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Gender differentials in income profiles across the lifecycle in Nigeria

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Abstract

Gender income inequality persists globally but remains acute in developing economies, where informal labor markets and unpaid care work disproportionately reduce women's lifecycle earnings. This study examines gender differentials in income profiles across the lifecycle in Nigeria, a context where structural barriers and cultural norms worsen these gaps. Understanding these differentials is critical for informing policies on savings, investments, and retirement planning in gender-unequal labor markets. This study employs the National Transfer Accounts (NTA) framework, a methodology rooted in research on intergenerational transfers that enables a detailed analysis of economic flows across age groups. The NTA approach integrates microdata from surveys with macrodata from national accounts to construct labor income profiles by generations and age. The analysis draws on the 2018/2019 National Living Standards Survey and the 2019 National Accounts from the National Bureau of Statistics. The results reveal a persistent gender gap in the Nigerian labor market, with women facing discrimination from ages 30–68, a period characterized by 56% male dominance in wages. Conversely, women outperform men in self-employment, although this often signifies a precarious nature of informal work rather than a pathway to genuine empowerment. The study underscores the need for targeted policies that address mid-career income fluctuations and dismantle systemic barriers to women's long-term financial stability.

Keywords: Gender differentials; Lifecycle income; National Transfer Accounts; Nigeria

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1. Introduction

Income inequality has attracted significant scholarly attention, with numerous studies aiming to understand its persistence, especially in developing economies (Aktuğ *et al.*, 2021; Omoruyi, 2015). In Nigeria, this issue is more evident in the labor market, where men systematically earn more than women (NBS, 2020). The country's position, ranking 139th out of 146 countries on the Global Gender Gap Index (WEF, 2022), underscores one of the most severe gender income disparities in Sub-Saharan Africa (World Bank, 2023). This disparity directly challenges the achievement of Sustainable Development Goals 5 (gender equality) and 10 (reduced inequalities).

Gender disparities systematically limit socioeconomic progress by reinforcing structural inequalities. Historically, these inequities have favored men, creating measurable gaps in access to education, healthcare, and reproductive rights (Montanari &

Bergh, 2019). Such systemic barriers prevent women from fully participating in society and realizing their potential, thereby diminishing their influence in policymaking and household decisions. These environments also foster persistent discrimination and gender-based violence (Asali & Gurashviil, 2020). Ultimately, these inequalities manifest as earnings disparities that perpetuate cycles of disempowerment. This cycle is reinforced by women's limited participation in decision-making at both household and societal levels, which further exacerbates the gender wage gap (Abendroth *et al.*, 2017; Sin *et al.*, 2022). The economic consequences of these disparities are profound. Women in Nigeria forfeit over 30% of their potential lifetime income to unpaid work (ILO, 2022), which severely limits their capacity for savings, asset accumulation, and retirement security. Furthermore, households headed by female breadwinners allocate roughly 20% less to education and healthcare compared to households headed by males, due to income constraints (NBS, 2021), thereby reinforcing the intergenerational poverty cycle. Compounding this economic disempowerment, only approximately 12% of Nigerian women exercise full control over their own earnings (NBS, 2020). This lack of financial autonomy restricts their influence in household decision-making and limits their ability to leave abusive relationships (Asali & Gurashvili, 2020). The lifecycle income profile describes the evolution of an individual's earnings as they progress through their career (Heckman *et al.*, 2006). This profile illustrates how income levels change over time in response to key determinants, such as labor market structures, educational attainment, work experience, and career choices.

In Nigeria, gender dynamics within household economics and labor markets have been evolving. Increased female education, better reproductive healthcare, and labor-saving household technologies have expanded women's workforce participation, gradually transformed gender norms, and fostered a more inclusive economy that recognizes women's economic contributions (Sanusi *et al.*, 2020), even as traditional domestic roles persist.

