor force participation gap increases the financial gender gap by 0.3121 points and a point increase in the financial literacy gap increases the FGG by 0.099 points.

CHAPTER FIVE: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter breaks down and discusses the results obtained in the previous chapter. It also provides the conclusion arrived at by the study. With reference to the study variables, the chapter adequately answers the research questions and contrasts the findings with extant literature. The fixed effects panel data model was used for reporting results.

5.2 Summary

The study sought to determine the effect of the financial inclusion gap on the financial gender gap in Africa, from the analysis, the financial inclusion gender gap was found to have a positive relationship with the FGG in Africa. The relationship between the two is direct implying that an increase in one brings about an increase in the other and a decrease in one results to a decrease in the other. This is because a wide financial inclusion gap not only limits the access to crucial financial products and services but also hinders self/personal development which in the long run affects the levels of wealth and income accumulated among the genders with the disadvantaged gender most likely to be left out.

Countries that had high levels of the financial inclusion gender gap depicted a high level of FGG. Interestingly, while all countries under study experienced a change in the Financial Gender Gap over the period under study, countries like Benin, Botswana, Burundi, Congo Dem.Rep, Ghana, Liberia, Tanzania, Togo, Tunisia, Uganda, Zambia, and Zimbabwe experienced significant change in their FGG which was attributed to a significant reduction in their financial inclusion gender gaps for the period under study.

The study also found that there is a low correlation between the financial inclusion gap and the FGG. This is because, despite the high financial inclusion efforts towards women, women

highly self-selected themselves out of the financial markets and services. This is in line with the findings of Morsy (2020) who found that women self-selection out of the financial markets was not directly related to their creditworthiness or that of their businesses and that the self-selection persisted even in absence of discriminatory lending practices implying that the behavior was not a direct response to discrimination by the financial institutions and other lenders.

Further, more women than men preferred to have their savings in informal methods and even non-financial forms. This indicates that regardless of how much effort goes into reducing the financial inclusion gap, the uptake of financial services among women will still be an uphill task and the FGG will persist. Notably, in African countries such as Nigeria in West Africa and Kenya in East Africa, women have local saving groups such as “merry go-round” and “chamas” where they save and borrow from each other without involving financial institutions. This shows that in regards to formal financial inclusion, there exists many informal ways that individuals use and as such reducing the formal financial inclusion gender gap alone will not greatly improve the financial gender gap.

Women had low levels of risk uptake as compared to their male counterparts which places men at a better place to accumulate more wealth and income in line with the stance that the higher the risk, the higher the returns. In line with other studies that found women to be more risk averse than men, women were more likely to invest in less risky financial assets and projects thus more likely to earn lesser income due to the risk trade-off. The gender disparities in risk uptake were largely dependent on age and number of children. The men’s risk appetite may provide a logical explanation for men accumulating more income than women. Despite the financial inclusion gender gap bridging efforts, more women than men are less willing to have high risk high return assets in their portfolio thus an increasing financial gender gap.

Further, the effectiveness of financial inclusion is dependent on the presence of financial literacy. Without financial literacy, it is impossible to realize the maximum output from financial inclusion. Both men and women need be aware of the perks and disadvantages of their financial decisions which then helps in choosing the right financial services and goods. In the absence of this, the challenge of bad investments and the repercussions of bad financial decisions will befall individuals, this does not help in bridging the financial gender gap in any way. This implies that financial inclusion cannot effectively act as a stand-alone factor in the reduction of the financial gender gap thus the reduction of the financial inclusion gap alone cannot significantly reduce the financial gender gap.

The findings are also similar to those of Morsy (2020) who found that the widening of the financial inclusion gender gap further complicates the dream of achieving gender parity as women are not able to access in efficient technologies for their business ventures or diversify their income generating activities thus impeding their ability to do better financially as compared to their male counterparts. This increases the FGG.

The second objective of the study was to assess the effects of the financial literacy gender gap on the FGG, the study found a positive relationship between the two with an increase in one resulting to an increase in the other and vice versa. Financial literacy gender gap had a significant impact on the Financial gender gap. Financial literacy helps individuals to make sound and well-informed financial decisions which enables individuals to plan and explore the betterment of their financial health.

High levels of financial literacy positively impact financial well-being and health and bring about less financial worries and concerns. As individuals are able to identify and choose between existing financial options, they are able to make good and informed financial decisions. Financial knowledge obtained is instrumental in the reduction of social and

psychological pressures among individuals, families and businesses. It even helps reduce the frequency of financial disputes among families and business partners. With financial knowledge, both men and women are able to identify, analyze and understand the benefits of financial products and decide whether or not to invest in them. The uptake of the right financial products helps in financially securing the future and also reducing the existing financial gender gap as both genders are actively taking informed measures to increase their current and future income and wealth.

High levels of financial literacy also have a direct impact on the emotional stability of the workforce in workplaces. This is because financial literacy can help alleviate the stress and anxiety associated with undertaking bad financial decisions. Employees who have no financial problems are more likely to perform their assigned roles effectively and efficiently as opposed to those with financial problems (Taft et.al., 2013)

These results support the findings of Lusardi & Mitchell (2007), who found that financial literacy influences planning behaviour which in turn influences wealth accumulation. The relationship between education and earnings was also pointed out by Psacharopoulos, & Patrinos, (2018) who argued that wage income was a function of education levels and experience and that the higher the levels of education, the higher the wages are likely to be. This supports the ideology that an increase in the financial literacy gap brings about an increase in the FGG as the disadvantaged gender is exempt from the benefits of financial literacy such as income and wealth accumulation which directly affects the FGG.

The findings of the study are also in line with the human capital theory which argues that compensation is based on the knowledge and experience of the worker. The lower the educational and experience levels, the lower the monetary compensation for the worker. With financial illiteracy, it is harder to budget, save, create supplementary income from financial

products, and to attain the set goals. As a consequence, the inability to manage money, debt and lessen unnecessary financial burden puts a strain on the financial health and wellbeing of an individual. With more women than men in most of the study countries being financially illiterate, women will continue to lag behind as far as closing the FGG is concerned. Countries like Togo experienced reduced financial gender gaps as they significantly bridged the financial literacy gender gap.

The third objective of the study was to evaluate the pay gap effect on the financial gender gap in Africa. The study found a positive relationship between the two. An increase in the pay gap results in an increased FGG and the vice versa is true. Of the 40 countries studied, none had achieved gender parity as of 2022 indicating that wage equality is still a pipe dream and more men than women accumulate a higher income by the end of their professional lives simply due to the pay gap.

Undeniably, there are several factors that affect the cumulative wealth and income of an individual, the study found that having a high income is advantageous in that it helps an individual meet basic needs and makes it possible to realize the set financial goals. Additionally, it avails an avenue for an individual to spend surplus income in secondary needs such as cars and splurge on luxurious items. Persistence of the earnings and pay gap does not narrow the financial gender gap and income equality is crucial if the gender gap in financial attainments is to be achieved, especially for women and men performing similar tasks and have similar educational attainments.

In contrast, some researchers argue that financial literacy is more important in accumulating wealth and attaining financial health than any other factor such as income level (Budig, Lim, & Hodges, 2021). The study results are, however, supported by the World Economic Forum (2021), which argues that women are at a disadvantage in regards to wealth accumulation in

their lifetime. For professional and technical type roles, the gender wealth gap stands at 31%, while it stands at 38% for senior expert and leadership roles, these gaps are brought about by salient factors such as the gender pay gap, unequal career progression trajectories, existing gaps in financial literacy and lastly, life events that influence women's participation in paid work and their ability to contribute to wealth accumulation. This supports the finding that indeed the pay gap directly affects the FGG.

As per the findings, there is a low correlation between the pay gap and the FGG. Despite of increased efforts to attain wage equality and narrow the pay gap increase, women still dominate low –paying jobs in industries like social services, office administration, health care, retail and education whereas men are more dominant in high paying industries like the finance and technology industries (Diagana, 2022). Women are also dominant in the informal sector and in some countries still prone to cultural norms (UN Women, 2022). This means that even if wage equality was implemented among the genders, the FGG would still exist as more men are in high paying fields as compared to women.

The gender pay gap significance on the financial gender gap is affected by spending habits of the genders. In reference to a study by Hira & Mugenda (2000) on the gender differences in Financial Perceptions, a majority of both men and women did not engage in reckless purchasing behavior; that is, the purchase of unwanted items, however, there were notable differences in gender among participants who reported facing challenges in limiting excessive buying behavior. Twice the number of women as compared to men bought items without carefully considering their significance and importance and ended up with unplanned purchases of items they did not need. This shows that even as the pay gap is narrowed, men more than women will most likely have more cumulative income. This is because more women than men are likely to blow up their earnings on shopping sprees and other unwanted items. This diminishes the

significance of the pay gap on the financial gender gap in that despite of how low or high the wages paid are, the accumulated income in the long run is subject to spending habits.

Similarly, the earnings/pay gap significance on the financial gender gap is diminished by savings and investments behavior. The savings and investment behaviors are largely dependent on the individual goals and set aspirations and to some degree the current financial satisfaction of an individual. In reference to the same study by Hira & Mugenda (2000), 51% of women were satisfied with their savings as compared with 40% of men, men were more satisfied with their ability to meet long term goals than their female counterparts. This shows that the two genders have different attitudes to their savings and investments appetite which is key to influencing the income accumulation levels in the long run. This diminishes the role that the pay gap plays in influencing the financial gender gap because income accumulated is subject to savings and investments habits and not just the earning levels.

