Asian Development Policy Review
ISSN(e): 2313-8343
ISSN(p): 2518-2544
DOI: 10.55493/5008.v10i4.4661
Vol. 10, No. 4, 278-306.

URL: www.aessweb.com

LABOR EMPLOYMENT IN WESTERN AND CENTRAL AFRICA: AN EXPLORATION OF ECONOMIC, DEMOGRAPHIC, SOCIAL, AND POLITICAL INDICATORS

Ubong Edem Effiong[1+]
Supper Roland Okijie[2]
Nora Francis Inyang[3]

[1,3]*Department of Economics, University of Uyo, P.M.B. 1017, Uyo, Akwa Ibom State, Nigeria.*
[1]*Email: ubongeffiong3@gmail.com*
[3]*Email: nora_inyang@yahoo.com*
[2]*Department of Sociology and Anthropology, University of Uyo, P.M.B. 1017, Uyo, Akwa Ibom State, Nigeria.*
[2]*Email: srokijie@gmail.com*

(+ Corresponding author)

Article History
Received: 24 June 2022
Revised: 21 September 2022
Accepted: 3 October 2022
Published: 17 November 2022

Keywords
Demographic explosion
Employment
Labor participation
Self-employment
Unemployment
Vulnerable unemployment.

JEL Classification
E24; J01; J11; J21; N37; O55.

ABSTRACT

This paper explores how key economic, demographic, social, and political variables influence labor employment in Western and Central Africa (WCA). Our analysis is based on the use of time series data, which spans from 1991 to 2020. These data were analyzed using simple ordinary least squares estimation. It was observed that economic variables accounted for about 76.81% of the total variation in labor force participation. The demographic indicators were observed to account for 96.31% of the total variation in labor force participation. For the social indicators, the variables account for 88.46% of the total variation in total unemployment. For the political indicators, the variables jointly explain 89.75% of the overall variation in total unemployment. The research concludes that the problem of labor employment within the WCA region can be solved by addressing economic vagaries, demographic explosion, and social and political change.

Contribution/Originality: This study is one of the earliest studies in Western and Central Africa that explores the economic, demographic, social, and political variables within the region, and provides empirical evidence on how these variables influence labor force utilization over time.

1. INTRODUCTION

Africa's population is anticipated to double from 1.2 billion in 2020 to 2.4 billion by 2050 (Population Council, 2020). An expedited demographic transition would increase the proportion of the population who are of working age, generating a window of opportunity. Still, such a shift in the age structure may only bring long-term labor market results if it is supported by significant human capital expenditures (Quak, 2021). This misalignment of employment and labor force growth emphasizes the need to comprehend the long-term problems and opportunities that come with demographic transition (Bhorat, Naidoo, Oosthuizen, & Pillay, 2015). Africa's labor supply has surged over the years, with a 61.3% labor force participation rate against the global average of 60% in 2019. An explanation for this trend arises from the manifestation of an enormous population of working age striving to survive economically and who cannot afford to be out of work, thus finding themselves in vulnerable jobs and with seemly limited opportunities for formal employment (ILO, 2018). Sufficient employment is critical for generating a sustained income and paving the

route out of poverty. The expression 'employment' refers to all individuals of working age who were in either paid employment or in self-employment for a defined period (ILO, 2020). Since 2000, overall employment in Africa has increased by 2.5% to 3%, which is lower than the actual production growth. Employment increased by 2.9% in 2019, while real production increased by 3.2% (ILO, 2020).

Employment has expanded particularly rapidly in Eastern and Central Africa, with both sub-regions seeing increases of more than 3% since 2000, but with a miniscule drop below 3% in 2009. In contrast, Southern Africa has seen extreme instability in employment, marked by several phases. After the epoch, there was a considerable rise, but then a substantial decrease, owing mostly to the 2008 financial crisis. Nonetheless, there has been a recapture since 2010. In Northern Africa, the Arab Spring protests of the early 2010s had a momentous sway on employment; however, there has been some improvement since 2016. Western Africa's employment growth varied from 2.4% in 2016 to 2.9% in 2019, with a peak of 3.2% in 2017 (ILO, 2020).

Western and Central Africa (WCA), in particular, is characterized by a rising trend in the working population, with a 52.69% in 2000 surging to 54.09% in 2020; this is matched with a declining labor force participation rate of 63.97% in 2010 that had dropped to 59.44% in 2021 (World Bank, 2021). This trend is similar for both males and females. There was a 65.92% participation rate for males in 2021 against 72.57% in 1990, and 52.99% was recorded for females in 2021 against 60.04% in 1990. The sub-region is also characterized by a declining employment to population ratio, having declined from 63.31% in 1991 to 61.05% and 55.17% in 2010 and 2020, respectively. While wage and salaried workers exhibited an increasing trend from 11.23% in 1991 to 15.49% and 20.06% in 2008 and 2019, respectively, vulnerable employment has witnessed a declining trend from 87.66% in 1991 to 84.62% in 2005 before reaching 80.63% in 2015 and then dropping further to 78.60% in 2019. This indicates that Western and Central Africa has been experiencing a rise in formal employment in the public and private sectors in recent times.

It is proposed that Africa will be the only region in the world with a growing working-age population and the sole region with a declining dependents-to-working-age population ratio by 2050 (Lam, Leibbrandt, & Allen, 2019). These striking discrepancies concerning Africa and other continents is due to Africa's later and slower demographic drop, with fertility remaining high in many nations. Africa's mounting working-age population brings both opportunities and impending threats. The fact that it is the sole region with a flourishing working-age population may open up chances for investment and economic progress. To keep up with the increase of the working-age population, Africa must generate two million jobs every month by 2040 (Lam et al., 2019). The goal of Ndung'u (2021) was "to define the bearing of demographic factors on employment in Sub-Saharan Africa". Demographic features, imports, and service sector variables were shown to statistically and substantially affect employment when establishing such an association.

Unemployment in the region is another key issue worthy of concern. The WCA with a growing active population is experiencing a rising trend in unemployment, with a 4.415% rate in 1991, which surged to 4.63% in 2015 before reaching an all-time high of 6.78% in 2020. The male population has higher unemployment, with a rate of 7.00% recorded in 2020 against the female unemployment rate of 6.49% in the same year. The youths are not left out in this distressing situation, as youth unemployment increased from 8.78% in 1991 to 9.24% in 2005, then surged to 8.97% in 2010 before reaching 13.50% in 2020. As posited by Bloom (2012), Africa will be home to one third of the world's young people by 2015, up from around one fifth in 2012, and this points to the need for job creation. On a gender basis, the female youth unemployment and the male youth unemployment reached rates of 13.44% and 13.65%, respectively, in 2020. This rising unemployment trend seems to spur Western and Central Africans to engage in self-employment. This is evidenced in the 79.94% proportion of self-employment of the total employment within the region.

Africa, as a whole, is noted for its poor performance in the provision of meaningful employment (Mbaye & Gueye, 2018a). The factors are seen on both the supply and demand sides (Golub & Mbaye, 2015). On the supply side, a thriving population fueled by the world's greatest birth rates resulted in an upsurge in the working-age population.

And, in most nations, job seekers, particularly younger people, confronted momentous barriers to employment owing to a lack of training. On the demand side, commodities – agriculture, oil, and mining – fuel economic growth in Africa, but their spill-over into other segments of the economy is limited. Agriculture productivity is poor, and the mining and mineral sectors are capital intensive, hire petite indigenous labor, and leave only a minor portion of the earnings behind. Other formal operations are hampered by a hostile business environment with high unit costs and a heavy 'invisible hand', sometimes fraudulent government systems (Mbaye & Gueye, 2018b).

The growth in labor employment can be driven by diverse factors, including economic, social, and political variables. One of the economic variables is the growth in GDP (economic growth). The link between economic growth and labor employment can be two-fold. Consistent with the human capital theory and endogenous growth models, it is the growth in human capital that can spur growth in real capital. On the contrary, it can be asserted that as the economy grows, economic indicators don't improve and there will be a need for more labor employment within the economy. This scenario can only occur if growth filters down to the household level in terms of an increase in the per capita income with a rise in aggregate demand, which fosters further production and labor demand.

Other key economic variables include inflation, manufacturing activities, foreign direct investment (the influence of FDI on growth and employment is due to productivity spill-overs to domestic companies and direct employment) (Kappel, 2021), and external trade. The social variables include gender equality, social inclusion/equity and social protection, while the political variables include public sector management, quality of budgetary and financial management, transparency, accountability and corruption, quality of public administration, structural policies, efficiency of revenue mobilization, and equity of public resource use.

The economic ratings capture issues such as building human resources, business regulatory environment, debt policy, financial sector rating, fiscal policy rating, macroeconomic management rating, and trade rating. Western and Central Africa scored an average of slightly above 3, based on the range of 1 (low) to 6 (high). These indices could have a substantial influence on employment, unemployment and self-employment. In analyzing "*the impact of social and political variables on employment in Sub-Saharan Africa*", after controlling for macroeconomic indices, Gokhool, Tandrayen-Ragoobur, & Kasseeah (2021) discovered that greater economic growth, ease of access to finance, education, low corruption, and political stability all have a positive impact on employment.

In this paper, we survey the economic, demographic, social, and political variables in Western and Central Africa and link them to different labor employment indices (labor participation, male unemployment, female unemployment, vulnerable unemployment, youth unemployment, and total unemployment. Apart from looking at their trends, we also conduct an empirical analysis using the ordinary least squares regression to detect whether these variables have a significant influence on labor employment within the region.

2. ECONOMIC AND DEMOGRAPHIC INDICATORS

The economic variables cut across both the domestic and external economic factors that can influence labor employment in any economy. This includes GDP growth, per capita income growth, household consumption expenditure, productivity, inflation, external balance, foreign direct investment, and others. Regarding the demographic variables, the focus is on population growth – urban, rural, male, female, and total population. These variables influence the labor force of a nation.

2.1. Economic Indicators

As stated earlier, key macroeconomic variables can influence labor employment. We will focus on key macroeconomic variables in this regard to see their trend over the years, and this trend will aid in revealing the behavior of the variables over time and how they could inhibit or stimulate employment in the WCA region.

2.1.1. Economic Growth and Standard of Living

The economic growth of the WCA region, measured by the growth rate of GDP, and the standard of living, measured by the growth rate of the per capita GDP growth, is portrayed in Table 1 and reflects their behavior for selected years.

Table 1. GDP growth in Western and Central Africa for selected years.

Year	GDP growth (annual %)	GDP per capita growth (annual %)	Year	GDP growth (annual %)	GDP per capita growth (annual %)
1961	1.85	-0.23	1991	1.12	-1.54
1963	7.27	4.99	1993	-1.16	-3.74
1965	4.05	1.78	1995	1.93	-0.74
1967	-9.55	-11.56	1997	4.23	1.49
1968	1.47	-0.82	1998	3.51	0.77
1969	15.49	12.85	1999	1.42	-1.26
1970	17.91	15.16	2000	3.73	1.00
1974	10.25	7.50	2004	8.01	5.15
1975	-2.16	-4.66	2005	5.85	3.02
1976	8.58	5.75	2006	5.37	2.53
1978	-2.19	-4.82	2008	6.28	3.39
1980	2.00	-0.76	2010	6.96	4.06
1981	-6.93	-9.45	2011	4.85	2.02
1982	-3.35	-5.97	2012	5.14	2.32
1983	-6.53	-9.07	2013	6.10	3.26
1985	5.55	2.70	2015	2.75	0.01
1988	4.84	2.03	2018	2.95	0.24
1989	2.27	-0.45	2019	3.19	0.49
1990	6.56	3.74	2020	-0.88	-3.45

Source: World Bank (2021).