The standard lifecycle profile is characterized by three distinct phases. The early career phase, shaped by labor market entry, is marked by rapid income growth, typically 812% annually, as individuals develop skills and human capital investments mature, though gender gaps often emerge immediately post-education (Mosedale, 2005). This is followed by the mid-career phase, where earnings stabilize and peak as workers establish themselves in their chosen fields. Finally, the retirement transition phase involves a gradual income decline as labor force participation decreases. These patterns show how macroeconomic forces and individual factors interact to shape lifetime earning potential. Notably, these pathways often differ significantly by gender, particularly where women face structural obstacles. Research shows that women's income profiles tend to flatten even during peak productivity years (Blau & Kahn, 2017) and typically experience sharper declines (approximately 22% steeper than men) in the post-peak phase, largely due to pension gaps (Liu *et al.*, 2022).

The Nigerian labor market is characterized by earnings disparities. Women in formal wage employment earn 56% less than men with comparable education levels (NBS, 2020). This inequity persists even in self-employment, a sector where women constitute a majority (62%) of informal workers; here, their earnings are still 40% lower, primarily due to constrained access to credits and markets (ILO, 2022). The gender gap emerges early: Within 5 years of labor market entry, female graduates earn 18% less than their male counterparts. Furthermore, only 35% of female graduates secure wage employment, compared to 61% of men, indicating significant barriers to their skill utilization (World Bank, 2023). This underutilization of human capital is particularly striking given the progress in female education. Despite a 15% increase in female school enrolment since 2015, only 35% of Nigerian women hold wage jobs (NBS, 2020). This paradox is partly explained by the heavy burden of unpaid care work, which reduces women's lifetime earnings by 30% (ILO, 2022). These constraints occur despite a nearly balanced national population ratio (51:49 male-to-female), highlighting that the problem is not a lack of women but a failure to integrate them equitably into the productive economy.

An evidence-based analysis of gender disparities in labor income across the lifecycle is essential to address these issues effectively. While existing literature has extensively analyzed income inequality (Adeosun & Owolabi, 2021; Aktuğ *et al.*, 2021; Barth *et al.*, 2021), few studies examine how gender gaps evolve over the lifecycle in developing economies like Nigeria. This study fills that gap by applying the National Transfer Accounts (NTA) framework to quantify gender differentials of income patterns across age groups and between the formal and informal sectors in Nigeria. The NTA methodology, which integrates household survey and macroeconomic accounts, is particularly suited to capture these dynamics and identify policy levers to mitigate lifecycle inequalities (R. Lee & Mason, 2011). The remainder of the paper is structured as follows: Section 2 reviews the relevant literature, Section 3 details the NTA methodology and data, Section 4 presents the results of the analysis, Section 5 discusses the results and their implications, and Section 6 concludes the study.

2. Literature review

Gender disparities in labor income persist as a significant global challenge, but their manifestation is particularly acute in developing economies with large informal sectors (Becker, 1962; S. Lee & Ogawa, 2011). These disparities are not merely static gaps in pay but are dynamic processes that unfold over an individual's lifetime. They are driven by a complex interplay of factors, including societal norms that allocate disproportionate unpaid care work to women, systematic occupational segregation into lower-paying roles, and constraints on human capital investment due to anticipated career interruptions (Budig & England, 2001; Goldin, 2014). Consequently, women's lifecycle earnings often peak earlier and decline more rapidly than men, leading to cumulative disadvantages that affect lifetime wealth and economic security.

Conventional studies of these disparities often rely on cross-sectional surveys analyzed with ordinary least squares (OLS) regression. Adeosun & Owolabi (2021) reveal stark inequalities: only 32% of women participated in wage employment compared to 61% of men, with female workers heavily concentrated in the lowest income quintile. Their application of the Theil index further decomposed this inequality into between and within groups, showing that while regional differences were significant, a substantial portion of the inequality occurred within groups (0.78), underscoring the pervasive nature of the gender gap. However, while such studies effectively document the existence of a gap at a specific moment, they cannot capture how these disadvantages accumulate and evolve over an individual's entire career.