Lastly, the study examined the effects of labour force participation rates among women on the FGG. Results indicate that an increase in the labour force participation gender gap results to an increase in the FGG with the vice versa being true. Countries such as Guinea had more women than men active in the labour market and as the gap between men and women narrowed, the financial gender gap narrowed. In turn, North African countries such as Algeria and Egypt had large gender gaps in their labour force participation numbers (76% and 77% respectively) and registered increasing levels of the financial gender gaps as of 2022.

Study results show that the labour force participation rates among women had a significant effect on the financial gender gap. As more women enter the labour market, the gender gap in labour force participation narrows which in turn narrows the FGG. Women participation in the labour market not only offers incentives such as earning of wages but also an opportunity to improve their living standards for themselves and their families. Participation in the labour

market gives men and women access to wages and salaries which can be used to create and build wealth gradually whereas participation or focusing their energy on unpaid work does not elevate women's financial status. Similarly, adherence to traditional roles such as child care for women leaves them without a source of income thus dimming any possibility of bridging the labour force participation gender gap and consequently the financial gender gap.

The results also indicated a low correlation between the labour participation gender gap and the FGG, this is due to an increasing number of women opting to work out of necessity and for survival as opposed to career advancement which elevates the income earning scales. This means that even with more women entering the labour market, the income generated is not used to build up wealth or asset portfolios, instead, it is merely for survival and has no long term effect on their financial position and wellbeing.

This is also supported by Klasen, Le, Pieters, & Santos (2021) who argued that women in African economies became more active in the labour market so as to fend for their families especially in cultures where high fertility was prevalent. This also goes in hand with the structural functionalism theory which argues that cultural influence and division labour are crucial for the functioning of society and that inequalities are present for optimal societal functioning.

Sivakumar, & Sharma, (2019) also found that labour force participation among women in Africa was heavily dependent on dominant social and cultural norms with traditional roles being a key area of deliberation when deciding whether or not to enter the labour market. In addition, as of 2021, women in African countries dominated service-sector jobs such as fashion, hair dressing, and catering while men dominated high paying jobs such as finance and technology thus creating an inequality in income regardless of the number of women active in the labor market (Akpakpan, 2021).

5.3 Conclusion

The study concluded that the financial inclusion gender gap was directly correlated to the financial gender gap, however, its significance on the financial gender gap was diluted by its reliance on financial literacy, the self-selection of women out of credit markets and other financial markets and the risk appetite differences among the two genders. Despite of the efforts to include women financially, they were still heavily reliant in informal savings and borrowings methods in countries like Nigeria and Ghana which derailed the achievement of the gender parity dream.

The financial literacy gender gap was also directly correlated to the financial gender gap and the two had a significant relationship. Togo had the most financially literate women in Africa, in Mauritius, Senegal, and Sierra Leone more women than men were financially literate. Financial Literacy offered an avenue for the men and women to make sound financial decisions and reap the benefits later on thus positively impacting their income and wealth accumulation in the long run.

The pay gap was also positively correlated to the financial gender gap, as of 2022, no country had done away with wage inequality and thus the earnings/pay gap persisted in all countries under study. The significance of the pay gap on the financial gender gap was diluted by the spending and savings habits of individuals. Regardless of how much an individual earned, their cumulative income in the long run was subject to spending, savings and borrowing habits and discipline.

The labour force participation rates also impacted the financial gender gap positively and the study found a significant relationship between the two. Participation in the labour market provided a channel to earn wages and salaries and use that for personal development and wealth creation in the long run. Both men and women were being held back by stereotypical profiling

where some jobs were dominated by men whereas others were dominated by women. More women than men were also disadvantaged for partaking in unpaid labour such as child care and household chores. Countries that had low gender gap in labour participation had lower financial gender gaps.

The financial literacy gap and its direct effect on the FGG supplemented the human capital theory which argues that there is a direct relationship between education & output on the wage compensation level. As fewer women than men are literate and financially literate in the African countries and women are more likely to face career disruptions than men due to maternity breaks and other family obligations, it is easy to see why men are more likely to accumulate more wealth and earn more income at the expense of women. As a result, this further widens the FGG.

As for the structural functionalism theory, the existence of inequalities which the theory argues are necessary for optimal society function, it can be used to explain the existence of the FGG. The traditional apportionment of roles where women are responsible for non-paying jobs such as household chores, and upbringing of children whereas men are free to pursue paying jobs undoubtedly contributes to the FGG by increasing the earnings gap and labor force participation gap.

The feminist theory paints a picture of how prevalent inequality was from the 1700s, a phenome that countries are still grappling with to date. One of the earliest issues was the wage inequality, an issue that up to date, no African country has been able to do away with to date and had inevitably led to the earnings gap. Efforts driven by the feminist movement have been key to narrowing the gap in the labour force participation rates, the financial inclusion gap, the financial literacy gap, and the earnings gap through consistent advocacy, drafting of policies

and creation of training and career advancement programs to help women attain a level playing field with men.

5.4 Recommendations

As per the study results, the labor force participation rate gender gap registered the highest coefficient and as such, there is need for better policies that do not discourage women participation in the labour market. Discriminatory policies, especially, by employers both in the private and public sector should be discouraged in an effort to achieve gender parity in the continent as well as bridging the existing financial gender gap. To do away with self-discrimination among women from certain jobs, a root- cause approach aimed at letting young boys and girls choose their preferred careers with minimal cultural bias should be adopted.

Furthermore, there is need for women reskilling so as to enable them to position themselves for more opportunities regardless of the sectors of the economy that these opportunities are in. Additionally, African countries can emulate countries like Nigeria and Rwanda which have very active organizations that are mentoring women and guiding them through career advancement. With Africa still rooted to its traditions, policy makers need to factor in cultural norms when drafting key policies such as those that affect the pay gap and labor force participation gap. This will help in drafting tailor-made policies that wholly serve the disadvantaged gender in each area.

Women ought to access equal opportunities as men to participate in the labour market as unequal opportunities result into wasted labour and expertise. Jobs should go to the most qualified individual regardless of their gender and this will motivate both genders to work and propel their careers. Nobel recipient Claudia Goldin argues that unpaid care work is the missing link in the reduction of the gender gap in labour outcomes. In her book, she recommended that

unpaid care work, if not done away, will continue to impede the achievement of wage equality; that is equal pay for equal work.

There is need to pay close attention to the financial literacy gap which had the second highest coefficient and minimize the gap. Introductory aspects of financial literacy should be part of the education system and women should be encouraged to actively learn and make financial decisions as opposed to wholly dispensing the financial aspects of their families to women. To enhance the effectiveness of financial literacy, financial inclusion should also be widespread so as to enable individuals to access financial services and products.

The pay gap is also a persistent issue globally that has consistently narrowed then stagnated in recent years. The 2023 Nobel recipient for Economics, Claudia Goldin recommends more government funding of child care so as to lift the burden of unpaid work on women without transferring it to men. Women also need to negotiate for higher salaries when seeking jobs without pricing themselves out of the job markets. Employers have a key role to play in doing away with the pay gap by exercising legal and fair work practices when hiring employees. This will be helpful as most African countries; e.g. Kenya, have laws prohibiting discrimination in the workplace due to gender or sex.

To combat the financial inclusion gap, women also need to stop self-selecting themselves out of the credit market so as to access financial services that will enable them access out of reach financial services. They also need to actively participate in the financial planning of their households as opposed to delegating the duties to the men alone. To ensure that financial inclusion efforts work effectively, the role of education and financial literacy should not be undermined.

Lastly, the study recommends continued investment in men so as to ensure they are not falling back as more women centered programs are adopted. Women are ahead of men in financial literacy levels and the labour force participation rates in a number of countries under study. As such, while continued effort is recommended to bridge the gap, the efforts should not be focused on women only but also men.

In general, the study recommends the emulation of countries like Rwanda which is the best performing country in Africa in regards to bridging its existing Gender gap by adopting policies that work such as involvement of women in political and economic activities, the implementation of policies and programs that boosts financial literacy.

5.5 Recommendations for Future Research

The study has contributed to literature on the scarcely researched topic of the financial gender gap in Africa. The results of the study can be applied to other under-developed or developing nations. As the study covered only 40 of 54 countries in Africa, there's room to research the remaining 14 countries and conclusively come up with a study depicting the FGG situation in Africa as a whole.