As Table 1 portrays, the WCA's GDP growth and the per capita GDP growth exhibit similar trends. Periods of higher/lower and positive/negative are also matched with higher/lower and positive/negative values of the growth in per capita GDP. The lower growth rate of GDP in 1961 was matched with negative per capita GDP growth. But as the GDP recovered in 1963 and 1965 with positive growth rates of 7.27% and 4.05%, respectively, the per capita GDP growth also recovered to the rates of 4.99% and 1.78%, respectively. This same behavior is reflected in other periods, such as 1969 and 1970, where the region recorded huge GDP growth of 15.49% and 17.91%, respectively, and the GDP per capita growth grew by 12.85% and 15.16% for the same respective periods. In the 1990s, the WCA region enjoyed periods of positive GDP growth accompanied by positive GDP per capita, though it was not devoid of negative values as recorded in 1991 and 1993. From 2000 to 2019, the WCA was marked with greater improvements in the economy as portrayed by the positive growth rates in the two variables throughout the period. This was upturned in 2020 when the GDP growth and the per capita GDP growth recorded negative values of -0.88% and -3.45%, respectively.

This behavior is an indication that, as the economy grows, the standard of living is likely to also increase and the growth proceeds will filter down to individual economic agents. The implication of such behavior is that increased productivity will boost income which, in turn, stimulates aggregate demand within the economy. An increase in aggregate demand will require firms to employ more labor that will produce the extra output required. In that way, labor employment will increase and unemployment will decline.

2.1.2. Manufacturing Value Added (MVA)

It has been clearly stated and validated that "manufacturing is an engine of growth" (Effiong & Udofia, 2022; Kaldor, 1966), and for an economy to be industrialized, the manufacturing industry must contribute significantly to

growth and employment in the economy. The information in Table 2 reflects the performance of the manufacturing industry for selected years.

Table 2. Manufacturing value added (MVA) for selected years.

Year	MVA (annual % growth)	MVA (% of GDP)	MVA (constant 2015 US$ billion)	Year	MVA (annual % growth)	MVA (% of GDP)	MVA (constant 2015 US$ billion)
1982	-12.12	21.42	55.105	2002	15.09	11.55	44.071
1983	-26.13	20.99	40.709	2003	-7.16	11.61	40.915
1984	-6.14	17.11	38.211	2004	0.43	10.79	41.089
1985	5.27	20.02	40.225	2005	6.68	10.43	43.835
1986	-7.80	17.98	37.089	2006	0.95	9.61	44.252
1987	14.46	15.87	42.451	2007	3.23	9.47	45.683
1988	13.41	16.76	48.142	2008	4.29	9.38	47.643
1989	-13.70	14.92	41.546	2009	3.11	9.20	49.127
1990	6.00	14.94	44.040	2010	2.22	8.08	50.216
1991	7.77	15.23	47.461	2011	11.86	8.69	56.174
1992	11.00	14.28	52.681	2012	9.27	8.67	61.380
1993	-16.26	14.04	44.116	2013	13.60	9.94	69.730
1994	-11.09	15.59	39.225	2014	9.72	10.38	76.506
1995	-11.47	15.45	34.727	2015	0.24	10.08	76.686
1996	3.63	14.27	35.989	2016	-1.56	9.61	75.489
1997	1.94	14.86	36.689	2017	1.99	9.86	76.993
1998	-3.14	13.89	35.537	2018	3.03	10.45	79.323
1999	2.43	13.61	36.399	2019	1.37	11.31	80.414
2000	1.15	12.59	36.818	2020	-1.82	11.88	78.949
2001	4.01	12.56	38.293	NA	NA	NA	NA

Source: World Bank (2021).

As portrayed in Table 2, the growth in manufacturing value added (MVA) of Western and Central Africa exhibited a high degree of vacillations over the years. From 1982 to 1986, the sector recorded negative growth in MVA, except in 1985 when a 5.27% growth was recorded. In the same period, the MVA as a proportion of GDP of WCA exhibited mild debility as it plunged from 21.42% in 1982 to 17.98% in 1986, with its value declining from US$55.105 billion in 1982 to US$37.089 billion in 1986. The growth in MVA recorded negative growth rates for three consecutive years (1993–1995) with rates of -16.26%, -11.06%, and -11.47%, respectively. The MVA declined further to 15.45% in 1995. In 2000, the growth in MVA was 4.01% with a 12.56% proportion in GDP, and it increased to 15.09% in 2002 before it plunged to -7.16% in 2003. Afterwards, the MVA growth maintained positive values for twelve consecutive years (2004 to 2015) but the MVA's proportion of GDP kept declining, from 10.79% in 2004 to 8.67% in 2012, before some progress was observed in 2013 to 2015, as it was recorded to be 9.94%, 10.38%, and 10.08%, respectively, for these three years.

For 2016 and 2020, the growth in MVA was negative (-1.56% and -1.82%) and the positive growth rates for other periods were small (1.99% in 2017; 3.03% in 2018; and 1.37% in 2019). The MVA as a proportion of GDP still maintained some form of recovery as it rose to 11.88% in 2020 compared to 9.86% in 2017. Growth in MVA has a link to labor employment. A rise in output growth can drive greater labor employment if this growth is matched with greater demand for manufactured products. From another perspective, growth in manufacturing has a spill-over effect on the non-manufacturing sector, as reflected in Kaldor's first law, and growth in the sector can propel growth in other sectors, which will require greater employment of labor.

2.1.3. Foreign Direct Investment Inflow

The inflow of foreign direct investment (FDI) can be a key avenue for increased labor employment in the home economy. As such investments increase, more multinational companies are being set up, which can absorb the

domestic labor for gainful employment. Table 3 captures the inflows and outflows of FDI within Western and Central Africa.

Table 3. Foreign direct investment, net inflows and outflows.

Year	Foreign direct investment, net inflows (% of GDP)	Foreign direct investment, net outflows (% of GDP)	Year	Foreign direct investment, net inflows (% of GDP)	Foreign direct investment, net outflows (% of GDP)
1970	1.563	NA	1996	1.052	0.623
1973	1.869	NA	1999	1.562	0.085
1975	1.574	NA	2001	2.178	-0.261
1977	0.960	0.057	2003	2.571	0.078
1978	0.876	0.014	2004	1.831	0.231
1980	-0.276	0.002	2006	2.339	0.220
1983	0.569	0.013	2009	3.580	0.270
1985	0.786	0.022	2011	3.651	0.377
1988	0.631	0.056	2014	1.918	0.476
1990	0.701	0.342	2016	2.018	0.371
1993	1.845	0.493	2019	2.151	0.183
1994	2.767	0.145	2020	2.197	0.237
1995	0.875	0.270	NA	NA	NA

Source: World Bank (2021).

The net inflows of FDI as a proportion of GDP were positive in the 1970s, though not huge, with the highest of 1.869% being recorded in 1973. This declined steadily to -0.276% in 1980 before recovering to positive values until 2020. In 1995, the net FDI inflow as a percentage of GDP was 0.875%. It then increased to 1.831% in 2004 and increased further to 3.651% in 2011 but recorded a 2.197% growth in 2020. As capital flows into WCA, some capital also flows out of the region. The proportion of net FDI outflows to GDP from WCA was 0.057% in 1977 but declined to 0.002% in 1980. Some improvements were noticed as it bounced back to 0.493% and 0.623% in 1993 and 1996, respectively. However, a rate of -0.261% was recorded in 2001, but this was offset in subsequent years, reaching 0.377% and 0.237% in 2011 and 2020, respectively. Figure 1 reflects the behavior over time.

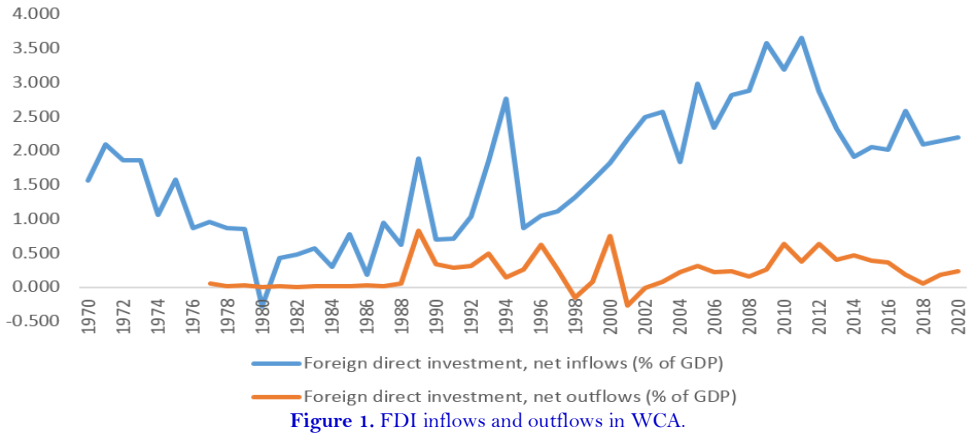

Figure 1. FDI inflows and outflows in WCA.

Often, Western and Central Africa attracts more FDI inflows than outflows. This is even being intensified in the present day as inflows increased from 1.918% in 2014 to 2.197% in 2020. The rising FDI inflows is also an avenue for more labor employment within the region.

2.1.4. Inflation and Household Consumption

Inflation could have a two-way effect in influencing labor employment in an economy. Cost-push inflation is likely to stall production and will have a devastating influence on labor demand. Production will be cut due to the

high cost of production and some labor could be laid off. This has a dampening influence on labor employment. In another case, demand-pull inflation, which is driven by increasing aggregate demand, could increase labor demand. To bridge the gap, firms will have to employ more labor, which will have a favorable impact on labor employment. The rise in aggregate demand is captured by the household consumption expenditure, and an increase is likely to trigger labor employment to rise, otherwise it will decline. Table 4 reflects the inflation trends and household consumption expenditure in WCA.

Table 4. Inflation and household consumption expenditure for selected years.

Year	Inflation, consumer prices (annual %)	Household and NPISH final consumption expenditure (annual % growth)	Year	Inflation, consumer prices (annual %)	Household and NPISH final consumption expenditure (annual % growth)
1982	12.06	-8.06	2002	3.19	12.36
1983	10.67	-17.67	2003	1.76	9.70
1984	11.25	4.42	2004	0.69	0.99
1985	7.35	17.06	2005	5.63	11.08
1986	5.95	-4.50	2006	4.42	-10.01
1987	0.25	-4.13	2007	3.61	26.10
1988	2.52	4.16	2008	8.45	-10.31
1989	0.87	-5.79	2009	3.28	16.12
1990	1.06	16.19	2010	1.78	2.97
1991	1.74	5.34	2011	4.02	-1.13
1992	-0.06	11.58	2012	4.58	1.95
1993	0.55	-5.07	2013	2.44	16.81
1994	31.84	-7.94	2014	1.76	1.21
1995	10.56	4.99	2015	2.13	2.69
1996	4.91	16.34	2016	1.49	-2.65
1997	4.00	-2.01	2017	1.76	0.78
1998	4.47	0.79	2018	1.78	4.66
1999	0.37	-3.92	2019	1.76	1.06
2000	2.53	2.13	2020	2.44	1.68
2001	4.36	43.60			

Note: NPISH = Non-profit institutions serving households
Source: World Bank (2021).

As can be observed in Table 4, high inflation is likely to reduce the household final consumption expenditure, since the real value of their money (the purchasing power of money) is likely to reduce. In 1982 and 1993, when inflation was 12.06% and 10.67%, respectively, the household final consumption growth was -8.06% and -17.67%, respectively. A period of lower inflation also reduces growth in household final consumption. This can be linked to the fact that firms profit from inflation. When their prices are low, they will not be willing to employ more labor, which tends to reduce the per capita income of the economy. This situation can be observed in 1987, 1989 and 1999. Also, inflation remained in single digits in WCA from 1996 until 2020, when it increased from 1.76% in 2017 to 2.44% in 2020. Household final consumption also declined from 4.66% in 2018 to 1.68% in 2020.