To address this limitation and analyze how income deficits accumulate over time, economists have developed the NTA framework. This methodology generates comprehensive, gender-disaggregated profiles of income and consumption across the entire lifecycle (R. Lee & Mason, 2011). Applications of this approach in various contexts consistently reveal substantial lifecycle gender gaps. For instance, studies in Mali and Moldova showed women's lifecycle income was 35% and 22.7% below men's, respectively, largely due to their concentration in unpaid domestic and care work (Gagauz & Prohnitski, 2022; Guidime *et al.*, 2022). These findings highlight the NTA's power in quantifying the two critical, and often hidden, dimensions of gender inequality: the cumulative lifetime earnings gap and the economic burden of unpaid care work.

The disparities quantified by lifecycle methodologies have profound implications, arising from deep-seated structural mechanisms. Comparative research highlights how career interruptions and part-time work create compounding disadvantages that peak at midlife and severely impact retirement security (Foster & Walker, 2021). These cumulative earnings gaps, often combined with financial literacy disparities, directly undermine women's economic empowerment. As noted in the South African context, lower lifetime incomes can restrict women's autonomy, contribute to financial dependence in older age, and perpetuate inequality across generations (Sharaunga *et al.*, 2019). Furthermore, these barriers are often reinforced by cultural and institutional contexts. In Morocco, for example, patriarchal norms and power relations can limit the economic benefits women derive from income-generating activities, such as cooperatives, which often rely on their underpaid or unpaid labor (Montanari & Bergh, 2019).

Beyond broad societal structures, gender disparities are also perpetuated at the organizational level. Firm-based analyses reveal that wage gaps are driven by a combination of perceived productivity differences, women's lower success in wage bargaining, and outright employer discrimination (Sin *et al.*, 2022). This is evident in contexts like Malaysia, where employers often prefer male workers based on perceptions of greater skill and mobility, despite equal qualifications (Ismail & Jajri, 2012). Even organizational policies designed to help can have mixed results, for example, increasing women's access to positions of power in German firms reduced the gender wage gap for low-skilled jobs but was less effective for high-skilled roles (Abendroth *et al.*, 2017), indicating that the mechanisms of discrimination are complex and context-dependent.

While the existing literature provides a robust understanding of gender income disparities globally, from their structural bases to the firm-level manifestations, a critical gap persists in the Nigerian context. Indeed, Olaniyan *et al.* (2011) pioneered the application of the NTA framework in Nigeria to estimate national lifecycle income and consumption profiles. Although this was recently extended by Olaniyan *et al.* (2018) and Olasehinde *et al.* (2024), their analysis only focused on aggregate profiles, which masked critical gender inequalities. Consequently, the specific and compounded disadvantages faced by Nigerian women throughout their lifecycle remain unquantified and poorly understood. This is particularly relevant for the impact of pervasive informal sector employment, which is characterized by income volatility and poor social protection coverage. Therefore, this study addresses this gap by applying a gendered-NTA framework to Nigeria, explicitly investigating how the precarious nature of informal work shapes women's distinctive and disadvantaged economic lifecycle.

3. Data and methods

3.1. Data sources

The study utilizes cross-sectional data from two primary sources to construct comprehensive labor income profiles by age and across generations. The micro-level age profiles were computed using data from the 2018/2019 National Living Standards Survey, conducted by the National Bureau of Statistics. The survey provides detailed income source accounts for 26,170 individuals across 4,050 households. For this analysis, income variables were converted to monthly earnings, and the mean income by age was calculated to generate the input age profiles. For the macro-level data, figures on earnings, employment type, and hours worked were extracted from the 2019 Income Approach of the National Accounts to construct the aggregate labor income by sector. In this framework, wage income corresponds to the compensation of employees, while the self-employment income represents the labor share of mixed income. For a labor-intensive economy like Nigeria, this labor share is conventionally set at 67% (R. Lee & Mason, 2011).