REFERENCES

- Akpakpan, E. (2021). To unlock African women's potential, we must end gendered patterns of labour. *World Economic Forum*. <https://www.weforum.org/agenda/2021/04/africa-women-inequality-labour-jobs/>
- Amin, M. & Kushnir, K. (2013, August 6). Is the human capital 'gender gap' a matter of experience, education or both?. *World Bank blogs*. <https://blogs.worldbank.org/psd/human-capital-gender-gap-matter-experience-education-or-both>
- Asongu, S. A., Nnanna, J., & Acha-Anyi, P. N. (2020). Inequality and gender economic inclusion: The moderating role of financial access in Sub-Saharan Africa. *Economic Analysis and Policy*, 65, 173-185.
- Asuming, P. O., Osei-Agyei, L. G., & Mohammed, J. I. (2019). Financial inclusion in sub-Saharan Africa: Recent trends and determinants. *Journal of African Business*, 20(1), 112-134.
- Azuh, D., Egharevba, M. D., & Azuh, A. E. (2014). Gender discrimination and national politics: The Nigerian case. *Covenant University Journal of Politics and International Affairs*.
- Bassey, S. A., & Bubu, N. G. (2019). Gender inequality in Africa: a re-examination of cultural values. *Cogito*, 11(3), 21-36.
- Becker, G. S. (1993). *Human Capital – A Theoretical and Empirical Analysis, with Special Reference to Education*. 3rd Edition. Chicago. The University of Chicago Press, Ltd. 1993
- Behrman, J. R., Mitchell, O. S., Soo, C. K., & Bravo, D. (2012). How financial literacy affects household wealth accumulation. *American Economic Review*, 102(3), 300-304.
- Bergmann, B. R. (1974). Occupational segregation, wages and profits when employers discriminate by race or sex. *Eastern economic journal*, 1(2), 103-110.
- Blau, F. D., & Kahn, L. M. (2006). The gender pay gap: Going, going... but not gone. *The declining significance of gender*, 37-66.
- Budig, M. J., Lim, M., & Hodges, M. J. (2021). Racial and gender pay disparities: The role of education. *Social science research*, 98, 102580.
- Cambridge University Press. (n.d.). Gender gap. In Cambridge Dictionary. Retrieved on March 20, 2023, from <https://dictionary.cambridge.org/dictionary/english/gender-gap>
- Comblon, V., Robilliard, A. S., & Roubaud, F. (2017). Gender analysis of labour market outcomes in Sub-Saharan Africa: Recent evidence from Cameroon and Mali. United Nations.
- Credit Suisse Research Institute (CSRI) (2022). *Global Wealth Report 2022; Leading perspectives to navigate the future*. <file:///C:/Users/Admin/Downloads/global-wealth-report-2022-en.pdf>
- Damodaran, A. (2013). Financial inclusion: Issues and challenges. *AKGEC International Journal of Technology*, 4(2), 54-59.

- Demirgüç-Kunt, A., Klapper, L., Singer, D., Ansar, S., & Hess, J. (2022). The Global Findex Database.
- Diagana, O. (2022). Promoting Wage Equality in the Labor Market in Africa: A Moral Imperative. *World Bank Blogs*. <https://blogs.worldbank.org/african/promoting-wage-equality-labor-market-africa-moral-imperative>
- Ditzen, J., Karavias, Y., & Westerlund, J. (2021). Testing and estimating structural breaks in time series and panel data in stata. arXiv preprint arXiv:2110.14550.
- Elder, S., & Smith, A. (2010). *Women in labour markets: Measuring progress and identifying challenges*. Ginebra, Suiza: International Labour Office.
- Elu, J. U., & Price, G. N. (2017). Science Labor Supply in Sub- Saharan Africa: Is There a Gender Disparity in Preferences?. *African Development Review*, 29(3), 367-375.
- Ferguson, K. E. (2017). Feminist theory today. *Annual Review of Political Science*, 20, 269-286.
- Gap, G. G. (2022). World economic forum. *Cologny/Geneva*.
- Global Financial Literacy Excellence Centre. (2022). S& P Global FinLit Survey. Retrieved from <https://gflec.org/initiatives/sp-global-finlit-survey/>
- Graovac, C. (2016). Wage gap Vs Earnings gap. *Sanford Journal of Public Policy*, 6(1), 20-21. <https://www.sanfordjournal.org/sjpp/2016/wage-gap-vs-earnings-gap>
- Greene, M., Warren, A., & McKay, J. (2022). Identifying Barriers and Opportunities for Improving Women's Financial Health: The Gender Gap in Financial Health. <https://finhealthnetwork.org/research/gender-gap-in-financial-health/>
- Haan, K., (2022). Gender Pay Gap Statistics In 2023. Forbes Advisor. <https://www.forbes.com/advisor/business/gender-pay-gap-statistics/>
- Hasler, A., & Lusardi, A. (2017). The gender gap in financial literacy: A global perspective. *Global Financial Literacy Excellence Center, The George Washington University School of Business*.
- Hideg, I., Krstic, A., Trau, R., & Zarina, T. (2018). Do longer maternity leaves hurt women's careers?.
- Hira, T. K., & Mugenda, O. (2000). Gender differences in Financial Perceptions. *Behaviors and Satisfaction*
- Huma, A. G. (2003). A History of Women in Afghanistan: Lessons Learnt for the Future or Yesterdays and Tomorrow: Women in Afghanistan. *Journal of International Women's Studies*, 4(3), 1-14. Available at: <https://vc.bridgew.edu/jiws/vol4/iss3/1>
- International Labour Organization (2019, November 3). Wages in Africa: Recent trends in average wages, gender pay gaps and wage disparities. https://www.ilo.org/africa/information-resources/publications/WCMS_728363/lang--en/index.html

- International Labour Organization. (2019). Wages in Africa: Recent trends in average wages, gender pay gaps, and wage disparities. https://www.ilo.org/wcmsp5/groups/public/---africa/--ro-abidjan/---sro-cairo/documents/publication/wcms_728363.pdf
- International Labour Organization. “ILO Modelled Estimates and Projections database (ILOEST)” ILOSTAT. Accessed April 25, 2023. ilostat.ilo.org/data
- K.C. Chakrabarty, (2010), Financial Inclusion and Banks: Issues and Perspectives, Reserve Bank of India.
- Klasen, S., Le, T. T. N., Pieters, J., & Santos Silva, M. (2021). What drives female labour force participation? Comparable micro-level evidence from eight developing and emerging economies. *The Journal of Development Studies*, 57(3), 417-442.
- Kothari, R. (2009). *Research Methodology: Methods and Techniques*. New Dheli: Wiley
- Kugler, M., Viollaz, M., Duque, D., Gaddis, I., Newhouse, D., Palacios-Lopez, A., & Weber, M. (2021). How Did the COVID-19 Crisis Affect Different Types of Workers in the Developing World? World Bank, Washington, DC. © World Bank. openknowledge.worldbank.org/handle/10986/358232
- Lavrakas, P. (2014). Encyclopedia of Survey Research Methods Sampling. In P. Lavrakas (Ed.), *Encyclopedia of Survey Research Methods Sampling (Vol 1 & 2, pp. 784–785)*. Los Angeles, United States of America. Sage Publications
- Lay, K., & Daley, J. G. (2007). A critique of feminist theory. *Advances in social work*, 8(1), 49-61.
- Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-based dentistry*, 7(1), 24-25.
- Louay, C., Ifeanyi, E., Glick, P., Martini, J., Chandra G. (2020). Barriers to Employment That Women Face in Egypt: Policy Challenges and Considerations (RR-2868-RC). Retrieved from https://www.rand.org/pubs/research_reports/RR2868.html
- Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *American Economic Journal: Journal of Economic Literature*, 52(1), 5-44.
- Maranga, V. G. (2021). *Corporate Governance in Kenya: The Dilemma of Achieving Equality in Board Management* (Doctoral dissertation, University of Nairobi).
- Marginson, S. (2019). Limitations of human capital theory. *Studies in Higher Education*, 44(2), 287-301.
- McKenna, M. C., & Robinson, R. D. (1990). Content literacy: A definition and implications. *Journal of reading*, 34(3), 184-186.
- Mishra, M. V., Likitlersuang, J., B Wilmer, J., Cohan, S., Germine, L., & DeGutis, J. M. (2019). Gender differences in familiar face recognition and the influence of sociocultural gender inequality. *Scientific reports*, 9(1), 1-12.

- Moghadam, V. M. (1997). *Nationalist Agendas and Women Rights: Conflicts in Afghanistan in the Twentieth Century. Feminist Nationalism*. New York: Routledge.
- Monter, W (2012). *The rise of female kings in Europe, 1300-1800*, New Haven, CT: Yale University Press.
- Morpeth, R (2018, April 18). Financial Inclusion in the U.S. – Are We Making Progress? The state of inclusion in the country in terms of financial access, financial health, debt and savings levels, and more. *Centre of Financial Inclusion*. <https://www.centerforfinancialinclusion.org/financial-inclusion-in-the-u-s-are-we-making-progress>
- Morsy, H. (2020). Access to finance: Why aren't women leaning in?. *Morsy, H.(2020). Access to Finance: Why Aren't Women Leaning In, 52-53*.
- Morsy, H., and Youssef. H. (2017).“Access to Finance—Mind the Gender Gap.”EBRD Working Paper 202, European Bank for Reconstruction and Development, London.
- Mugenda, O. M., & Mugenda, A. G. (2003). *Research methods: Quantitative & qualitative approaches* (Vol. 2, No. 2). Nairobi: Acts press.
- Mukanda, M. (2020). Financial Literacy, A need among African women. Retrieved from <https://feminstyle.africa/finance/mukanda/financial-literacy-a-need-among-african-women/2020/09/>
- Munyingi, L. (2012). *Factors affecting career choice of the female students in Kenyan tertiary institutions: a case of United States International University (Usiu-Africa)* (Doctoral dissertation, University of Nairobi, Kenya).
- Muthuva, D. (2016). Determinants of Disclosure Level by Deposit Taking savings and Credit Co-operative Societies in Kenya. Jomo Kenyatta University of Agriculture and Technology
- Noctor, M., Stoney, S. and Stradling, R. (1992), *Financial Literacy: A Discussion of Concepts and Competencies of Financial Literacy and Opportunities for its Introduction into Young People's Learning*, National Foundation for Education Research, London
- OECD (2020), *OECD/INFE 2020 International Survey of Adult Financial Literacy* www.oecd.org/financial/education/launchoftheoecdinfeglobalfinancialliteracysurveyreport.html. OECD. (2022). *OECD labour force statistics 2020*.
- Opoku, K., & Boahen, E. A. (2023). Gender wage gaps in Ghana: a comparison across different selection models. *SN Business & Economics*, 3(7), 130.
- Organization for Economic Cooperation and Development (OECD) (2013), *PISA 2012 Assessment and Analytical Framework: Mathematics, Reading, Science, Problem Solving and Financial Literacy*. OECD Publishing, Paris.
- Parliament of Kenya. (2022). Members of the National Assembly. <http://www.parliament.go.ke/the-national-assembly/mps>