2.1.5. Cost of Business Start-up Procedures and Time Required to Start a Business

For entrepreneurial response to thrive, the cost of business start-up procedures and the time required to start a business must be as low as possible. Table 5 reflects this scenario by capturing the two variables for both males and females.

Table 5. Cost and time to start a business.

Year	Cost of business start-up procedures, female (% of GNI per capita)	Cost of business start-up procedures, male (% of GNI per capita)	Time required to start a business (days)	Time required to start a business, female (days)	Time required to start a business, male (days)
2003	298.85	298.85	45.40	45.47	45.33
2004	291.50	291.49	43.80	43.87	43.73
2005	240.21	240.21	59.53	59.60	59.45
2006	254.78	254.77	59.83	59.90	59.76
2007	222.61	222.60	55.83	55.90	55.76
2008	146.97	146.94	54.95	55.05	54.86
2009	117.14	117.11	50.81	50.90	50.71
2010	110.05	110.02	49.81	49.90	49.71
2011	98.43	98.41	37.62	37.71	37.52
2012	87.25	87.23	35.76	35.86	35.67
2013	74.55	74.53	29.33	29.42	29.24
2014	65.41	65.38	25.42	25.51	25.33
2015	63.61	63.58	25.17	25.26	25.08
2016	57.45	57.42	24.20	24.29	24.11
2017	53.53	53.50	17.90	18.00	17.81
2018	48.02	48.00	17.75	17.84	17.66
2019	38.75	38.73	15.26	15.35	15.17

Source: World Bank (2021).

As reflected in Table 5, it is interesting to note that the cost of business start-up procedures and the time required to start a business have been declining significantly. This points to the fact that the ease of doing business has been improving over the years within the WCA region. A case can be drawn from the cost of business start-up procedures as a percentage of GNI declining from 298.85% for females and males in 2003 to 110.05% and 110.02%, respectively, in 2010. This further declined to 38.75% and 38.73%, respectively, in 2019. In a different vein, the time required to start a business increased from 45.47 days for females and 45.33 days for males in 2003 to 55.90 days for females and 55.76 days for males in 2007. Later, this reduced significantly to 25.26 days for females and 25.08 days for males in 2015 to 15.35 days for female and 15.17 days for males in 2019. In aggregate, the number of days required to start a business rose from an average of 45.40 days in 2003 to 55.83 days in 2007, before declining to 25.17 days and 15.26 days for 2015 and 2019, respectively. These improvements are likely to spur self-employment and increase labor employment within the region.

2.1.6. Domestic Credit to the Private Sector

Access to credit is one of the core fundamentals for driving entrepreneurial response and facilitating self-employment. The growth in credit to the domestic sector is an indication that financial resources have been channeled to entrepreneurs who utilize such resources to drive business growth. It is also used as an index to measure the financial depth of the economy. Table 6 reflects this growth for selected years.

For the selected years, Table 6 portrays that the WCA region recorded divergence in domestic credit to the private sector. The period from 1961 to 1970 recorded that the domestic credit as a ratio of GDP remained in single digits, averaging 8.20% for the selected years. It switched to double digits in 1973 until 1991, averaging 13.20%. The double-digit failed to increase from 1995 to 2005 as it reduced to an average of 8.69%. A recovery was witnessed for the selected periods from 2008 to 2020 where an average proportion of 13.95% was recorded. Improved financial development will facilitate access to credit for productive investments, which can have a significant impact on labor employment.

Table 6. Domestic credit to the private sector for selected years.

Year	Domestic credit to the private sector (% of GDP)	Domestic credit to the private sector by banks (% of GDP)	Year	Domestic credit to the private sector (% of GDP)	Domestic credit to the private sector by banks (% of GDP)
1961	6.07	6.60	1991	12.80	12.59
1965	8.78	8.54	1995	8.25	8.17
1968	9.92	9.09	1998	8.49	8.44
1970	8.04	7.34	2000	8.75	8.69
1973	10.42	10.23	2003	9.13	9.10
1975	12.00	11.65	2005	8.85	8.81
1978	16.94	16.60	2008	15.59	15.52
1980	17.20	16.95	2010	13.12	13.04
1983	11.11	11.01	2013	12.59	12.50
1985	11.10	10.99	2015	14.50	14.42
1988	14.06	13.97	2018	13.37	13.22
1990	13.13	12.83	2020	14.54	13.85

Source: World Bank (2021).

2.1.7. Exports/Imports and External Trade Balance

Another economic variable that is worthy of note is the issue of external balance. This is the difference between imports and export. Being expressed as a percentage of GDP, it measures the degree of openness of the economy. In that way, we can say that it is an index of trade liberalization. An argument can be put forward that such liberalization will reduce labor employment and aggravate unemployment situation within the WCA region.

Table 7. Trade balance in Western and Central Africa for selected years.

Year	Imports of goods and services (% of GDP)	Exports of goods and services (% of GDP)	External balance on goods and services (% of GDP)	Year	Imports of goods and services (% of GDP)	Exports of goods and services (% of GDP)	External balance on goods and services (% of GDP)
1961	23.62	17.22	-6.40	1991	21.51	26.11	4.60
1963	20.41	16.46	-3.96	1993	22.30	23.39	1.09
1965	22.12	17.94	-4.18	1995	25.85	30.07	4.22
1968	22.76	19.75	-3.01	1998	28.64	25.13	-3.51
1970	19.10	17.11	-1.98	2000	23.73	36.23	12.50
1973	23.37	22.40	-0.97	2003	28.30	29.38	1.08
1975	29.76	24.47	-5.29	2005	21.75	27.08	5.33
1978	30.39	25.66	-4.73	2008	23.93	29.94	6.01
1980	27.31	32.67	5.36	2010	25.94	29.49	3.55
1983	13.52	13.65	0.14	2013	21.88	23.67	1.78
1985	15.57	17.84	2.28	2015	20.23	17.46	-2.77
1988	18.62	18.97	0.35	2018	24.73	22.52	-2.21
1990	20.30	25.42	5.12	2020	23.00	16.96	-6.04

Source: World Bank (2021).

This is because "trade liberalization can weaken and destroy good jobs" (Davis & Harrigan, 2011). Table 7 captures the behavior for selected years.

Within the WCA region, external balance maintained a negative value for selected years between 1961 and 1978 with an average of -3.82%. Later, the region enjoyed a positive external trade balance for the selected years between 1980 until 1995 before recording a negative value of -3.51% in 1998. Subsequently, positive values were recorded from 2000 to 2013 before swinging to negative values of -2.77%, -2.21%, and -6.04% for 2015, 2018, and 2020, respectively. It is worth noting that the imports of goods as a percentage of GDP is often greater than the exports of goods as a percentage of GDP. This portrays that WCA's imports are far higher than the exports. The behavior of the external trade balance is captured in Figure 2 where the period covered is from 1961 to 2020.

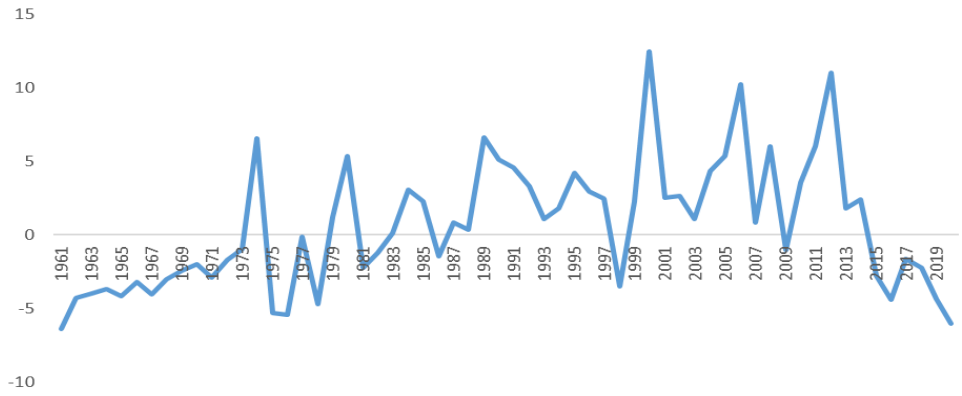

Figure 2. Trend of external trade balance, % of GDP.

Figure 2 indicates high volatility in the external balance of WCA over the years, with the 1960s and early 1970s being in the negative. There have been swings in the value during the 1980s and 1990s with the recent period (2015–2020) recording negative values. This could validate the accession of Davis and Harrigan (2011), which could influence labor employment drastically.

2.1.8. Official Development Assistance (ODA) Received

The ODA is a form of government aid meant to trigger the economic development of a nation, and it targets the development and welfare of a developing nation in particular. Table 8 captures the net amount of such aid received from 1970 to 2019.

Table 8. Net official development assistance received, 1970–2019.

Year	Net ODA received (% of GNI)	Year	Net ODA received (% of GNI)	Year	Net ODA received (% of GNI)
1970	2.390	1987	4.094	2004	3.603
1971	3.039	1988	4.741	2005	5.117
1972	2.548	1989	6.082	2006	5.451
1973	2.640	1990	5.632	2007	2.924
1974	2.719	1991	5.900	2008	2.367
1975	2.888	1992	5.926	2009	3.003
1976	2.293	1993	6.827	2010	2.792
1977	2.377	1994	9.363	2011	2.282
1978	3.022	1995	6.765	2012	2.281
1979	2.839	1996	5.900	2013	1.835
1980	2.549	1997	4.584	2014	1.798
1981	1.279	1998	4.797	2015	1.983
1982	1.420	1999	3.768	2016	2.060
1983	1.836	2000	3.259	2017	2.414
1984	2.536	2001	3.530	2018	2.338
1985	2.579	2002	3.906	2019	2.411
1986	3.841	2003	3.544		

Source: World Bank (2021).

Table 8 reflects that the net ODA received by the WCA region rose steadily from 2.39% in 1970 to 2.549% in 1980 with some swings within the same period. It declined to 1.279% in 1981 before maintaining a continuous rise to 6.082% in 1989. A further decline was witnessed before bouncing back to a record high of 9.363% in 1994. This has remained the highest net ODA received (% of GNI) by WCA over the years, as it declined to 3.603% in 2004 before reaching another peak of 5.451% in 2006. Then, the net ODA received (% of GNI) declined drastically, reaching 1.798% in 2014. Subsequent years were marked with mild improvements, reaching 2.411% in 2019. This behavior is portrayed in Figure 3.

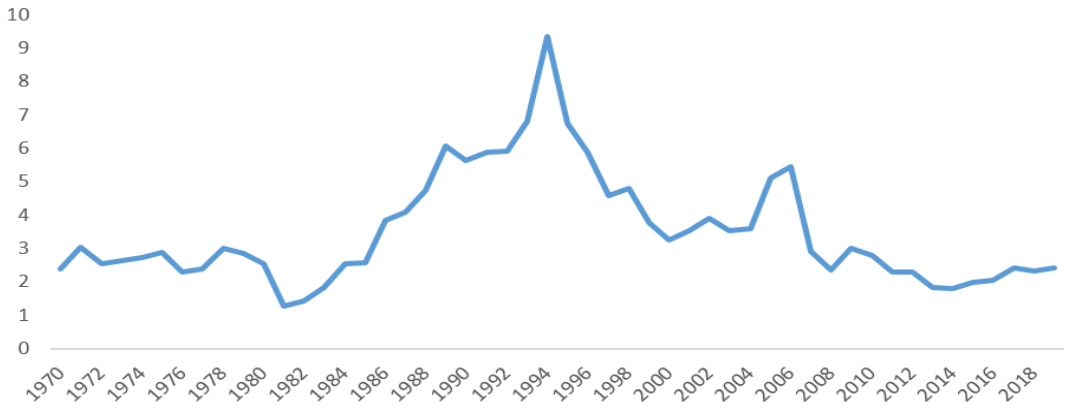

Figure 3. Net ODA received, % of GNI, 1970–2019.