Subsequently, the micro-level age profiles were used to distribute the macro incomes into the age cohorts. To mitigate the influence of outliers, the top and bottom 2% of income values were trimmed. The analysis was conducted at both per capita and aggregate levels using Stata 17 (StataCorp LLC, United States) and Microsoft Excel 365 (Microsoft Corporation, United States).

3.2. Analytical framework

This study employs the NTA theoretical and accounting framework to analyze gender disparities in lifecycle income profiles in Nigeria. The methodology examines economic flows across age cohorts by integrating microdata with macroeconomic accounts. This integration allows for the estimation of age- and gender-specific earnings that account for variations in labor force participation, hours worked, and productivity differentials across sectors (R. Lee & Mason, 2011).

A key innovation of the NTA approach is its use of two central metrics: The "effective producers" and "effective consumers." An effective producer is defined as a worker whose labor income equals the unweighted average labor income for prime-age cohorts (30–49 years), which enables cross-age comparisons. This metric captures how labor market dynamics, such as the concentration of women in informal employment and gendered career interruptions, shape cumulative lifetime earnings (Olasehinde *et al.*, 2024). For instance, a 55-year-old earning 20% less than the prime age average would be counted as 0.8 effective producers.

The effective number of producers, L, and the effective number of consumers, N, are defined as Equations (1) and (2), respectively.

$$L(t) = \int \rho(x) P(x,t) dx \tag{1}$$

$$N(t) = \int \phi(x) P(x,t) dx \tag{2}$$

Where $\rho(x)$ and $\phi(x)$ are the age-specific variations in productivity and consumption, respectively. Furthermore, the population of age x in year t is represented by $P(x,t)$. Mean income per effective consumer, $y(t)$, is therefore expressed as the product of two factors (Equations [3] and [4]).

$$y(t) = \frac{Y(t)}{N(t)} \tag{3}$$

$$\frac{Y(t)}{N(t)} = \frac{L(t)}{N(t)} \times \frac{Y(t)}{L(t)} \tag{4}$$

where $Y(t)$ is the sum of labor income for all individuals in year t.

3.3. Measurement of gender differentials

Gender differentials in labor income were measured across both per capita and aggregate profiles, with variations analyzed along two primary dimensions:

(i) Age: Defined as the time elapsed since birth (in years). The analysis employs the standard NTA age range of 0–90 years to capture the complete economic lifecycle, from childhood dependency through the working-age years to retirement. The upper limit is set at 90 to prevent distortions in per capita calculations from small and heterogeneous samples at very advanced ages.

(ii) Employment sector: Labor income was disaggregated by sector. Wage income includes monthly earnings from primary and secondary employment, as well as in-kind payments received by employees. Self-employment income comprises earnings from work for one's own enterprise. To ensure consistency in measuring self-employment income, which is often inaccurately reported in surveys, an imputed value was calculated based on the number of hours worked and the national minimum wage of ₦30,000/month, capped at a maximum of 56 h/week.

This two-dimensional approach accounts for Nigeria's dual formal–informal labor market structure, enabling the detection of distinct earnings patterns over the career lifecycle. Although consumption is also age-adjusted in the NTA framework, the present study focuses exclusively on production-side dynamics. The detailed NTA implementation procedure follows Olaniyan *et al.* (2021).

4. Results

The analysis profiles labor income over the lifecycle by examining the age-specific patterns to identify gender differentials in Nigeria. Labor income was disaggregated into its two primary components: the compensation of employees (wage income) and self-employment income.

For the gender wage gap, Table 1 shows men earn 28% higher wages than women on average (₦75,766 [US$210] vs. ₦59,024 [US$164]). However, there is parity in self-employment income, as gender differences are minimal (₦11,569 [US$32] for men vs. ₦10,835 [US$30] for women). The sectoral segregation shows women dominate self-employment, while men overwhelmingly lead in wage employment.