- Pederson, L. L., Vingilis, E., Wickens, C. M., Koval, J., & Mann, R. E. (2020). Use of secondary data analyses in research: Pros and Cons. *J. Addict. Med. Ther. Sci*, 6, 58-60.
- Piskadlo, D. (2016, May 2). In the United States, Gender Gaps in Financial Literacy and Pay Persist. *Centre for Financial Literacy*. <https://www.centerforfinancialinclusion.org/in-the-united-states-gender-gaps-in-financial-literacy-and-pay-persist>
- Polit, D. F., & Beck, C. (2010). International Journal of Nursing Studies Generalization in quantitative and qualitative research: Myths and strategies. *International Journal of Nursing Studies*, 47(11), 1451–1458
- Polit, D. F., & Beck, C. T. (2006). The Content Validity Index: Are You Sure You Know What 's Being Reported ? Critique and Recommendations. *Research 193 in Nursing & Health*, (29), 489–497.
- Psacharopoulos, G., & Patrinos, H. A. (2018). Returns to investment in education: a decennial review of the global literature. *Education Economics*, 26(5), 445-458.
- Quffa, W. A. (2016). A review of the history of gender equality in the United States of America. *Social Sciences and Education Research Review*, 3(2), 143-149.
- Refera, M. K., Dhaliwal, N. K., & Kaur, J. (2016). Financial literacy for developing countries in Africa: A review of concept, significance and research opportunities. *Journal of African Studies and development*, 8(1), 1-12.
- Saunders, M., Lewis, P., & Thornhill, A. (2009b). Reserch methods for business
- Sharma, R. R., Chawla, S., & Karam, C. M. (2021). Global gender gap index: world economic forum perspective. In *Handbook on diversity and inclusion indices* (pp. 150-163). Edward Elgar Publishing.
- Sivakumar, S., & Sharma, S. (2019). Female labour force participation: A summary of IGC research. *The International Growth Centre, London*.
- Standing, G. (2008). The ILO: An agency for globalization?. *Development and change*, 39(3), 355-384.
- Harris, B. (2017). What is the gender gap (and why is it getting wider)? Education, skills and learning. World Economic Forum. <https://www.weforum.org/agenda/2017/11/the-gender-gap-actually-got-worse-in-2017/>
- Taft, M. K., Hosein, Z. Z., Mehrizi, S. M. T., & Roshan, A. (2013). The relation between financial literacy, financial wellbeing and financial concerns. *International journal of business and management*, 8(11), 63.
- Tan, E. (2014). Human capital theory: A holistic criticism. *Review of educational research*, 84(3), 411-445.
- Tranmer, M., & Elliot, M. (2008). Multiple linear regression. *The Cathie Marsh Centre for Census and Survey Research (CCSR)*, 5(5), 1-5.

- Turner, B. S. (2014). Parsons and his critics: on the ubiquity of functionalism. In Talcott Parsons on Economy and Society (pp. 179-206). Routledge.
- UN Women Africa. (2022) Equality will be achieved when women and men are granted equal pay and equal respect: An explainer. <https://africa.unwomen.org/en/stories/explainer/2022/09/equality-will-be-achieved-when-women-and-men-are-granted-equal-pay-and-equal-respect#:~:text=In%20order%20to%20ensure%20equal%20pay%20for%20work,globally%20including%20both%20the%20formal%20and%20informal%20sectors.>
- United Nations (2020). The World's Women 2020: Trends and Statistics. <https://www.un.org/en/desa/world%E2%80%99s-women-2020>
- Webb, C. (1993). Feminist research: definitions, methodology, methods and evaluation. *Journal of Advanced Nursing*, 18(3), 416-423.
- Willy Kipkoech Langat*, Dr. Isaac Naibei**, Prof. Clifford Machogu Getare (2017) International Journal of Scientific and Research Publications, Volume 7, Issue 12, December 2017 pp 712.
- World Bank. (2020). Universal Financial Access 2020. <https://ufa.worldbank.org/en/ufa>
- World Bank. (2022). *World Development Report: Finance For an Equitable Recovery*. <https://openknowledge.worldbank.org/server/api/core/bitstreams/e1e22749-80c3-50ea-b7e1-8bc332d0c2ff/content>
- World Economic Forum. (2022). *Global Gender Gap Report 2022*. <https://www.weforum.org/reports/global-gender-gap-report-2022/digest>
- Xu, L., & Zia, B. (2012). Financial literacy around the world: an overview of the evidence with practical suggestions for the way forward. *World Bank Policy Research Working Paper*, (6107).

APPENDIX I: Target Population Guide

FIGURE A1:

SSA COUNTRIES

Angola, Benin, Botswana, Burkina Faso, Burundi, Cameroon, Cape Verde, Chad, Congo, Democratic Rep., Côte d'Ivoire, Ethiopia, Gambia The, Ghana, Guinea, Kenya, Lesotho, Liberia, Madagascar, Malawi, Mali, Mauritania, Mauritius, Mozambique, Namibia, Niger, Nigeria, Rwanda, Senegal, Sierra Leone, South Africa, Swaziland/ Eswatini, Tanzania, Togo, Uganda, Zambia, Zimbabwe

FIGURE A2:

NORTH-AFRICA COUNTRIES

Tunisia, Egypt, Algeria, Morocco

Source: The Global Gender Gap Index (2022)

APPENDIX II: Secondary Data

TABLE A1: Raw Data

Country	year	countryid	Financial Inclusion gap	Pay/Earnings gap	Labour force participation gap	Financial Literacy gap	FGG
Algeria	2012	1	50.00%	43.00%	53.00%	7.41%	84.00%
Algeria	2013	1	57.00%	42.00%	79.00%	35.00%	84.00%
Algeria	2014	1	56.00%	22.00%	79.00%	34.00%	83.00%
Algeria	2015	1	42.00%	30.00%	79.00%	22.60%	84.00%
Algeria	2016	1	42.00%	24.00%	76.00%	40.60%	82.00%
Algeria	2017	1	42.00%	22.00%	76.00%	15.20%	82.00%
Algeria	2018	1	37.00%	22.00%	77.00%	1.32%	82.00%
Algeria	2019	1	30.00%	21.00%	75.00%	25.00%	82.00%
Algeria	2020	1	25.00%	18.00%	78.00%	36.10%	83.00%
Algeria	2021	1	22.00%	19.00%	75.00%	36.40%	81.00%
Algeria	2022	1	22.00%	18.00%	76.00%	7.14%	82.00%
Angola	2012	2	50.00%	49.00%	18.00%	0.00%	33.00%
Angola	2013	2	50.00%	52.00%	18.00%	-8.00%	37.00%
Angola	2014	2	50.00%	60.00%	17.00%	0.00%	37.00%
Angola	2015	2	44.00%	60.00%	17.00%	13.30%	37.00%
Angola	2016	2	44.00%	60.00%	22.00%	28.60%	41.00%
Angola	2017	2	45.00%	60.00%	22.00%	33.30%	42.00%
Angola	2018	2	37.00%	41.00%	5.00%	3.57%	42.00%
Angola	2019	2	32.00%	39.00%	5.00%	-0.70%	41.00%
Angola	2020	2	25.00%	39.00%	5.00%	12.50%	27.00%
Angola	2021	2	21.00%	39.00%	3.00%	9.10%	27.00%
Angola	2022	2	23.00%	38.00%	6.00%	21.91%	28.00%
Benin	2012	3	60.00%	25.00%	12.00%	12.50%	33.00%
Benin	2013	3	55.00%	30.00%	13.00%	6.00%	32.00%
Benin	2014	3	63.00%	30.00%	13.00%	16.00%	36.00%
Benin	2015	3	41.00%	24.00%	12.00%	27.30%	34.00%
Benin	2016	3	33.00%	27.00%	3.00%	32.10%	27.00%
Benin	2017	3	37.00%	26.00%	3.00%	13.50%	5.00%
Benin	2018	3	37.00%	29.00%	4.00%	1.24%	5.00%
Benin	2019	3	37.00%	29.00%	4.00%	2.40%	27.00%
Benin	2020	3	30.00%	29.00%	4.00%	7.90%	7.00%
Benin	2021	3	22.00%	22.00%	4.00%	9.10%	28.00%
Benin	2022	3	19.00%	29.00%	4.00%	20.83%	39.00%
Botswana	2012	4	55.00%	25.00%	8.00%	12.50%	52.00%