The aid pattern remains relatively steady in the 1970s, reaching a peak in 1994 before maintaining a declining but oscillating trend thereafter. This reduction in aid can affect the development and welfare pursuit, of which labor employment is one, in Western and Central Africa.

2.2. Demographics

Population dynamics can have a significant impact on the labor force of a nation. A greater number of labor force without adequate economic expansion could cause an increasing rate of labor unemployment since there is no capacity to absorb them. We consider the demographic trends in WCA to see how they behave over time.

2.2.1. Male and Female Populations

The growth pattern of the population by gender has exhibited a form of overtaking by the male population in recent years, as the results in Table 9 clearly portray.

Table 9. Population in Western and Central Africa by gender.

Year	Population, female	Population, female (% of total population)	Population, male	Population, male (% of total population)
1961	49,400,141	50.200	49,007,080	49.800
1965	53,822,355	50.165	53,467,520	49.835
1970	60,291,982	50.131	59,977,062	49.869
1975	68,203,397	50.086	67,970,147	49.914
1980	78,003,993	50.040	77,878,277	49.960
1985	89,524,454	50.062	89,302,099	49.938
1990	102,466,336	50.031	102,337,529	49.969
1995	116,861,054	49.982	116,946,573	50.018
2000	133,462,296	49.946	133,752,248	50.054
2005	152,428,247	49.891	153,092,341	50.109
2010	174,658,066	49.823	175,898,820	50.177
2015	199,813,894	49.756	201,772,757	50.244
2020	227,985,427	49.691	230,818,049	50.309

Source: World Bank (2021).

The female population accounted for 50.20% of the total population in 1960 but declined to 50.031% in 1990. Males accounted for 49.80% and 49.969% for 1960 and 1990, respectively. The reverse holds from 1995 until 2020, when the male population took the higher share; the male population accounted for 50.018% of the total population in 1995 and increased to 50.309% in 2020. Meanwhile, the female population declined from 49.982% in 1995 to 49.691% in 2020.

2.2.2. Rural and Urban Populations

Looking at the urban and rural populations as indicated in Table 10 and Table 11, respectively, we can observe some dynamics over the years.

Table 10. Population in Western and Central Africa, urban.

Year	Urban Population	Urban population (% of total population)	Urban population growth (annual %)	Year	Urban Population	Urban population (% of total population)	Urban population growth (annual %)
1961	14,813,809	15.054	4.753	1991	66,189,690	31.469	4.251
1965	17,961,784	16.741	5.026	1995	77,372,831	33.093	3.969
1968	20,725,919	18.057	4.928	1998	87,173,656	34.415	4.104
1970	22,830,490	18.983	4.941	2000	94,468,306	35.353	4.088
1973	26,690,752	20.629	5.375	2003	107,608,667	37.174	4.438
1975	29,667,110	21.786	5.444	2005	117,415,817	38.431	4.463
1978	34,728,830	23.534	5.319	2008	133,856,733	40.346	4.448
1980	38,220,116	24.519	4.897	2010	145,922,388	41.626	4.396
1983	44,698,120	26.405	5.319	2013	165,607,296	43.531	4.262
1985	49,617,207	27.746	5.395	2015	179,836,016	44.781	4.191
1988	57,714,623	29.739	5.046	2018	202,961,117	46.633	4.074
1990	63,490,907	31.001	4.858	2020	219,531,155	47.849	3.977

Source: World Bank (2021).

The urban population accounted for 15.054% of the total population of WCA in 1961, and this has been increasing steadily to 31.001% in 1990, recording annual growth rates of 4.753% and 4.858% in these two years, respectively. The proportion of the urban population kept rising in the 1990s through the 2000s from 33.093% in 1995 to 47.849% in 2020, growing at a rate of 3.969% and 3.977% for the two respective years.

Table 11. Rural Population in Western and Central Africa.

Year	Rural population	Rural population (% of total population)	Rural population growth (annual %)	Year	Rural population	Rural population (% of total population)	Rural population growth (annual %)
1961	83,593,412	84.946	1.627	1991	144,142,577	68.531	2.002
1965	89,328,091	83.259	1.681	1995	156,434,796	66.907	2.063
1968	94,055,197	81.943	1.744	1998	166,128,654	65.585	1.997
1970	97,438,554	81.017	1.803	2000	172,746,238	64.647	1.968
1973	102,694,202	79.371	1.789	2003	181,860,863	62.826	1.708
1975	106,506,434	78.214	1.857	2005	188,104,771	61.569	1.703
1978	112,842,233	76.466	1.990	2008	197,915,597	59.654	1.712
1980	117,662,154	75.481	2.112	2010	204,634,498	58.374	1.670
1983	124,581,302	73.595	1.908	2013	214,830,600	56.469	1.620
1985	129,209,346	72.254	1.808	2015	221,750,635	55.219	1.590
1988	136,355,456	70.261	1.814	2018	232,268,264	53.367	1.536
1989	138,833,591	69.632	1.817	2019	235,777,809	52.757	1.511
1990	141,312,958	68.999	1.786	2020	239,272,321	52.151	1.482

Source: World Bank (2021).

For the rural population, Table 11 reveals that a greater proportion of the WCA's population resides in rural areas, though this has been declining over the years due to rural–urban migration. The proportion of the rural population was 84.946% in 1961 and declined sharply to 68.999% in 1990, recording growth rates of 1.627% and 1.786% in the respective years. This was followed by a continuous decline in the proportion of the rural population in the 1990s and 2000s. It plunged from 66.907% in 1995 to 58.374% in 2010 before reaching 52.151% in 2020. The growth rate of the rural population was 2.063% in 1995 before reaching a record low of 1.670% and 1.482% in 2010 and 2020, respectively.

2.2.3. Total Population and Labor Force

Overall, the total population of the WCA region has been growing immensely, as reflected in Table 12 and Figure 4.

Table 12. Total population and active population, 1960–2020.

Year	Population, total	Population aged 15–64, total	Population aged 15–64 (% of total population)
1960	96,396,419	53,387,204	55.383
1965	107,289,875	58,639,680	54.655
1970	120,269,044	64,793,225	53.874
1975	136,173,544	72,310,042	53.101
1980	155,882,270	81,591,557	52.342
1985	178,826,553	92,290,076	51.609
1990	204,803,865	105,528,132	51.526
1995	233,807,627	121,770,722	52.082
2000	267,214,544	140,800,602	52.692
2005	305,520,588	161,676,866	52.918
2010	350,556,886	185,772,094	52.993
2015	401,586,651	213,860,470	53.254
2020	458,803,476	248,156,675	54.088

Source: World Bank (2021).

The active population (% of total population) declined from 55.383% in 1960 to 51.526% in 1990. This was followed by a continuous increase, reaching a record high of 54.088% in 2020. The total population grew in an exponential manner, as reflected in Figure 4. It increased from 96.4 million in 1960 to 204.8 million in 1990 before reaching an all-time high of 458.8 million in 2020.

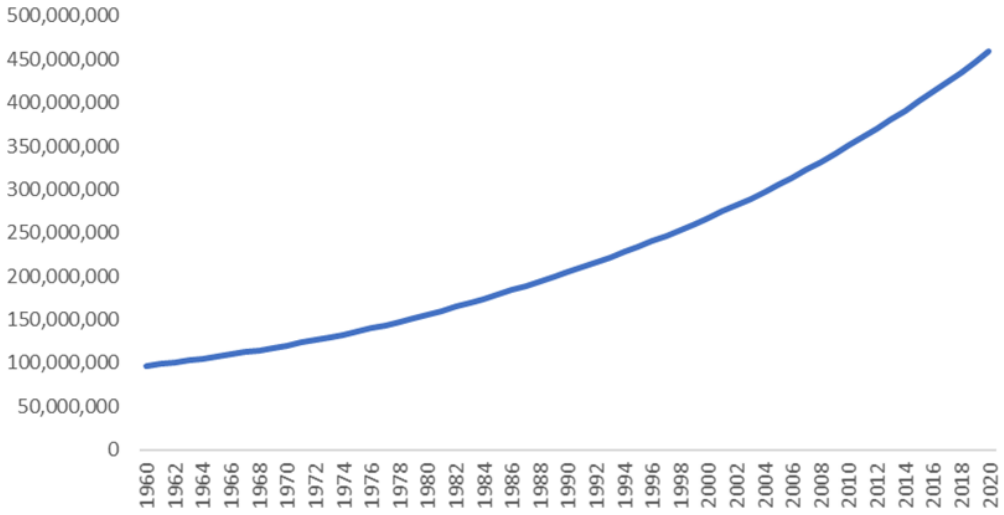

Figure 4. Total population in Western and Central Africa, 1960–2020.

This exponential increase could put significant pressure on labor demand, causing a high level of unemployment within the region.

3. SOCIO-ECONOMIC AND POLITICAL RATINGS

The WCA region has been rated on several indices from social, economic and political perspectives.

3.1. Economic Ratings

The economic ratings range from human resources to trade, from 1 (low) to 6 (high). Table 13 reveals the ratings of WCA regarding diverse economic indices. The data are constructed based on the World Bank's Country Policy and Institutional Assessment (CPIA).

Table 13. Economic ratings in Western and Central Africa.

Year	CPIA building human resources rating (1–6)	CPIA business regulatory environment rating (1–6)	CPIA debt policy rating (1–6)	CPIA economic management cluster average (1–6)	CPIA financial sector rating (1–6)	CPIA fiscal policy rating (1–6)	CPIA macroeconomic management rating (1–6)	CPIA trade rating (1–6)
2005	3.13	3.18	3.08	3.32	3.00	3.32	3.58	3.79
2006	3.16	3.05	3.00	3.33	3.03	3.39	3.58	3.82
2007	3.24	3.08	3.13	3.42	3.08	3.45	3.68	3.79
2008	3.24	3.13	3.21	3.44	3.08	3.45	3.66	3.79
2009	3.23	3.15	3.23	3.43	3.08	3.40	3.65	3.75
2010	3.25	3.10	3.28	3.44	3.05	3.38	3.68	3.75
2011	3.38	3.08	3.33	3.51	3.03	3.45	3.75	3.78
2012	3.43	3.13	3.40	3.53	2.98	3.43	3.78	3.78
2013	3.43	3.13	3.45	3.52	2.98	3.40	3.70	3.80
2014	3.38	3.13	3.45	3.45	2.90	3.25	3.65	3.80
2015	3.38	3.15	3.43	3.41	2.88	3.23	3.58	3.78
2016	3.48	3.10	3.35	3.33	2.78	3.13	3.53	3.78
2017	3.53	3.08	3.20	3.35	2.78	3.25	3.60	3.83
2018	3.55	3.03	3.18	3.34	2.78	3.23	3.63	3.83
2019	3.55	3.03	3.20	3.35	2.70	3.25	3.60	3.85
2020	3.55	3.05	3.25	3.38	2.70	3.28	3.63	3.88
Average	3.37	3.10	3.26	3.41	2.93	3.33	3.64	3.80

Source: World Bank (2021).

The data in Table 13 reveal that WCA has an average economic rating, as measured by the CPIA. The financial sector rating recorded the lowest value of 2.93, which is below average. This points to the fact that the WCA region is lagging behind in financial sector development. However, these averages indicate that WCA is at least doing well economically with regard to the CPIA.

Table 14. Social ratings in Western and Central Africa.