The per capita profiles were graphically presented, and the aggregate profiles were tabulated. Figure 1 illustrates the per capita age profile of labor income for the Nigerian economy in 2019. The figure shows similarly skewed distributions for males and females; however, their kurtosis values are strikingly dissimilar, and their respective labor income values peaked in different years.

From Figure 1, the discrimination against the female gender in terms of labor income divergence is noticeable from the age of 30 years and lasts until the age of 68 years, with slight female dominance between the ages of 69 and 86 years. It was evident that males in Nigeria started earning income before females did. While males' income increased steadily until its peak at the age of 49 years, females' income flattened out from the ages of 37–55 years. Women's earnings were far below those of their male counterparts during their peak years. In addition, the figure suggests the existence of child labor in the country across both genders, earning labor income from approximately 12 years of age.

The disaggregation of labor income across wage employment and self-employment is depicted in Figure 2. As shown in Figure 2A, the gap between the peak labor income of males and females suggests that discrimination in gender-based earnings is largely prevalent in the formal, wage-earning sector, where male dominance occurs virtually throughout the lifecycle. On the other hand, females earn more self-employment income on average than males do, but their average domination are far below those of wage-earning males (Figure 2B).

For aggregate earnings in the country, Table 2 reveals that females earned a total labor income of 25.27 trillion Naira in 2019, whereas males' total income was 32.05

Table 1. Descriptive statistics of labor income in Nigeria

Gender	Variable	Observation	Mean	Standard deviation
Females	Age (in years)	3,062	39.6	14.1
	Wage-employment income (in Naira)	467	59,024.47	186,081.1
	Self-employment income (in Naira)	2,595	10,834.56	5,181.3
Males	Age (in years)	2,770	41.6	14.9
	Wage-employment income (in Naira)	882	75,765.87	62,679.0
	Self-employment income (in Naira)	1,888	11,569.22	5,167.4

Table 2. Lifecycle dynamics of labor income, 2019 (in Naira million)

Age group	0–17	18–60	60+	Total
Labor income	1,211,994	52,897,938	3,215,492	57,325,424
Females	697,325	23,057,455	1,517,148	25,271,928
Males	514,669	29,840,483	1,698,343	32,053,495
Dominance proportion	0.58 (Females)	0.56 (Males)	0.53 (Males)	0.56 (Males)
Wage income	153,414	24,576,996	1,082,965	25,813,374
Females	59,457	7,326,918	151,872	7,538,246
Males	93,957	17,250,078	931,093	18,275,129
Male dominance proportion	0.61	0.70	0.86	0.71
Self-employment income	1,058,580	28,320,942	2,132,527	31,512,049
Females	637,868	15,730,537	1,365,277	17,733,683
Males	420,712	12,590,405	767,250	13,778,367
Female dominance proportion	0.60	0.56	0.64	0.56

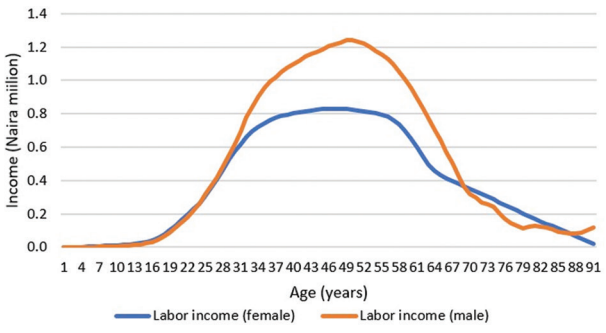

Figure 1. Per capita age profile of labor income for employed persons in Nigeria, 2019 (in Naira million)