Botswana	2013	4	31.00%	22.00%	10.00%	0.00%	53.00%
Botswana	2014	4	31.00%	24.00%	9.00%	8.00%	16.00%
Botswana	2015	4	32.00%	30.00%	9.00%	21.40%	15.00%
Botswana	2016	4	31.00%	28.00%	7.00%	-15.60%	11.00%
Botswana	2017	4	27.00%	25.00%	7.00%	-51.50%	13.00%
Botswana	2018	4	26.00%	28.00%	14.00%	9.07%	13.00%
Botswana	2019	4	24.00%	28.00%	13.00%	6.90%	14.00%
Botswana	2020	4	24.00%	28.00%	14.00%	6.90%	23.00%
Botswana	2021	4	19.00%	29.00%	12.00%	4.80%	39.00%
Botswana	2022	4	15.00%	32.00%	14.00%	21.60%	28.00%
Burkina Faso	2012	5	45.00%	30.00%	12.00%	25.00%	33.00%
Burkina Faso	2013	5	41.00%	28.00%	12.00%	13.00%	33.00%
Burkina Faso	2014	5	41.00%	34.00%	12.00%	26.00%	33.00%
Burkina Faso	2015	5	35.00%	34.00%	12.00%	11.50%	34.00%
Burkina Faso	2016	5	36.00%	34.00%	13.00%	0.00%	35.00%
Burkina Faso	2017	5	31.00%	34.00%	14.00%	-20.80%	34.00%
Burkina Faso	2018	5	30.00%	31.00%	22.00%	-1.03%	34.00%
Burkina Faso	2019	5	27.00%	31.00%	20.00%	-6.50%	39.00%
Burkina Faso	2020	5	20.00%	30.00%	21.00%	4.40%	40.00%
Burkina Faso	2021	5	15.00%	30.00%	21.00%	3.10%	43.00%
Burkina Faso	2022	5	15.00%	30.00%	21.00%	13.49%	43.00%
Burundi	2012	6	42.00%	24.00%	-4.00%	26.67%	22.00%
Burundi	2013	6	33.00%	25.00%	-3.00%	14.00%	21.00%
Burundi	2014	6	33.30%	17.00%	-2.00%	14.00%	21.00%
Burundi	2015	6	43.00%	20.00%	-2.00%	41.70%	22.00%
Burundi	2016	6	11.00%	16.00%	-3.00%	17.40%	22.00%
Burundi	2017	6	16.00%	21.00%	-2.00%	-4.20%	-32.00%
Burundi	2018	6	13.00%	21.00%	-5.00%	-21.46%	-32.00%
Burundi	2019	6	16.00%	20.00%	-4.00%	-14.80%	-34.00%
Burundi	2020	6	16.00%	17.00%	-4.00%	-3.20%	-36.00%
Burundi	2021	6	15.00%	16.00%	-4.00%	-3.10%	-36.00%
Burundi	2022	6	16.00%	16.00%	0.00%	7.46%	0.00%
Cameroon	2012	7	45.00%	27.00%	34.00%	-30.00%	37.00%
Cameroon	2013	7	46.00%	29.00%	15.00%	21.00%	37.00%
Cameroon	2014	7	55.50%	29.00%	16.00%	29.00%	37.00%
Cameroon	2015	7	51.00%	29.00%	15.00%	28.60%	37.00%
Cameroon	2016	7	43.00%	33.00%	12.00%	28.60%	34.00%
Cameroon	2017	7	48.00%	33.00%	12.00%	10.50%	34.00%
Cameroon	2018	7	43.00%	33.00%	12.00%	14.89%	-12.00%
Cameroon	2019	7	43.00%	32.00%	12.00%	14.60%	10.00%
Cameroon	2020	7	31.00%	36.00%	12.00%	14.70%	52.00%
Cameroon	2021	7	27.00%	33.00%	12.00%	16.30%	53.00%
Cameroon	2022	7	11.00%	32.00%	13.00%	16.28%	51.00%

Cape Verde	2012	8	62.00%	31.00%	31.00%	20.00%	54.00%
Cape Verde	2013	8	60.00%	33.00%	36.00%	29.00%	53.00%
Cape Verde	2014	8	56.00%	32.00%	36.00%	29.00%	53.00%
Cape Verde	2015	8	53.00%	36.00%	36.00%	33.30%	53.00%
Cape Verde	2016	8	48.00%	33.00%	35.00%	26.10%	51.00%
Cape Verde	2017	8	48.00%	33.00%	34.00%	31.00%	51.00%
Cape Verde	2018	8	46.50%	35.00%	28.00%	9.71%	51.00%
Cape Verde	2019	8	44.00%	35.00%	22.00%	12.50%	46.00%
Cape Verde	2020	8	35.00%	35.00%	9.00%	9.00%	17.00%
Cape Verde	2021	8	24.00%	35.00%	18.00%	3.70%	31.00%
Cape Verde	2022	8	12.50%	35.00%	24.00%	6.06%	30.00%
Chad	2012	9	65.00%	36.00%	18.00%	14.29%	39.00%
Chad	2013	9	43.00%	42.00%	19.00%	21.00%	38.00%
Chad	2014	9	43.00%	40.00%	18.00%	21.00%	38.00%
Chad	2015	9	58.00%	39.00%	18.00%	27.30%	39.00%
Chad	2016	9	58.00%	39.00%	18.00%	33.30%	39.00%
Chad	2017	9	63.00%	39.00%	18.00%	7.70%	39.00%
Chad	2018	9	53.00%	38.00%	16.00%	6.98%	39.00%
Chad	2019	9	39.00%	38.00%	16.00%	5.30%	38.00%
Chad	2020	9	27.00%	38.00%	16.00%	5.10%	37.00%
Chad	2021	9	12.00%	38.00%	16.00%	7.50%	33.00%
Chad	2022	9	12.60%	43.00%	33.00%	8.25%	46.00%
Congo, Dem.Rep	2012	10	52.00%	55.00%	6.00%	69.23%	74.00%
Congo, Dem.Rep	2013	10	38.00%	57.00%	6.00%	55.00%	77.00%
Congo, Dem.Rep	2014	10	18.00%	40.00%	4.00%	59.00%	71.00%
Congo, Dem.Rep	2015	10	29.00%	39.00%	3.00%	40.50%	68.00%
Congo, Dem.Rep	2016	10	33.00%	41.00%	2.00%	10.30%	71.00%
Congo, Dem.Rep	2017	10	42.00%	42.00%	1.00%	12.50%	71.00%
Congo, Dem.Rep	2018	10	49.00%	34.00%	2.00%	0.51%	49.00%
Congo, Dem.Rep	2019	10	34.00%	48.00%	0.00%	12.80%	46.00%
Congo, Dem.Rep	2020	10	24.00%	40.00%	7.00%	0.00%	36.00%
Congo, Dem.Rep	2021	10	12.00%	36.00%	7.00%	-0.30%	45.00%
Congo, Dem.Rep	2022	10	15.00%	45.00%	11.00%	-2.63%	37.00%
Côte d'Ivoire	2012	11	65.00%	45.00%	38.00%	50.00%	53.00%