Year	CPIA gender equality rating (1–6)	CPIA policies for social inclusion/equity cluster average (1–6)	CPIA policy and institutions for environmental sustainability rating (1–6)	CPIA property rights and rule-based governance rating (1–6)	CPIA social protection rating (1–6)
2005	3.24	3.12	3.11	2.79	3.03
2006	3.18	3.07	2.95	2.82	2.92
2007	3.21	3.09	2.95	2.82	2.97
2008	3.21	3.09	2.92	2.79	3.03
2009	3.18	3.09	2.90	2.78	3.00
2010	3.18	3.14	2.98	2.78	3.00
2011	3.18	3.22	3.18	2.80	3.00
2012	3.15	3.21	3.18	2.73	2.95
2013	3.18	3.20	3.13	2.78	2.93
2014	3.18	3.20	3.23	2.75	2.93
2015	3.08	3.19	3.28	2.80	2.98
2016	3.08	3.21	3.23	2.83	3.03
2017	3.08	3.23	3.28	2.85	3.03
2018	3.08	3.25	3.30	2.85	2.98
2019	3.10	3.28	3.38	2.90	2.98
2020	3.15	3.30	3.38	2.93	3.03
Average	3.15	3.30	3.38	2.93	3.03

Source: World Bank (2021).

3.2. Social Ratings

The social ratings, which covers indices ranging from gender equality to social protection, are captured in Table 14 from 2005 to 2020.

From Table 14, gender equality and policies for social inclusion/equity have overall averages of 3.15 and 3.30, respectively, while social protection has an average of 3.03. However, property rights and rule-based governance has a rating of 2.93, which is below average. However, the WCA region is doing well in the social perspective based on the CPIA rating.

Table 15. Some political ratings in Western and Central Africa.

Year	CPIA public sector management and institutions cluster average (1–6)	CPIA quality of budgetary and financial management rating (1–6)	CPIA quality of public administration rating (1–6)	CPIA transparency, accountability, and corruption in the public sector rating (1–6)	CPIA structural policies cluster average (1–6)	CPIA efficiency of revenue mobilization rating (1–6)	CPIA equity of public resource use rating (1–6)
2005	2.99	3.08	2.87	2.79	3.32	3.42	3.11
2006	2.98	3.03	2.89	2.79	3.31	3.34	3.11
2007	2.98	3.03	2.92	2.82	3.32	3.32	3.11
2008	2.95	3.00	2.89	2.79	3.33	3.29	3.08
2009	2.98	3.05	2.90	2.83	3.33	3.33	3.15
2010	3.00	3.15	2.90	2.85	3.30	3.30	3.28
2011	3.04	3.18	2.98	2.93	3.29	3.33	3.38
2012	2.99	3.15	2.93	2.83	3.29	3.33	3.35
2013	3.00	3.13	2.88	2.88	3.30	3.35	3.35
2014	2.99	3.10	2.90	2.90	3.28	3.30	3.28
2015	3.01	3.10	2.90	2.90	3.27	3.35	3.25
2018	3.02	3.10	2.90	2.90	3.21	3.33	3.33
2019	3.05	3.20	2.93	2.93	3.19	3.30	3.38
2020	3.05	3.20	2.90	2.93	3.21	3.30	3.40
Average	3.00	3.11	2.91	2.86	3.28	3.33	3.25

Source: World Bank (2021).

3.3. Political Ratings

Politically, the CPIA indices range from public sector management and institutions to the equity of public resource use. Table 15 captures these indices and their values over the years.

In the political sphere, the WCA region performs below average in regard to the quality of public administration (2.91), and transparency, accountability, and corruption in the public sector (2.86). These two indices are crucial for modern democracy and successful governance; thus, we can say that WCA still has governance issues to deal with. Other indices performed up to the average.

4. EMPLOYMENT AND UNEMPLOYMENT

Western and Central Africa has experienced diverse levels of employment and unemployment over the years. We dissect this into various segments to see the behavior over the years.

4.1. Labor Force Participation

The labor force participation rate reflects the segment of the active population in an economy (15–64 years) who are presently working or seeking paid employment. The trend in the participation rate is captured in Table 16 and reflects the female, male, and aggregate participations.

Table 16. Labor force participation rate.

Year	Labor force participation rate, female (% of female population ages 15+) (modelled ILO estimate)	Labor force participation rate, male (% of male population ages 15+) (modelled ILO estimate)	Labor force participation rate, total (% of total population ages 15+) (modelled ILO estimate)
1990	60.04	72.57	66.23
1993	59.93	72.39	66.09
1995	59.88	72.02	65.89
1998	59.74	71.67	65.65
2000	59.66	71.26	65.41
2002	59.48	71.08	65.23
2005	59.19	70.79	64.94
2008	58.68	70.38	64.50
2010	58.14	69.86	63.97
2012	56.71	68.26	62.46
2015	54.81	66.56	60.66
2018	54.12	66.66	60.37
2019	53.98	66.71	60.33
2020	52.76	65.61	59.18
2021	52.99	65.92	59.44

Source: World Bank (2021).

The labor participation rates for the female, male and total working populations show a declining trend over the years. As Table 16 reflects, the female labor participation rate declined from 60.04% in 1990 to 59.66% in 2000. This was accompanied by a subsequent decline to 58.14% in 2010 and 54.81% in 2015 before reaching 52.99% in 2021. The male labor participation followed a similar trend as it declined from 72.57% in 1990 to 71.26% in 2000, reaching 69.86% in 2010 and then dropped further to 66.56% in 2015 and 65.92% in 2021. It is worth noting that the female labor participation rate is always below the male labor participation rate, indicating a degree of inequality. At the aggregate, the labor participation rate in the WCA region stood at 66.23% in 1990 before declining steadily to 65.41% in 2000. Subsequent declines to 63.97% in 2010 and 60.66% in 2015 were recorded before it declined further to 59.44% in 2021.

4.2. Vulnerable Employment

As defined by Johnson (2010), workers in vulnerable employment constitutes own-account workers plus family workers who have less official working schedules and are exposed to unfavorable working conditions, inadequate social security, and 'voice' via active representation by trade unions and related organizations. This kind of employment has attributes of poor earning, low productivity, and tough conditions of service that demoralize the fundamental rights of labor. Table 17 captures the situation of vulnerable employment for selected years within Western and Central Africa. It reflects the female, male and total vulnerable employment within the WCA region. They are correspondingly measured as a percentage of female, male, and total employment, and are based on the International Labour Organization (ILO) model.

It can be seen from Table 17 that WCA has a large proportion of employees operating at the vulnerable level. The percentage of females in vulnerable employment was 92.67% in 1991, and this declined steadily to 90.48% in 2005. It declined infinitesimally to 88.49% in 2010 before reaching 87.68% and 85.72% in 2015 and 2019, respectively. Male vulnerable unemployment stood at 83.50% within the WCA region before declining to 81.88% and 79.68% in 2000 and 2005, respectively. This was followed by further declines, to 76.70% in 2010 and 74.83% in 2015, before reaching 72.66% in 2019. It can be deduced from this trend that females in the WCA region suffer from greater vulnerable employment compared to their male counterparts. At the aggregate, the vulnerable employment in the WCA region declined from 87.66% in 1990 to 86.44% in 2000 and again to 84.62% in 2005. Further declines to 82.07% and 80.63 were recorded for 2010 and 2015, respectively, before reaching 78.60% in 2019. In all, the WCA

region is characterized by greater vulnerable employment that poses serious threats to working conditions and the implied poor pay.

Table 17. Vulnerable employment.

Year	Vulnerable employment, female (% of female employment) (modelled ILO estimate)	Vulnerable employment, male (% of male employment) (modelled ILO estimate)	Vulnerable employment, total (% of total employment) (modelled ILO estimate)
1991	92.67	83.50	87.66
1993	92.70	83.56	87.71
1995	92.53	83.23	87.46
1998	92.48	82.93	87.28
2000	91.84	81.88	86.44
2002	91.78	81.79	86.35
2005	90.48	79.68	84.62
2009	89.33	77.91	83.11
2010	88.49	76.70	82.07
2012	87.52	75.02	80.69
2015	87.68	74.83	80.63
2016	87.57	74.72	80.51
2017	86.83	73.88	79.73
2018	86.18	73.25	79.12
2019	85.72	72.66	78.60

Source: World Bank (2021).

4.3. Wage and Salaried Workers

As stated by the International Labour Organisation (ILO) (2014), the employment trends of wage and salaried labor force are an indicator of the health of the economy. The wage and salaried workers constitute employees in the public or private entities and they are entitled to compensation in the form of wage, commission, salary, or in kind (ILO, 2002; cited in International Labour Organisation (ILO) (2014)). This can be viewed as an opposite of vulnerable employment as conditions of service and organized working arrangements are clearly spelled out, and workers enjoy some degree of social security and active representation in the labor union. The trend of such employment within Western and Central Africa is portrayed in Table 18 for female, male, and total wage and salaried workers.

Table 18. Wage and salaried workers.

Year	Wage and salaried workers, female (% of female employment) (modelled ILO estimate)	Wage and salaried workers, male (% of male employment) (modelled ILO estimate)	Wage and salaried workers, total (% of total employment) (modelled ILO estimate)
1991	6.66	15.04	11.23
1993	6.62	14.96	11.17
1995	6.78	15.25	11.40
1998	6.84	15.63	11.62
2000	7.47	16.73	12.49
2003	7.96	17.42	13.10
2005	8.81	18.82	14.25
2008	9.78	20.28	15.49
2010	10.73	21.67	16.70
2013	11.40	23.44	17.98
2015	11.43	23.51	18.06
2016	11.50	23.53	18.11
2017	12.25	24.39	18.91
2018	12.89	25.04	19.53
2019	13.36	25.65	20.06

Source: World Bank (2021).

A general point to note about these segments of wage and salaried workers is that they have been improving over the years. As Table 18 portrays, female wage and salaried workers were just 6.66% of female employment in 1991 but this increased to 7.47% and 10.73% in 2000 and 2010, respectively. It further increased to 12.25% in 2017 before reaching 13.36% in 2019. For males, it increased from 15.04% in 1990 to 16.73% and 21.67% in 2000 and 2010, respectively. The rising trend continued, reaching 24.39% in 2017 and a record 25.65% in 2019. It also shows a big gap inherent between male and female wage and salaried workers. This is due to the high level of vulnerability embedded in female employment compared to that of male employment. At the aggregate, wage and salaried workers constituted 11.23% of the total employment in WCA but rising trends to 12.49% and 16.70% were recorded for 2000 and 2010, respectively. This progress continued into 2015 with 18.06% and then to 19.53% and 20.06% in 2018 and 2019, respectively. This proportion is quite small due to the greater proportion of employment in the WCA region being at the vulnerable level.

4.4. Sectoral Labor Employment

Western and Central Africa's workforce are employed in diverse sectors. The key sectors are agriculture, industry, and services. Table 19 shows the proportion of total employment absorbed by these three sectors over the years. The proportions are computed using the ILO estimates.

Table 19. Labor employment by sector.

Year	Employment in agriculture (% of total employment) (modelled ILO estimate)	Employment in industry (% of total employment) (modelled ILO estimate)	Employment in services (% of total employment) (modelled ILO estimate)
1991	59.197	11.815	28.988
1993	59.026	11.703	29.273
1995	58.681	11.620	29.699
1998	57.666	11.465	30.873
2000	56.939	11.346	31.716
2003	55.005	11.306	33.691
2005	53.654	11.198	35.148
2008	51.355	11.081	37.565
2010	49.487	11.130	39.384
2013	46.365	12.287	41.348
2015	43.850	12.889	43.262
2017	42.786	12.991	44.223
2018	42.159	12.953	44.892
2019	41.537	12.976	45.488

Source: World Bank (2021).

As depicted in Table 19, employment in agriculture exhibits a declining trend, the industry trend is fluctuating in nature, and the service sector records a rising trend over the years. In the 1990s until 2015, the agricultural sector remained the highest employer of labor in WCA. It absorbed about 59.197% of the total employment in 1991, then a continuous decline set in, dropping to 43.850% in 2015. In the same period, employment in services rose significantly, from 28.988% in 1991 to 39.384% and 43.262% in 2010 and 2015, respectively. Also, the employment in industry declined from 11.815% in 1991 to 11.346% and 11.081% in 2000 and 2008, respectively, before recording some progress with a rise to 12.889% in 2015. Between 2016 and 2019, the services sector was the leading employer of labor by absorbing a total of 45.488% of the total employment. This is followed by agriculture with 41.537% and industry with 12.976% for the same year. This shows some transitions in the economy of Western and Central Africa where there is a shift from agriculture to services.