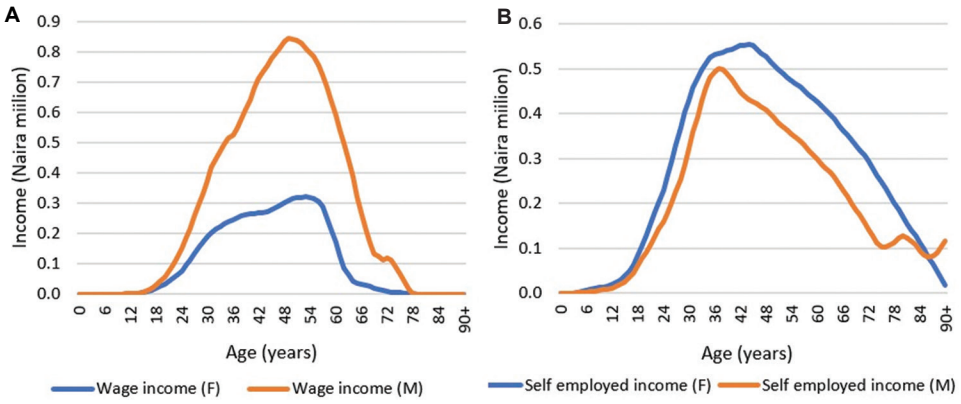

Figure 2. (A and B) Wage and self-employed income in Nigeria, 2019 (in Naira million)
Abbreviations: F: Female; M: Male.

trillion Naira. A similar pattern was found in the working class, where the proportion of male domination was 56%, and among the elderly, with a male dominance of 53%. However, a reverse pattern was observed among children, where females outearned males, with 58% pro-female dominance.

The study reveals a significant gender differential in earnings among active working years among wage earners. The differential peak from ages 18–60 years shows that males earned 9.92 trillion (17.25 trillion−7.35 trillion) more than females of the same age range under wage employment, whereas females earned 3.14 trillion (15.73 trillion−12.59 trillion) more than males under self-employment. This accounts for approximately one-third of the pro-male income differential of wage earners. This confirms that females generate lower aggregate and per capita labor income in the economy.

5. Discussion

The analysis of gender income differentials across the lifecycle in Nigeria reveals an inherent inequality that reflects both universal patterns of gender inequality, as well as its context-specific manifestations of patriarchal systems. This study uncovers how Nigeria's labor market institutions interact with cultural norms to create gender disparities throughout life cycles. The findings reveal that men maintain a substantial 9.92 trillion Naira advantage in wage employment during prime working years (ages 18–60), a pattern that both confirms and complicates traditional human capital theory (Becker, 1962). This study reveals that Nigerian women experience a 27% lifetime earnings penalty relative to men, concentrated during childbearing years (25–35) and informal sector-dominated late career (55 and above).

While Becker's framework attributes such gaps to differences in education and training investments, our data reveal a more complex reality. Nigerian women face persistent wage discrimination similar to what Arrow (1973) tags as statistical discrimination, where employers make biased assumptions about women's productivity and commitment based on gender stereotypes rather than productivity and actual performance. This is significant during periods when income gaps widen dramatically, providing strong empirical support for Budig & England's (2001) motherhood penalty theory while highlighting how its effects are amplified in developing economies with weak social protections. The findings of Agüero *et al.* (2020) show that for middle-income countries, there is a 15% decrease in wages, while our finding suggests Nigerian women experience a 29% reduction, a disparity that reflects the limited childcare support in developing countries, such as Nigeria, especially when care responsibilities force women into informal work prematurely (Guidime *et al.*, 2022). This pattern is observed in other patriarchal labor markets in Malaysia (Ismail & Jajri, 2012) but is more acute during women's childbearing years in Nigeria, which compounds their economic vulnerability.

The Nigerian labor market presents several paradoxes that make the applications of Western economic theories to African contexts challenging. While the identified 56% male wage gap (Table 2) exceeds global averages (ILO, 2023), the apparent female advantage in self-employment (where women earn 3.14 trillion Naira more than men) becomes economic participation that offers limited returns and no path to genuine empowerment (Mosedale, 2005). This finding aligns with but extends Guidime *et al.*'s (2022) work in Mali by showing how Nigeria's larger informal sector (57% versus Mali's 40%) creates more extreme versions of the concentration of women's economic activities in low-productivity and insecure self-employment.