Côte d'Ivoire	2013	11	50.00%	44.00%	36.00%	31.00%	52.00%
Côte d'Ivoire	2014	11	62.00%	39.00%	35.00%	31.00%	51.00%
Côte d'Ivoire	2015	11	42.00%	34.00%	35.00%	35.30%	52.00%
Côte d'Ivoire	2016	11	42.00%	40.00%	35.00%	0.00%	52.00%
Côte d'Ivoire	2017	11	47.00%	41.00%	35.00%	11.40%	52.00%
Côte d'Ivoire	2018	11	37.00%	35.00%	27.00%	3.19%	52.00%
Côte d'Ivoire	2019	11	36.00%	34.00%	27.00%	1.20%	49.00%
Côte d'Ivoire	2020	11	28.00%	32.00%	26.00%	3.10%	45.00%
Côte d'Ivoire	2021	11	20.00%	45.00%	28.00%	-5.10%	33.00%
Côte d'Ivoire	2022	11	17.00%	33.00%	30.00%	-7.56%	47.00%
Egypt	2012	12	30.00%	18.00%	70.00%	-9.68%	74.00%
Egypt	2013	12	46.00%	23.00%	68.00%	-12.00%	74.00%
Egypt	2014	12	46.20%	22.00%	68.00%	-7.00%	69.00%
Egypt	2015	12	50.00%	25.00%	67.00%	11.40%	70.00%
Egypt	2016	12	50.00%	24.00%	69.00%	26.90%	71.00%
Egypt	2017	12	54.50%	34.00%	69.00%	7.40%	71.00%
Egypt	2018	12	44.50%	32.00%	69.00%	-2.35%	72.00%
Egypt	2019	12	32.00%	31.00%	68.00%	-2.30%	73.00%
Egypt	2020	12	32.00%	26.00%	68.00%	-3.50%	74.00%
Egypt	2021	12	29.00%	78.00%	73.00%	-2.90%	22.00%
Egypt	2022	12	18.00%	22.00%	77.00%	0.00%	81.00%
Ethiopia	2012	13	40.00%	34.00%	9.00%	35.71%	33.00%
Ethiopia	2013	13	38.00%	35.00%	11.00%	27.00%	33.00%
Ethiopia	2014	13	36.00%	31.00%	10.00%	4.00%	49.00%
Ethiopia	2015	13	29.00%	41.00%	10.00%	11.50%	39.00%
Ethiopia	2016	13	29.00%	43.00%	12.00%	14.30%	40.00%
Ethiopia	2017	13	34.00%	41.00%	12.00%	6.30%	40.00%
Ethiopia	2018	13	24.00%	41.00%	10.00%	3.49%	40.00%
Ethiopia	2019	13	17.00%	41.00%	11.00%	3.20%	41.00%
Ethiopia	2020	13	18.00%	50.00%	12.00%	3.20%	42.00%
Ethiopia	2021	13	9.00%	42.00%	12.00%	1.00%	43.00%
Ethiopia	2022	13	9.00%	42.00%	15.00%	3.03%	41.00%
Gambia, The	2012	14	50.00%	20.00%	16.00%	10.00%	33.00%
Gambia, The	2013	14	51.00%	20.00%	15.00%	18.00%	32.00%
Gambia, The	2014	14	48.00%	19.00%	13.00%	-27.00%	32.00%
Gambia, The	2015	14	51.00%	19.00%	12.00%	-26.70%	32.00%
Gambia, The	2016	14	50.00%	23.00%	12.00%	5.60%	32.00%
Gambia, The	2017	14	44.00%	23.00%	12.00%	12.80%	58.00%
Gambia, The	2018	14	40.00%	25.00%	24.00%	4.69%	58.00%
Gambia, The	2019	14	32.00%	25.00%	23.00%	3.90%	60.00%
Gambia, The	2020	14	26.00%	25.00%	23.00%	8.60%	64.00%
Gambia, The	2021	14	14.00%	29.00%	24.00%	7.00%	25.00%
Gambia, The	2022	14	12.00%	25.00%	26.00%	9.09%	31.00%

Ghana	2012	15	65.00%	23.00%	1.00%	37.50%	30.00%
Ghana	2013	15	33.00%	28.00%	5.00%	21.00%	34.00%
Ghana	2014	15	32.80%	41.00%	4.00%	25.00%	34.00%
Ghana	2015	15	26.00%	22.00%	4.00%	16.70%	27.00%
Ghana	2016	15	27.00%	25.00%	3.00%	6.50%	26.00%
Ghana	2017	15	32.00%	31.00%	3.00%	6.30%	27.00%
Ghana	2018	15	22.00%	30.00%	5.00%	1.41%	30.00%
Ghana	2019	15	18.00%	30.00%	-4.00%	20.50%	40.00%
Ghana	2020	15	16.00%	30.00%	10.00%	4.60%	69.00%
Ghana	2021	15	9.00%	71.00%	10.00%	2.60%	30.00%
Ghana	2022	15	12.00%	30.00%	11.00%	4.17%	71.00%
Guinea	2012	16	45.00%	39.00%	16.00%	4.76%	38.00%
Guinea	2013	16	50.00%	40.00%	15.00%	5.00%	38.00%
Guinea	2014	16	38.00%	41.00%	16.00%	8.00%	37.00%
Guinea	2015	16	53.00%	39.00%	15.00%	8.30%	36.00%
Guinea	2016	16	53.00%	38.00%	4.00%	30.30%	29.00%
Guinea	2017	16	48.00%	20.00%	4.00%	13.30%	30.00%
Guinea	2018	16	48.00%	20.00%	2.00%	33.84%	30.00%
Guinea	2019	16	34.00%	20.00%	1.00%	38.50%	40.00%
Guinea	2020	16	23.00%	24.00%	0.00%	33.90%	31.00%
Guinea	2021	16	18.00%	16.00%	-7.00%	34.40%	26.00%
Guinea	2022	16	16.00%	26.00%	1.00%	37.38%	15.00%
Kenya	2012	17	45.00%	32.00%	12.00%	11.76%	35.00%
Kenya	2013	17	33.00%	33.00%	14.00%	21.00%	35.00%
Kenya	2014	17	32.60%	30.00%	14.00%	8.00%	8.00%
Kenya	2015	17	31.00%	38.00%	14.00%	8.00%	7.00%
Kenya	2016	17	31.00%	35.00%	14.00%	5.40%	35.00%
Kenya	2017	17	26.00%	32.00%	14.00%	5.30%	35.00%
Kenya	2018	17	26.00%	32.00%	9.00%	5.82%	35.00%
Kenya	2019	17	23.00%	33.00%	7.00%	7.80%	33.00%
Kenya	2020	17	16.00%	32.00%	8.00%	6.50%	30.00%
Kenya	2021	17	10.00%	28.00%	6.00%	7.30%	32.00%
Kenya	2022	17	10.00%	32.00%	7.00%	7.37%	18.00%
Lesotho	2012	18	12.00%	27.00%	8.00%	25.00%	39.00%
Lesotho	2013	18	15.00%	32.00%	19.00%	50.00%	39.00%
Lesotho	2014	18	15.00%	42.00%	19.00%	31.00%	39.00%
Lesotho	2015	18	17.00%	45.00%	19.00%	33.30%	39.00%
Lesotho	2016	18	17.00%	45.00%	19.00%	25.00%	39.00%
Lesotho	2017	18	14.00%	49.00%	19.00%	32.10%	41.00%
Lesotho	2018	18	13.00%	51.00%	18.00%	34.82%	41.00%
Lesotho	2019	18	13.00%	41.00%	17.00%	33.30%	39.00%
Lesotho	2020	18	12.00%	51.00%	18.00%	31.90%	36.00%
Lesotho	2021	18	15.00%	39.00%	18.00%	31.90%	53.00%

Lesotho	2022	18	14.50%	53.00%	21.00%	30.83%	33.00%
Liberia	2012	19	48.00%	39.00%	9.00%	46.67%	32.00%
Liberia	2013	19	38.00%	39.00%	8.00%	35.00%	32.00%
Liberia	2014	19	35.00%	39.00%	8.00%	26.00%	32.00%
Liberia	2015	19	26.00%	42.00%	9.00%	21.10%	32.00%
Liberia	2016	19	26.00%	45.00%	7.00%	26.30%	31.00%
Liberia	2017	19	18.00%	38.00%	8.00%	23.80%	2.00%
Liberia	2018	19	14.00%	30.00%	4.00%	11.59%	2.00%
Liberia	2019	19	22.00%	40.00%	3.00%	-6.20%	-1.00%
Liberia	2020	19	12.00%	39.00%	3.00%	12.60%	-11.00%
Liberia	2021	19	10.00%	-17.00%	9.00%	10.00%	-10.00%
Liberia	2022	19	8.00%	38.00%	13.00%	9.43%	0.00%
Madagascar	2012	20	20.00%	33.00%	4.00%	0.00%	28.00%
Madagascar	2013	20	17.00%	35.00%	5.00%	7.00%	28.00%
Madagascar	2014	20	16.67%	39.00%	3.00%	0.00%	30.00%
Madagascar	2015	20	0.00%	35.00%	3.00%	16.70%	28.00%
Madagascar	2016	20	8.00%	37.00%	5.00%	16.70%	29.00%
Madagascar	2017	20	14.00%	35.00%	5.00%	10.50%	34.00%
Madagascar	2018	20	14.00%	35.00%	6.00%	7.59%	34.00%
Madagascar	2019	20	14.00%	34.00%	7.00%	9.70%	33.00%
Madagascar	2020	20	13.50%	29.00%	6.00%	7.40%	17.00%
Madagascar	2021	20	12.00%	17.00%	5.00%	5.50%	18.00%
Madagascar	2022	20	7.00%	17.00%	7.00%	0.32%	18.00%
Malawi	2012	21	55.00%	24.00%	4.00%	0.00%	21.00%
Malawi	2013	21	22.00%	26.00%	-6.00%	-73.00%	21.00%
Malawi	2014	21	21.87%	24.00%	-5.00%	0.00%	22.00%
Malawi	2015	21	41.00%	29.00%	-5.00%	8.30%	22.00%
Malawi	2016	21	42.00%	30.00%	-1.00%	0.00%	24.00%
Malawi	2017	21	37.00%	37.00%	-1.00%	5.70%	25.00%
Malawi	2018	21	36.00%	38.00%	10.00%	4.05%	34.00%
Malawi	2019	21	32.00%	36.00%	10.00%	3.10%	36.00%
Malawi	2020	21	14.00%	36.00%	10.00%	3.20%	42.00%
Malawi	2021	21	15.00%	41.00%	9.00%	1.70%	33.00%
Malawi	2022	21	15.00%	33.00%	11.00%	-3.09%	38.00%
Mali	2012	22	37.00%	32.00%	43.00%	15.38%	59.00%
Mali	2013	22	30.00%	30.00%	47.00%	22.00%	59.00%
Mali	2014	22	30.00%	39.00%	37.00%	-8.00%	59.00%
Mali	2015	22	31.00%	33.00%	37.00%	28.60%	52.00%
Mali	2016	22	34.00%	33.00%	38.00%	32.10%	53.00%
Mali	2017	22	27.00%	36.00%	38.00%	-3.00%	62.00%
Mali	2018	22	27.00%	37.00%	26.00%	19.44%	58.00%
Mali	2019	22	25.00%	37.00%	24.00%	21.20%	60.00%
Mali	2020	22	19.00%	37.00%	23.00%	18.80%	50.00%