The neglect of the agricultural sector in the WCA region creates some key issues in the economy. One of these is the reduction in the employment to population ratio. This trend in indicated in Table 20.

Table 20. Employment to population ratio, male and female.

Year	Employment to population ratio, 15+, female (%) (modelled ILO estimate)	Employment to population ratio, 15+, male (%) (modelled ILO estimate)	Employment to population ratio, 15+, total (%) (modelled ILO estimate)
1991	57.410	69.340	63.306
1993	57.188	69.117	63.087
1995	57.147	68.781	62.904
1998	56.924	68.358	62.587
2000	56.685	67.795	62.190
2003	56.485	67.679	62.037
2005	56.297	67.535	61.874
2008	55.872	67.260	61.529
2010	55.331	66.840	61.053
2013	52.829	63.944	58.361
2015	51.989	63.761	57.852
2018	50.780	62.706	56.726
2019	50.844	62.522	56.669
2020	49.339	61.016	55.166

Source: World Bank (2021).

The employment to population ratio in the female category declined from 57.41% in 1991 to 56.685 in 2000, reaching lower values of 56.297% and 55.331% in 2005 and 2010, respectively. Declines to 51.989% in 2015 and 49.339% in 2020 further portray this declining trend. For males, the reduction is smaller than that of females. The male ratio declined from 69.34% in 1991 reaching 67.795% and 67.535% in 2000 and 2005, respectively. A further decline struck the male employment population ratio, with a rate of 63.761% in 2015 before reaching a record low of 61.016% in 2020. For total employment, the employment to population ratio also exhibited a declining trend. It declined from 63.306% in 1991 to 62.190% in 2000 before reaching 61.874% in 2005. Subsequent years were still being marked with a declining employment to population ratio, with a rate of 61.053% in 2010 and 57.852% in 2015 before reaching an all-time low of 55.166% in 2020. This declining trend is a clear indication of a looming high dependency in Western and Central Africa.

4.5. Self-Employment

In 2019, the world statistics on self-employment show that total employment was put at 46.4%, with a female rate of 45.4%, and a male rate of 47.0% (see World Bank (2021)). Self-employment entails working for oneself rather than working for an employer for a wage. This behavior is driven by the entrepreneurial response within the economy along with a lack of gainful employment in the public and private sectors. Table 21 reflects the trend from 1991 to 2019 for Western and Central Africa.

Compared to the global statistic mentioned above, female self-employment in WCA was estimated to be 86.646%, while the male figure was estimated to be 74.353%. Overall, the total self-employment (as a % of total employment) was estimated at 79.941%, which is far greater than the global figure of 46.4%. This points out the prevalence of self-employment in the WCA region. It is noteworthy that self-employment has been declining over the years. For the female segment, self-employment declined from 93.343% in 1991 to 89.267% in 2010 with a further decline to 88.572% in 2015. For their male counterparts, the rate declined from 84.960% in 1991 to 83.274% in 2005 before plunging further to 78.327% and 76.495% in 2010 and 2015, respectively. At the aggregate, total self-employment declined from 88.767% in 1991 to lows of 87.505% and 83.302% in 2000 and 2010, respectively, and then reaching 81.944% in 2015. Between 2015 and 2019, total self-employment (as a % of total employment) was 81.06% on average.

Table 21. Self-employment rates.

Year	Self-employed, female (% of female employment) (modelled ILO estimate)	Self-employed, male (% of male employment) (modelled ILO estimate)	Self-employed, total (% of total employment) (modelled ILO estimate)
1991	93.343	84.960	88.767
1993	93.382	85.044	88.831
1995	93.221	84.746	88.601
1998	93.163	84.371	88.379
2000	92.530	83.274	87.505
2003	92.039	82.579	86.897
2005	91.192	81.180	85.754
2008	90.222	79.721	84.507
2010	89.267	78.327	83.302
2013	88.604	76.561	82.018
2015	88.572	76.495	81.944
2016	88.496	76.474	81.890
2018	87.108	74.957	80.467
2019	86.646	74.353	79.941

Source: World Bank (2021).

4.6. Unemployment Statistics

Unemployment within the WCA region has exhibited a rising trend over the years, pointing to a looming social catastrophe. Table 22 captures this trend by gender and at the aggregate.

Table 22. Unemployment by gender.

Year	Unemployment, female (% of female labor force) (modelled ILO estimate)	Unemployment, male (% of male labor force) (modelled ILO estimate)	Unemployment, total (% of total labor force) (modelled ILO estimate)
1991	4.357	4.464	4.415
1995	4.557	4.499	4.526
1998	4.712	4.621	4.663
2000	4.985	4.867	4.921
2003	4.874	4.647	4.751
2005	4.884	4.595	4.728
2008	4.793	4.436	4.599
2010	4.836	4.318	4.555
2013	4.589	4.261	4.410
2015	5.140	4.201	4.627
2018	6.170	5.937	6.041
2020	6.492	7.004	6.775
2021	6.668	6.977	6.839

Source: World Bank (2021).

As shown in Table 22, female unemployment rose from 4.357% in 1991 to 4.985% in 2000, and male unemployment rose from 4.464% to 4.867% in the same period, reflecting that unemployment in the female category grew by 14.41% and male unemployment grew by 9.03%. This rising trend in the two categories was reversed thereof, where female unemployment plunged to 4.884% in 2005 and 4.836% in 2010 with a further decline to 4.589% in 2013, while male unemployment reflected a similar trend by declining to 4.595% in 2005 and 4.318% in 2010 with a further decline to 4.201% in 2015. Thereafter, the unemployment rate in the two components show rising trends to 6.668% for females and 6.977% for males in 2021. The total unemployment rate exhibits a similar trend, growing by 7.09% between 1991 (4.415%) and 2005 (4.728) and then plunged to 4.627% in 2015 before rising sharply to a record high of 6.839% in 2021.

4.7. Youth Unemployment

As stipulated in Atan and Effiong (2020), youth unemployment is one of the threats jeopardizing the progress of a nation, and its consequences spans across social, political, and economic issues, especially political instability. Youth unemployment entails the conglomerate of youths (aged 15–24) with dissimilar backgrounds who are ready and capable of working but cannot find paid employment (Onah, 2001). Table 23 portrays the trend in Western and Central Africa related to youth unemployment.

Table 23. Youth unemployment by gender.

Year	Unemployment, youth female (% of female labor force ages 15–24) (modelled ILO estimate)	Unemployment, youth male (% of male labor force ages 15–24) (modelled ILO estimate)	Unemployment, youth total (% of total labor force ages 15–24) (modelled ILO estimate)
1991	8.548	9.058	8.779
1994	8.712	9.149	8.908
1995	8.649	9.136	8.870
1999	9.056	9.554	9.272
2000	9.102	9.649	9.338
2004	9.162	9.348	9.192
2005	9.241	9.374	9.238
2009	9.180	9.021	9.012
2010	9.211	8.922	8.971
2014	9.952	7.056	8.344
2015	9.938	7.300	8.481
2019	12.207	12.475	12.303
2020	13.439	13.652	13.504

Source: World Bank (2021).

At the global level, it is projected that youth unemployment will be 13.1% by 2030 (ILO, 2015, 2016). Meanwhile, the total youth unemployment in WCA in 2020 had already reached 13.504%, and 13.439% and 13.652% for males and females, respectively. The region is marked with rising youth unemployment among both males and females, and the rising trend is quite alarming. Female youth unemployment rose from 8.548% in 1991 to 9.211% in 2010 before reaching an all-time high of 13.439% in 2020. The male youth unemployment rose from 9.058% in 1991 to 9.374% in 2005, after which it declined to a record low of 7.056% in 2014. Thereafter, it surged continuously, reaching 13.652% in 2020. A similar trend was exhibited in the total youth unemployment, which rose from 8.779% in 1991 to 9.238% in 2005. It then started declining until it reached 8.344% in 2014 and started rising again until it reached 13.504% in 2020. This rising trend of youth unemployment portrays an imminent social, political, and economic crisis looming in Western and Central Africa.

4.8. Modelling the Relationship

The aim here is to model the influence of economic, demographic, social, and political variables on the labor employment indices. In that regard, the models are specified as follows:

Model I: The influence of economic variables on labor employment indices.

$$L_t = f(E_t) \quad (1)$$

Equation 1 stipulates that labor employment indices at time L_t depends on economic variables E_t. In this model, L_t is a vector of labor employment variables, including the labor force participation rate, unemployment rate, youth unemployment, and vulnerable unemployment, while E_t is a vector of economic variables that encompasses domestic credit to the private sector, external balance, foreign direct investment inflows, GDP growth, household final consumption expenditures (measuring aggregate demand), inflation, manufacturing value added, and net official development assistance (ODA) received.

Model II: The influence of demographic factors on labor employment indices.

$$L_t = f(D_t) \quad (2)$$

Equation 2 opines that labor employment indices at time L_t is defined as being dependent on demographic variables at time D_t. L_t remains the same as defined earlier, while D_t is a vector of demographic variables including rural population growth, urban population growth, and total population growth.

Model III: The influence of political indicators on labor employment.

$$L_t = f(P_t) \quad (3)$$

Equation 3 argues that the labor employment indicators at time L_t depend on political indicators at time P_t. L_t includes the earlier identified labor employment variables plus self-employment, male unemployment, and female unemployment but excluding labor participation rate and vulnerable employment. P_t includes the public sector management and institutions cluster; quality of budgetary and financial management; quality of public administration, transparency, accountability, and corruption; structural policies; efficiency of revenue mobilization; and equity of public resource use. These political indices range from 1 (low) to 6 (high) and are based on the CPIA computations.

Model IV: The influence of social variables on labor employment.

$$L_t = f(S_t) \quad (4)$$

Equation 4 states that labor employment indicator at time, L_t, depends on social indicators at given time S_t. L_t is the same as in Equation 4, while S_t includes a vector of gender equality, policies for social inclusion/equity, policies and institutions for environmental sustainability, property rights and rule-based governance, and social protection. These social indices range from 1 (low) to 6 (high) and are based on the CPIA computations.

The models will be estimated using a multiple linear regression model under the OLS framework. This approach will yield estimates that are 'best linear unbiased estimators' (BLUE) for us to make necessary conclusions. All the data utilized are obtained from the World Bank (2021) and the International Labour Organization (ILO) database.

4.9. Some Empirical Elucidations

The empirical findings are based on the models specified earlier to capture the influence of economic, demographic, social, and political indicators on labor employment.

4.9.1. Empirical Findings on Economic Indicators and Labor Employment

As specified in previous sections and modelled earlier, macroeconomic variables could have some influence on labor participation. This perceived influence is estimated and the results are presented in Table 24.

The results in column I of Table 24 indicate that the only economic variable that has a significant effect on the labor force participation rate is net ODA received. A one percent increase in net ODA received increases the labor force participation rate by 1.0118% on average. Domestic credit to the private sector, foreign direct investment, inflation, and manufacturing value added exerted a negative but insignificant effect on labor force participation. However, external balance, GDP growth, and household final consumption expenditure wielded a positive but insignificant effect. Holding the economic variables constant, the labor force participation rate is 59.83% on average, while the overall model explains 76.81% of the total variation in the labor force participation rate. The overall model is statistically significant, as reflected in the significance of the F-statistic at the 1% level.

In column II, two economic variables – external balance and net ODA received – exerted a negative and significant effect on unemployment. On average, a unit percent increase in external balance reduced unemployment by 0.0711%, while a unit percent increase in net ODA received reduced unemployment by 0.1886%. Domestic credit to the private sector, foreign direct investment inflow, GDP growth, and household final consumption expenditure all had a negative but insignificant effect on unemployment within Western and Central Africa. This implies that the variables reduce unemployment, though not substantially. On the contrary, inflation and manufacturing value added exerted a positive but insignificant effect on unemployment. The implication is that they both increase unemployment, though the effect is not substantial. Holding the economic variables constant, the rate of unemployment within

Western and Central Africa is an average of 6.63%. The explanatory variables jointly explain 62.56% of the total variation in unemployment in the region, and the overall model is statistically significant as the F-statistic is significant at the 5% level.

Table 24. Effect of economic variables on labor force participation, 1991–2020.

Variable	Labor Force Participation Rate	Unemployment Rate	Youth Unemployment	Vulnerable Unemployment
	I	II	III	IV
Domestic credit to private sector by banks	-0.0726 (0.56.34)	-0.0320 (0.4388)	-0.0452 (0.6388)	-0.2056 (0.1816)
External balance on goods and services	0.1108 (0.1379)	-0.0711 (0.0065)**	-0.1268 (0.0316)**	0.1128 (0.2057)
Foreign direct investment net inflows	-0.0168 (0.9688)	-0.0579 (0.6808)	0.0178 (0.9567)	-0.9684 (0.0707)*
GDP growth	0.2363 (0.1100)	-0.0767 (0.1134)	-0.1258 (0.2594)	0.1281 (0.4602)
Households' final consumption expenditure	0.0288 (0.2549)	-0.0081 (0.3257)	-0.0167 (0.3870)	0.0434 (0.1574)
Inflation, consumer prices	-0.0990 (0.1252)	0.0048 (0.8147)	-0.0055 (0.9082)	-0.0627 (0.4094)
Manufacturing value added	-0.0557 (0.2631)	0.0044 (0.7863)	0.0055 (0.8830)	-0.0409 (0.4904)
Net ODA received	1.0118 (0.0003)***	-0.1886 (0.0237)**	-0.2579 (0.1682)	1.0964 (0.0009)***
C	59.8259 (0.0000)***	6.6332 (0.0000)***	11.9112 (0.0000)***	83.2917 (0.0000)***
R-squared	0.7681	0.6256	0.4693	0.8276
F-Statistic (Probability)	8.6941 (0.0000)***	4.3858 (0.0030)**	4.3217 (0.0062)**	12.6040 (0.0000)***

Note: *, **, and *** symbolize significance at 10%, 5%, and 1%, respectively.

Column III reflects the influence of economic variables on youth unemployment in Western and Central Africa. Out of all the economic variables, only external balance exerted a negative and significant influence on youth unemployment. This means that external balance aids in reducing youth unemployment in the region. A unit percent increase in external balance reduces youth unemployment by 0.1268% on average. Only foreign direct investment exerted a positive but insignificant effect, while every other variable had a negative but insignificant effect on youth unemployment. The average youth unemployment could be 11.91% holding all economic variables constant. The economic variables jointly explain 46.93% of the total variation in youth unemployment within the region. The overall model is also significant since the F-statistic is significant at the 5% level.

The influence of selected economic variables on vulnerable unemployment is captured in column IV. Foreign direct investment exerted a negative and significant effect on vulnerable unemployment, reflecting that it helps in reducing vulnerable unemployment. A unit percent increase in foreign direct investment reduced vulnerable unemployment by 0.9684% on average. The net ODA received exerted a positive and significant effect on vulnerable unemployment. A unit percent increase in net ODA received increased vulnerable unemployment by 1.0964% on average. The constant term implies that vulnerable unemployment will be 83.29% on average if the economic variables are held constant. The economic variables explain 82.76% of the total variation in vulnerable unemployment as the F-statistic is significant at the 1% level.

4.9.2. Empirical Findings for Demographic Variables and Labor Employment

The demographic variables include total population growth, urban population growth, and rural population growth. The regression results in Table 25 reflect their influence on labor force participation.

Table 25. Effect of demographic variables on labor force participation, 1991–2020.

Variable	Labor Force Participation Rate I	Unemployment Rate II	Youth Unemployment III	Vulnerable Unemployment IV
Rural Population Growth	11.9762 (0.0000)***	-2.6196 (0.0000)***	-4.8441 (0.0000)***	16.0314 (0.0000)***
Urban Population Growth	7.8690 (0.0000)***	-1.1807 (0.0105)**	-2.0965 (0.0390)**	9.7011 (0.0000)***
Total Population Growth	-8.2841 (0.0156)**	-6.5425 (0.0035)**	-13.098 (0.0084)**	-29.6295 (0.0000)***
C	32.0105 (0.0002)***	32.3342 (0.0000)***	62.5830 (0.0000)***	95.3617 (0.0000)***
R-squared	0.9631	0.7755	0.7038	0.9838
F-Statistic (Probability)	226.1433 (0.0000)***	29.9380 (0.0000)***	20.5897 (0.0000)***	526.0503 (0.0000)***

Note: **, and *** symbolizes significance at 5%, and 1% respectively.
Source: Researchers' computation (2022).

Column I shows the effect of the demographic variables on the labor force participation rate. The rural population and urban population exerted a positive and significant effect on labor force participation. A unit percent increase in rural population growth and the urban population growth wielded respective increases of 11.98% and 7.87% in the labor participation rate on average. Meanwhile, total population growth wielded a negative and significant effect. A unit percent increase in population growth reduced labor force participation by an average of 8.28%. The constant term reflects that the labor force participation rate will be an average of 32.01% holding demographic factors constant. These factors explain 96.31% of the total variations in labor force participation rate. The significance of the F-statistic validates the significance of the overall model.

Colum II reflects that all the three demographic factors considered wielded a negative and significant effect on the unemployment rate. This implies that a unit percent increase in rural population growth, urban population growth, and total population growth reduces unemployment by 2.62%, 1.18%, and 6.54%, respectively. Holding the demographic variables constant, unemployment will be an average of 32.33%. The demographic factors jointly explain 77.55% of the total distortions in unemployment within the study period. Column III indicates that all three demographic variables also wielded a negative and significant influence on youth unemployment in Western and Central Africa. A 1% increase in rural population, urban population, and total population leads to respective decreases of 4.84%, 2.10%, and 13.10% in youth unemployment. The youth unemployment could be an average of 62.58% if the three demographic variables are held constant. The model explains 70.38% of the total variation in youth unemployment and is statistically significant at the 1% level.

A similar trend to labor force participation (column I) is observed in vulnerable unemployment (column IV), where rural population growth and urban population growth have a positive and significant effect on vulnerable unemployment, while total population growth wielded a negative and significant effect. A unit percent increase in rural population growth and urban population growth reduced unemployment by 16.03% and 9.70%, respectively, while a unit percent increase in total population growth wielded a 29.63% decrease in vulnerable unemployment. The constant term shows that vulnerable unemployment could be an average of 95.36% if the demographic variables are held constant. The overall model explains 98.38% of the total variation in vulnerable unemployment and is statistically significant at the 1% level.

4.9.3. Empirical Findings for Political Variables and Labor Employment

The effect of political variables on the labor force participation rate in Western and Central Africa is reflected in Table 26, where seven political ratings are considered.

Table 26. Effect of political variables on labor force participation, 2005–2020.

Variable	Self-Employment I	Female Unemployment II	Male Unemployment III	Youth Unemployment IV	Unemployment Rate V
Public sector management and institutions	57.8273 (0.0059)**	8.3148 (0.6178)	46.1728 (0.0405)**	90.0953 (0.0210)**	29.0479 (0.0920)*
Quality of budgetary and financial management	-3.4256 (0.6011)	-3.4119 (0.6178)	-7.5022 (0.3557)	-15.3143 (0.2632)	-5.6133 (0.3874)
Quality of public administration	-7.9539 (0.0857)*	-1.2020 (0.7810)	-13.1066 (0.0290)**	-22.0978 (0.0274)**	-7.7320 (0.0867)*
Transparency, accountability, and corruption	-19.6020 (0.0075)**	-2.1450 (0.7154)	-14.1944 (0.0672)*	-30.5883 (0.0253)**	-8.7381 (0.1430)
Structural policies	32.2960 (0.0001)***	-14.1433 (0.0147)**	-6.8143 (0.2419)	-9.8472 (0.3040)	-10.1081 (0.0477)**
Efficiency of revenue mobilization	-5.4930 (0.1888)	-1.4785 (0.7170)	-12.0198 (0.0324)*	-22.2163 (0.0207)**	-7.2673 (0.0872)*
Equity of public resource use	-7.1811 (0.0589)*	-0.6122 (0.8599)	2.1581 (0.6014)	5.9255 (0.3953)	0.8878 (0.7874)
C	-65.3011 (0.0802)*	53.7828 (0.1479)	23.5623 (0.5689)	25.5284 (0.7087)	37.1654 (0.2764)
R-squared	0.9821	0.8655	0.8769	0.8894	0.8975
F-Statistic (Probability)	62.7128 (0.0000)***	7.3515 (0.0058)**	8.1429 (0.0042)**	9.1899 (0.0028)**	10.0093 (0.0021)**

Note: *, **, and *** symbolize significance at 10%, 5%, and 1%, respectively.

Column I reflects how the political variables influence self-employment within Western and Central Africa. All the political variables, except quality of budgetary and financial management and efficiency of revenue mobilization, exerted a significant effect. Public sector management and institutions and structural policies wielded a positive and significant effect. They respectively increase self-employment by 57.83% and 32.30% if they increase by a unit percent. These means that the two variables have been proactive in driving self-employment within the region. Quality of public administration; transparency, accountability, and corruption; and equity of public resource use all wielded a negative effect and significant effect. A unit percent increase in these variables account for 7.95%, 19.60%, and 7.18% declines in self-employment, respectively. Quality of budgetary and financial management and efficiency of resource mobilization both exerted a negative but insignificant effect. The constant term indicates that self-employment will be -65.30% if the political variables are held unchanged. The variables jointly explain 98.21% of the total variation in self-employment.

For female unemployment in column II, only structural policies as a political variable had a significant influence. The variable had a negative and significant influence on female unemployment. A unit percent increase in structural policies reduced female unemployment by 14.14% on average. Public sector management and institutions had a positive but insignificant effect on female unemployment, while every other political variable (quality of budgetary and financial management; quality of public administration; transparency, accountability, and corruption; efficiency of revenue mobilization; and equity of public resource use) all had a negative but insignificant effect on female unemployment in Western and Central Africa. With the constant value, female unemployment will amount to an average of 53.78% if the political variables are held constant. The overall model explains 86.55% of the total variation in female unemployment and it is statistically significant.

Colum III, which captures the influence of political variables on male unemployment, portrays the quality of public administration; transparency, accountability, and corruption; and efficiency of revenue mobilization aid in reducing male unemployment as they put forth a negative and significant effect. A unit percent increase in these

variables reduced male unemployment by 13.11%, 14.19%, and 12.10%, respectively. Public sector management and institutions had a positive and significant effect on male unemployment. It is likely to increase youth unemployment by 46.17% on average if it is increased by a unit percent. Quality of budgetary and financial management did not wield any significant effect, though its effect is negative. In the same manner, equity of public resource use wielded a positive effect on male unemployment but the effect is not statistically significant. Male unemployment will be 23.56% if the political variables are held constant, and the overall model is statistically significant and explains 87.69% of the changes in male unemployment.