Mali	2021	22	12.00%	35.00%	27.00%	18.20%	72.00%
Mali	2022	22	10.00%	37.00%	28.00%	17.65%	48.00%
Mauritania	2012	23	50.00%	51.00%	26.00%	33.33%	72.00%
Mauritania	2013	23	40.00%	57.00%	64.00%	-31.00%	72.00%
Mauritania	2014	23	49.00%	34.00%	63.00%	0.00%	72.00%
Mauritania	2015	23	32.00%	38.00%	63.00%	6.70%	72.00%
Mauritania	2016	23	33.00%	43.00%	54.00%	7.10%	66.00%
Mauritania	2017	23	28.00%	55.00%	54.00%	12.10%	66.00%
Mauritania	2018	23	27.00%	58.00%	53.00%	2.35%	66.00%
Mauritania	2019	23	27.00%	58.00%	53.00%	-15.10%	70.00%
Mauritania	2020	23	22.00%	58.00%	53.00%	-4.60%	65.00%
Mauritania	2021	23	11.00%	50.00%	54.00%	-2.60%	66.00%
Mauritania	2022	23	10.50%	48.00%	51.00%	3.03%	66.00%
Mauritius	2012	24	20.00%	36.00%	43.00%	21.43%	55.00%
Mauritius	2013	24	49.00%	35.00%	40.00%	21.00%	55.00%
Mauritius	2014	24	44.00%	35.00%	39.00%	35.00%	57.00%
Mauritius	2015	24	6.00%	41.00%	39.00%	32.00%	58.00%
Mauritius	2016	24	5.00%	37.00%	36.00%	11.10%	57.00%
Mauritius	2017	24	13.00%	38.00%	36.00%	2.60%	53.00%
Mauritius	2018	24	12.50%	39.00%	35.00%	-28.82%	53.00%
Mauritius	2019	24	9.00%	39.00%	35.00%	-30.00%	60.00%
Mauritius	2020	24	9.00%	38.00%	35.00%	-40.10%	52.00%
Mauritius	2021	24	5.00%	37.00%	34.00%	-40.90%	50.00%
Mauritius	2022	24	5.00%	38.00%	39.00%	-34.57%	49.00%
Morocco	2012	25	45.00%	36.00%	66.00%	-16.67%	73.00%
Morocco	2013	25	49.00%	43.00%	66.00%	-15.00%	72.00%
Morocco	2014	25	49.03%	42.00%	66.00%	13.00%	72.00%
Morocco	2015	25	56.00%	48.00%	66.00%	-15.40%	73.00%
Morocco	2016	25	50.00%	46.00%	66.00%	13.30%	74.00%
Morocco	2017	25	40.00%	43.00%	66.00%	1.70%	74.00%
Morocco	2018	25	38.00%	39.00%	66.00%	2.63%	74.00%
Morocco	2019	25	39.00%	36.00%	66.00%	10.50%	77.00%
Morocco	2020	25	22.00%	34.00%	69.00%	2.80%	76.00%
Morocco	2021	25	20.00%	34.00%	69.00%	1.90%	76.00%
Morocco	2022	25	19.00%	35.00%	67.00%	-2.70%	75.00%
Mozambique	2012	26	50.00%	33.00%	1.00%	8.33%	19.00%
Mozambique	2013	26	36.00%	36.00%	-5.00%	13.00%	19.00%
Mozambique	2014	26	36.11%	36.00%	-4.00%	6.00%	20.00%
Mozambique	2015	26	34.00%	39.00%	-4.00%	21.10%	20.00%
Mozambique	2016	26	28.00%	37.00%	-11.00%	5.60%	15.00%
Mozambique	2017	26	20.00%	39.00%	-10.00%	0.00%	15.00%
Mozambique	2018	26	18.00%	44.00%	-12.00%	-1.60%	15.00%
Mozambique	2019	26	20.00%	44.00%	-6.00%	-2.70%	29.00%

Mozambique	2020	26	17.00%	44.00%	2.00%	0.50%	25.00%
Mozambique	2021	26	17.00%	44.00%	1.00%	4.70%	23.00%
Mozambique	2022	26	15.00%	44.00%	2.00%	-0.45%	23.00%
Namibia	2012	27	45.00%	36.00%	16.00%	-8.33%	36.00%
Namibia	2013	27	32.00%	39.00%	16.00%	7.00%	39.00%
Namibia	2014	27	25.00%	38.00%	13.00%	-14.00%	39.00%
Namibia	2015	27	28.00%	34.00%	13.00%	20.00%	26.00%
Namibia	2016	27	29.00%	35.00%	11.00%	7.70%	24.00%
Namibia	2017	27	24.00%	12.00%	11.00%	11.10%	22.00%
Namibia	2018	27	23.00%	32.00%	10.00%	42.75%	12.00%
Namibia	2019	27	22.00%	32.00%	11.00%	40.70%	13.00%
Namibia	2020	27	23.00%	34.00%	20.00%	49.50%	21.00%
Namibia	2021	27	15.00%	36.00%	11.00%	48.10%	18.00%
Namibia	2022	27	14.00%	38.00%	13.00%	49.06%	19.00%
Niger	2012	28	68.00%	41.00%	65.00%	18.18%	44.00%
Niger	2013	28	65.00%	40.00%	66.00%	44.00%	41.00%
Niger	2014	28	46.00%	40.00%	64.00%	44.00%	41.00%
Niger	2015	28	58.00%	45.00%	55.00%	47.40%	56.00%
Niger	2016	28	48.00%	41.00%	52.00%	12.90%	55.00%
Niger	2017	28	44.00%	37.00%	49.00%	12.90%	44.00%
Niger	2018	28	34.00%	32.00%	21.00%	39.13%	44.00%
Niger	2019	28	18.00%	39.00%	24.00%	9.50%	43.00%
Niger	2020	28	16.00%	46.00%	23.00%	12.50%	51.00%
Niger	2021	28	10.00%	37.00%	26.00%	8.70%	44.00%
Niger	2022	28	10.00%	36.00%	27.00%	24.14%	44.00%
Nigeria	2012	29	70.00%	27.00%	47.00%	21.43%	43.00%
Nigeria	2013	29	61.00%	26.00%	24.00%	37.00%	42.00%
Nigeria	2014	29	60.60%	24.00%	24.00%	22.00%	42.00%
Nigeria	2015	29	69.00%	27.00%	24.00%	21.10%	43.00%
Nigeria	2016	29	69.00%	25.00%	24.00%	0.00%	43.00%
Nigeria	2017	29	47.00%	24.00%	24.00%	7.70%	35.00%
Nigeria	2018	29	44.00%	26.00%	16.00%	7.85%	35.00%
Nigeria	2019	29	38.00%	27.00%	16.00%	6.90%	27.00%
Nigeria	2020	29	26.00%	28.00%	16.00%	8.80%	27.00%
Nigeria	2021	29	20.00%	30.00%	23.00%	6.70%	41.00%
Nigeria	2022	29	21.50%	28.00%	20.00%	5.40%	49.00%
Rwanda	2012	30	44.00%	37.00%	-2.00%	25.00%	22.00%
Rwanda	2013	30	39.00%	38.00%	-2.00%	17.00%	23.00%
Rwanda	2014	30	38.15%	39.00%	-2.00%	7.00%	24.00%
Rwanda	2015	30	41.00%	12.00%	-2.00%	10.30%	22.00%
Rwanda	2016	30	42.00%	12.00%	-6.00%	3.70%	18.00%
Rwanda	2017	30	37.00%	14.00%	-5.00%	15.40%	14.00%
Rwanda	2018	30	35.00%	25.00%	0.00%	5.56%	32.00%