The influence of political variables on youth unemployment is captured in column IV where it is portrayed that quality of public administration; transparency, accountability, and corruption; and efficiency of revenue mobilization all put forth a negative and significant influence on youth unemployment, implying that these political variables can reduce youth unemployment within the region. A 1% increase in these political variables reduces youth unemployment by 22.10%, 30.59%, and 22.22% on average, respectively. Public sector management and institutions is seen as a key variable that propels youth unemployment since it wielded a positive and significant effect on youth unemployment. A 1% increase in this variable increases youth unemployment by 90.10% on average. This figure is huge and reflects the decay in public sector management and institutions in the region. Equity of public resource use wielded a positive but insignificant effect on youth unemployment, while quality of budgetary and financial management along with structural policies wielded a negative but insignificant influence on youth unemployment. By holding the political variables constant, youth unemployment will be an average of 25.53%, though it is not significant. The overall model is significant and explains 88.94% of the aggregate changes in youth unemployment.

Then, column V reflects how the political variables impact total unemployment in Western and Central Africa. Quality of public administration, structural policies, and efficiency of revenue mobilization aided in reducing unemployment since they wielded a negative and significant effect. A unit percent increase in the significant variables reduces unemployment by 7.73%, 10.11%, and 7.27% on average, respectively. Public sector management and institutions tends to drive up unemployment within the region as it had a positive and significant effect on unemployment. As the variable increases by 1%, unemployment in Western and Central Africa increases by 29.05% on average. This portrays the existence of weak institutions within the region. Equity of public resource use wielded a positive but insignificant influence on unemployment, while quality of budgetary and financial management, and transparency, accountability, and corruption wielded a negative yet insignificant effect on unemployment within the region. The value of unemployment will be an average of 37.17% if political variables are held constant. The significance of the overall model is validated since the F-statistic is significant, and the overall model jointly explains 89.75% of the total variations in unemployment within the region.

4.9.4. Empirical Evidence on Social Variables and Labor Employment

Considering our social variables, Table 27 portrays the estimates of the regression tackling the influence of social variables on labor employment in Western and Central Africa.

Considering gender equality, the variable wielded a positive and significant effect on self-employment, a negative and significant effect on female unemployment, a positive but insignificant influence on male and youth unemployment, and a negative but insignificant influence on total unemployment. It follows that a unit percent increase in gender equality increases self-employment by 12.18% and reduces female unemployment by 4.86% on average. Policies for social inclusion/equity wielded a negative and significant influence on self-employment and a positive and significant influence on youth unemployment. A unit percent increase in policies for social inclusion/equity will cause self-employment to reduce by 29.65% on average, but youth unemployment will increase by 12.76% on average. This variable has no significant influence on female unemployment, male unemployment, or total unemployment, though it exerted a positive influence on all three.

Table 27. Effect of social variables on labor force participation, 2005–2020.

Variable	Self-Employment I	Female Unemployment II	Male Unemployment III	Youth Unemployment IV	Unemployment Rate V
Gender equality	12.1793 (0.0012)**	-4.8644 (0.0620)*	0.8539 (0.7250)	0.6092 (0.8814)	-1.7129 (0.4374)
Policies for social inclusion/equity	-29.6458 (0.0000)***	0.4001 (0.9165)	5.22558 (0.1983)	12.7593 (0.0742)*	3.0453 (0.3920)
Policy and institutions for environmental sustainability	4.6740 (0.0448)**	0.9379 (0.6008)	-0.5371 (0.7676)	-2.8474 (0.3626)	0.1306 (0.9361)
Property rights and rule-based governance	2.7681 (0.3078)	4.6568 (0.0597)*	12.10357 (0.0003)***	21.2081 (0.0002)***	8.7370 (0.0014)**
Social protection	4.6139 (0.1439)	4.3524 (0.1095)	1.0359 (0.6903)	2.4771 (0.5739)	2.5350 (0.2894)
C	102.2542 (0.0001)***	-9.6889 (0.4850)	-49.8748 (0.0044)**	-90.7673 (0.0027)	-31.7695 (0.0265)**
R-squared	0.9684	0.8373	0.8892	0.8975	0.8846
F-Statistic (Probability)	61.2375 (0.0000)***	10.2951 (0.0012)**	16.0578 (0.0002)***	17.5026 (0.0002)***	15.3340 (0.0002)***

Note: *, **, and *** symbolize significance at 10%, 5%, and 1%, respectively.

Policy and institutions for environmental sustainability wielded a positive and momentous influence on self-employment but its effect on female and total unemployment is positive but insignificant, while that on male and youth unemployment is negative but insignificant. A unit percent increase in policy and institutions for environmental sustainability causes self-employment to increase by 4.67% on average. This implies that such policies could spur entrepreneurial response and innovation and facilitate the creation of more enterprises, thus ensuring self-employment. Property rights and rule-based governance did not exhibit any significant influence on self-employment, though its effect is positive. Still, the variable exercised a positive and substantial influence on female, male, youth, and total unemployment. A 1% increase in property rights and rule-based governance increased female, male, youth, and total unemployment by 4.66%, 12.10%, 21.21%, and 8.74% on average, respectively. Surprisingly, social protection wielded a positive but inconsequential influence on self-employment, male, female, youth and total unemployment within Western and Central Africa.

Holding the social variables constant, self-employment, female unemployment, male unemployment, youth unemployment, and total unemployment will have averages of 102.25%, -9.69%, -49.87%, -90.77%, and -31.77%, respectively. Most of these constants are statistically significant and portray the importance of the social variables in labor employment. The social variables jointly explain 96.84% of the variation in self-employment, 83.73% variation in female unemployment, 88.92% variation in male unemployment, 89.75% variation in youth unemployment, and 88.46% variation in total unemployment in Western and Central Africa. The overall models are also statistically significant as their respective F-statistics are significant at the 1% level.

5. CONCLUSION

The issue of labor employment is crucial as it influences the living standards of the citizens in a capitalist economy. In this paper, we examined diverse actors ranging from economic to social variables that can influence labor employment indicators – labor participation rate, self-employment, vulnerable unemployment, youth unemployment, male unemployment, and female unemployment. We examine the trends in the economic, demographic, social, and political indicators within Western and Central Africa and consider the diverse labor employment indicators to a reasonable extent. Apart from the trend analysis, this paper conducted an empirical analysis to detect whether these

factors have a considerable impact on labor employment indicators. To achieve this, we apply the ordinary least squares estimation approach on the data to derive the estimates.

The economic variables that have a significant impact on unemployment in Western and Central Africa are external balance and net official development assistance (ODA) received. These two variables aid in significantly reducing unemployment. Also, net foreign direct investment inflow with net ODA received aid in substantially curbing vulnerable unemployment.

The demographic variables that aid in promoting labor force participation are the rural and urban population growth. These two variables, however, lead to an increase in vulnerable unemployment in a significant manner but reduce both the youth and overall unemployment.

The political variables that promote self-employment are public sector management and institutions, and structural policies, while quality of budgetary and financial management, quality of public administration, and equity of public resource use shrink self-employment. Similarly, public sector management and institutions increases the rate of unemployment, while quality of public administration, structural policies, and efficiency of revenue mobilization aided in reducing unemployment within the region.

Drivers of self-employment in the social sphere are gender equality and policy and institutions for environmental sustainability, while social inclusion/equity policies stifle self-employment in a significant way. It is also noted that all the social variables, except gender equality, lead to an increase in unemployment, though some are insignificant. The main social variable that causes a rise in unemployment is property rights and rule-based governance.

It is worth noting that quality of budgetary and financial management did not yield any significant effect throughout all the labor employment variables (self-employment, female unemployment, male unemployment, youth unemployment, and total unemployment). A similar case is reported for the social variables, where social protection did not exert any significant influence on the labor employment variables. It is therefore concluded that the problem of labor employment within the WCA region can be solved through thoroughly addressing economic vagaries, demographic explosion, and social and political change.

Funding: This study received no specific financial support.
Competing Interests: The authors declare that they have no competing interests.
Authors' Contributions: All authors contributed equally to the conception and design of the study.

REFERENCES

Atan, J. A., & Effiong, U. E. (2020). Industrialization and youth unemployment in Nigeria: An autoregressive distributive lag (ARDL) approach. *International Journal of Business and Economics Research, 9*(4), 334-344.Available at: https://doi.org/10.11648/j.ijber.20200905.15.

Bhorat, H., Naidoo, K., Oosthuizen, M., & Pillay, K. (2015). *Demographic, employment, and wage trends in South Africa: World Institute for development economic research (UNU-WIDER).* South Africa: University of Cape Town.

Bloom, D. E. (2012). Youth in the balance. *Finance & Development, 49*(1), 6-11.

Davis, D. R., & Harrigan, J. (2011). Good jobs, bad jobs, and trade liberalization. *Journal of International Economics, 84*(1), 26-36.Available at: https://doi.org/10.1016/j.jinteco.2011.03.005.

Effiong, U. E., & Udofia, M. A. (2022). The Kaldorian perspective to economic growth in Nigeria: Does globalization really matter? *Asian Research Journal of Current Science, 4*(1), 253-268.

Gokhool, S., Tandrayen-Ragoobur, V., & Kasseeah, H. (2021). A socio-economic-political dimension of employment in Sub-Saharan Africa. In Forum for Social Economics (pp. 1-21): Routledge: Taylor and Francis.

Golub, S., & Mbaye, A. A. (2015). Creating good jobs in Africa: Demand- and supply-side policies. Jobs and Development Blog, World Bank. Retrieved from http://blogs.worldbank.org/jobs/creating-good-jobs-africa-demand-and-supply-side-policies.

ILO. (2015). *Global employment trends for youth.* Geneva: International Labour Office.

ILO. (2016). *World employment and social outlook for youth*. Geneva: International Labour Office.

ILO. (2018). *World employment and social outlook: Trends*. Geneva: International Labour Office.

ILO. (2020). *Report on employment in Africa (Re-Africa): Tackling the youth employment challenge*. Geneva: International Labour Office.

International Labour Organisation (ILO). (2014). *Wage and salaried workers. Institute of Labour Science and Social Affairs, Policy Brief* (Vol. 3). Geneva: International Labour Office.

Johnson, L. J. (2010). *Global employment trends: Vulnerable employment and poverty on the rise, interview with ILO chief of employment trends unit*. Geneva: International Labour Office.

Kaldor, N. (1966). *Causes of the slow rate of economic growth of the United Kingdom: An inaugural lecture*. Cambridge: Cambridge University Press.

Kappel, R. (2021). *Africa's employment challenges: The ever-widening gaps*. Geneva: Labour and Social Justice, ILO.

Lam, D., Leibbrandt, M., & Allen, J. (2019). The demography of the labor force in Sub-Saharan Africa: Challenges and opportunities. GLM|LIC Synthesis Paper No. 10.

Mbaye, A. M., & Gueye, F. (2018a). Labor markets and jobs in West Africa. Working Paper Series No. 297, African Development Bank, Abidjan, Côte d'Ivoire.

Mbaye, A. A., & Gueye, F. (2018b). *The competitiveness challenge of the formal sector in francophone Africa: Understanding the role of the informal sector and the business environment. In I. Adeleye and M. Esposito (Eds.), Africa's competitiveness in the global economy. AIB Sub-Saharan Africa (SSA) Series*. Cham, Switzerland: Palgrave Macmillan.

Ndung'u, F. K. (2021). The effect of demographic characteristics on employment in Sub- Saharan Africa. *International Journal of Management & Information Technology, 16*, 12–27.Available at: https://doi.org/10.24297/ijmit.v16i.8939.

Onah, F. O. (2001). Urban unemployment situation in Nigeria. In: Ezeani, E. O. and Elekwa, N. N. (Eds.), Issues in Urbanization and Urban Administration in Nigeria (pp. 154 – 167). Enugu: Jamo Enterprises.

Population Council. (2020). *Contributing to the sustainable development goals by investing in adolescent girls and young women: Project document for single-partner project*. Denmark: Danish International Agency.

Quak, E. (2021). *The link between demography and labor markets in Sub-Saharan Africa: K4D Helpdesk Report No. 911*. Bringhton, UK: Institute of Development Studies.

World Bank. (2021). *World development indicators*. Washington DC: World Bank.