Rwanda	2019	30	25.00%	25.00%	-4.00%	4.10%	38.00%
Rwanda	2020	30	17.00%	24.00%	-1.00%	5.30%	39.00%
Rwanda	2021	30	11.00%	19.00%	-1.00%	2.60%	39.00%
Rwanda	2022	30	10.00%	21.00%	0.00%	2.05%	36.00%
Senegal	2012	31	55.00%	30.00%	27.00%	33.33%	42.00%
Senegal	2013	31	66.00%	37.00%	25.00%	55.00%	43.00%
Senegal	2014	31	67.00%	33.00%	25.00%	62.00%	43.00%
Senegal	2015	31	50.00%	31.00%	25.00%	37.50%	41.00%
Senegal	2016	31	76.00%	29.00%	35.00%	11.80%	50.00%
Senegal	2017	31	54.00%	31.00%	35.00%	7.50%	50.00%
Senegal	2018	31	35.00%	30.00%	34.00%	-9.89%	50.00%
Senegal	2019	31	24.00%	29.00%	48.00%	-6.40%	51.00%
Senegal	2020	31	15.00%	28.00%	39.00%	-9.70%	54.00%
Senegal	2021	31	7.00%	29.00%	38.00%	-10.00%	51.00%
Senegal	2022	31	7.00%	33.00%	41.00%	-11.08%	64.00%
Sierra Leone	2012	32	43.00%	41.00%	8.00%	62.50%	48.00%
Sierra Leone	2013	32	51.00%	41.00%	6.00%	55.00%	70.00%
Sierra Leone	2014	32	56.00%	41.00%	2.00%	50.00%	42.00%
Sierra Leone	2015	32	46.00%	60.00%	-2.00%	52.40%	70.00%
Sierra Leone	2016	32	37.00%	40.00%	0.00%	46.90%	60.00%
Sierra Leone	2017	32	35.00%	50.00%	-5.00%	57.10%	60.00%
Sierra Leone	2018	32	39.00%	34.00%	-4.00%	-2.70%	20.00%
Sierra Leone	2019	32	22.00%	40.00%	-3.00%	-2.30%	30.00%
Sierra Leone	2020	32	14.00%	40.00%	0.00%	-2.90%	50.00%
Sierra Leone	2021	32	8.00%	31.00%	-1.00%	-2.60%	41.00%
Sierra Leone	2022	32	18.00%	31.00%	0.00%	-1.75%	41.00%
South Africa	2012	33	35.00%	35.00%	24.00%	26.09%	45.00%
South Africa	2013	33	58.00%	35.00%	25.00%	22.00%	48.00%
South Africa	2014	33	29.00%	38.00%	23.00%	26.00%	48.00%
South Africa	2015	33	20.00%	35.00%	23.00%	16.70%	41.00%
South Africa	2016	33	13.00%	38.00%	19.00%	2.90%	39.00%
South Africa	2017	33	10.00%	45.00%	20.00%	-2.40%	40.00%
South Africa	2018	33	10.00%	46.00%	20.00%	4.74%	42.00%
South Africa	2019	33	11.00%	42.00%	19.00%	2.90%	45.00%
South Africa	2020	33	15.00%	44.00%	19.00%	2.10%	51.00%
South Africa	2021	33	14.00%	46.00%	18.00%	1.80%	51.00%
South Africa	2022	33	10.00%	51.00%	23.00%	1.58%	32.00%
Swaziland	2012	34	40.00%	29.00%	39.00%	47.06%	31.00%
Swaziland	2013	34	48.00%	32.00%	38.00%	50.00%	31.00%
Swaziland	2014	34	30.00%	31.00%	38.00%	38.00%	46.00%
Swaziland	2015	34	38.00%	35.00%	38.00%	40.00%	47.00%
Swaziland	2016	34	52.00%	35.00%	36.00%	20.80%	52.00%
Swaziland	2017	34	40.00%	33.00%	36.00%	25.90%	54.00%

Swaziland	2018	34	33.00%	35.00%	35.00%	22.22%	32.00%
Swaziland	2019	34	24.00%	32.00%	37.00%	33.80%	39.00%
Swaziland	2020	34	22.50%	32.00%	38.00%	32.70%	42.00%
Swaziland	2021	34	22.00%	32.00%	12.00%	32.70%	21.00%
Swaziland	2022	34	20.00%	32.00%	15.00%	32.07%	22.00%
Tanzania	2012	35	55.00%	44.00%	3.00%	0.00%	40.00%
Tanzania	2013	35	42.00%	41.00%	1.00%	0.00%	39.00%
Tanzania	2014	35	41.66%	34.00%	1.00%	13.00%	16.00%
Tanzania	2015	35	35.00%	35.00%	1.00%	17.60%	7.00%
Tanzania	2016	35	35.00%	36.00%	10.00%	7.90%	6.00%
Tanzania	2017	35	30.00%	33.00%	10.00%	10.00%	50.00%
Tanzania	2018	35	29.00%	35.00%	8.00%	27.55%	49.00%
Tanzania	2019	35	18.00%	48.00%	8.00%	-3.00%	42.00%
Tanzania	2020	35	9.00%	39.00%	8.00%	17.30%	40.00%
Tanzania	2021	35	8.00%	29.00%	8.00%	17.90%	26.00%
Tanzania	2022	35	18.00%	29.00%	9.00%	2.90%	26.00%
Togo	2012	36	45.00%	20.00%	-1.00%	-5.56%	71.00%
Togo	2013	36	38.00%	25.00%	-1.00%	0.00%	72.00%
Togo	2014	36	25.00%	29.00%	3.00%	-10.00%	72.00%
Togo	2015	36	38.00%	31.00%	4.00%	-8.30%	74.00%
Togo	2016	36	45.00%	35.00%	4.00%	10.80%	73.00%
Togo	2017	36	39.00%	35.00%	4.00%	10.50%	73.00%
Togo	2018	36	40.00%	36.00%	3.00%	-44.91%	73.00%
Togo	2019	36	29.00%	72.00%	3.00%	-40.00%	73.00%
Togo	2020	36	28.00%	38.00%	3.00%	-14.70%	73.00%
Togo	2021	36	12.00%	37.00%	7.00%	-14.00%	20.00%
Togo	2022	36	10.00%	37.00%	7.00%	-15.29%	18.00%
Tunisia	2012	37	39.00%	20.00%	64.00%	30.77%	27.00%
Tunisia	2013	37	32.00%	24.00%	66.00%	21.00%	27.00%
Tunisia	2014	37	36.00%	27.00%	64.00%	19.00%	60.00%
Tunisia	2015	37	44.00%	35.00%	64.00%	7.10%	73.00%
Tunisia	2016	37	38.00%	23.00%	64.00%	18.20%	60.00%
Tunisia	2017	37	40.00%	23.00%	64.00%	15.60%	40.00%
Tunisia	2018	37	40.00%	22.00%	65.00%	32.56%	43.00%
Tunisia	2019	37	28.00%	45.00%	65.00%	32.40%	47.00%
Tunisia	2020	37	21.00%	26.00%	64.00%	33.70%	46.00%
Tunisia	2021	37	12.00%	35.00%	63.00%	27.70%	72.00%
Tunisia	2022	37	14.00%	34.00%	62.00%	27.78%	71.00%
Uganda	2012	38	80.00%	25.00%	12.00%	-7.14%	36.00%
Uganda	2013	38	71.00%	24.00%	4.00%	-7.00%	36.00%
Uganda	2014	38	71.15%	21.00%	4.00%	5.00%	36.00%
Uganda	2015	38	39.00%	23.00%	4.00%	-5.00%	60.00%
Uganda	2016	38	40.00%	25.00%	5.00%	31.80%	50.00%

Uganda	2017	38	35.00%	40.00%	5.00%	2.90%	39.00%
Uganda	2018	38	34.50%	34.00%	10.00%	8.41%	33.00%
Uganda	2019	38	22.00%	31.00%	9.00%	13.00%	29.00%
Uganda	2020	38	14.00%	29.00%	9.00%	10.00%	-2.00%
Uganda	2021	38	9.00%	28.00%	8.00%	-0.40%	40.00%
Uganda	2022	38	11.00%	28.00%	10.00%	-1.15%	44.00%
Zambia	2012	39	35.00%	31.00%	24.00%	25.00%	30.00%
Zambia	2013	39	15.00%	34.00%	15.00%	8.00%	31.00%
Zambia	2014	39	14.47%	30.00%	15.00%	12.00%	32.00%
Zambia	2015	39	30.00%	18.00%	15.00%	5.30%	36.00%
Zambia	2016	39	30.00%	28.00%	4.00%	5.10%	31.00%
Zambia	2017	39	20.00%	29.00%	13.00%	5.00%	33.00%
Zambia	2018	39	18.00%	27.00%	11.00%	1.76%	25.00%
Zambia	2019	39	19.00%	26.00%	10.00%	5.90%	25.00%
Zambia	2020	39	15.00%	27.00%	11.00%	1.40%	26.00%
Zambia	2021	39	12.00%	24.00%	10.00%	-2.90%	3.00%
Zambia	2022	39	13.00%	26.00%	12.00%	-3.43%	18.00%
Zimbabwe	2012	40	47.00%	51.00%	9.00%	25.00%	55.00%
Zimbabwe	2013	40	23.00%	55.00%	6.00%	0.00%	22.00%
Zimbabwe	2014	40	14.00%	40.00%	2.00%	0.00%	50.00%
Zimbabwe	2015	40	21.00%	29.00%	7.00%	6.30%	29.00%
Zimbabwe	2016	40	23.00%	40.00%	11.00%	-18.80%	55.00%
Zimbabwe	2017	40	20.00%	44.00%	11.00%	7.30%	45.00%
Zimbabwe	2018	40	20.00%	33.00%	12.00%	5.15%	66.00%
Zimbabwe	2019	40	18.00%	31.00%	12.00%	5.20%	56.00%
Zimbabwe	2020	40	16.00%	29.00%	11.00%	3.90%	46.00%
Zimbabwe	2021	40	7.00%	27.00%	12.00%	5.90%	25.00%
Zimbabwe	2022	40	14.00%	28.00%	11.00%	6.71%	25.00%