However, the most striking contradiction of the study emerges when comparing our results to those of Aktuğ

et al. (2021), who found that in Turkey, women earned more than men in wage employment until age 35. This suggests that education and labor market policies can mitigate disparities. This effect was lacking in Nigeria, where the influence of structure and culture ensures that women face income deficits from the point of labor market entry, creating compounding disadvantages that persist throughout their working lives. Human capital investments alone cannot overcome the structural barriers Nigerian women face; the credential devaluation in gender-biased labor markets represents a significant dimension of gender inequality (Barth *et al.*, 2021). However, our finding that women maintain self-employment income advantages challenges the universal applicability of Barth's hypothesis, suggesting that in Nigeria's large informal sector, traditional gender roles may protect some economic spaces for women, though at the cost of career mobility.

The occupational and sectoral segregation that systematically restricts more women to petty trading (41.7% of female workers compared to 18.1% of male counterparts) confirms the crowding effect that Omoruyi (2015) and later Adeosun & Owolabi (2021) describe as concentrating women in specific economic activities regardless of their qualifications or aspirations in resource-dependent economies in Nigeria.

The enactment of Nigeria's Gender Equality Act brought hopes for women's empowerment. However, the Act is almost non-existent as it is failing to translate into meaningful change due to patriarchal resistance and institutional indifference, leading to its weak enforcement. This implementation gap explains the observed education paradox, despite educational advances (with 10.7% of women attaining tertiary education), Nigerian women capture just a fraction of the returns on their human capital investments, earning only 10.7% of total labor income compared to men's 32.1%. The weak enforcement of gender equality laws is a pattern observed in other patriarchal labor markets, such as Malaysia (Ismail & Jajri, 2012) and South Africa (Sharaunga *et al.*, 2019), where progressive policies often fail to disrupt patriarchal workplace norms.

The macroeconomic implications of these gender income disparities are far-reaching. McKinsey Global Institute (2023) showed that closing gender wage gaps boosts GDP, while Asali & Gurashvili (2020) demonstrated how gender pay disparities function as significant drags on national economic growth. The intergenerational effect of poverty, often occasioned by women's limited earnings, typically reduces investments in child health and education, extending Foster & Walker's (2021) lifecycle approach to understanding long-term consequences of gender inequality. Nigeria's current trajectory risks missing goal 5 (gender equality) and goal 8 (decent work) in precisely the ways the United Nations (2015) warned about, by maintaining structural barriers that prevent women from fully participating in and benefiting from decent work.

Addressing these disparities requires a multifaceted approach that targets both effects and root causes. Policy interventions should include: strengthened anti-discrimination and equal pay laws to reduce wage gaps in formal employment; expanded childcare and healthcare support to alleviate women's unpaid care burdens and improve workforce participation, especially during childbearing years; and targeted interventions, such as those proposed by Olaniyan *et al.* (2018). These could boost labor productivity, particularly for women in rural areas, and enhance their access to higher-quality jobs, particularly in high-growth sectors.

Additionally, social protection policies, including pensions and access to credit for informal workers, must be redesigned to account for gender disparities in lifecycle earnings. Implementing these strategies can help overcome structural barriers and foster inclusive growth in Nigeria and similar contexts across the Global South. Given the significant role women's economic participation plays in driving national development, future studies should examine how gender interacts with ethnicity, religion, and rural–urban divisions to influence economic outcomes.

Three principal limitations constrained this study: First, the NTA methodology, while it provides powerful insights into aggregate lifecycle patterns, fails to capture intra-household resource allocation dynamics that are crucial for understanding how resources are actually allocated and controlled within families. Second, the absence of intersectional analysis, particularly along North-South divides in Nigeria, leaves unanswered questions about how the interaction of ethnicity and location could enhance the gendered economic deprivation. Third, longitudinal research is required to investigate how the interplay of policy interventions, digital platforms, and new technologies might disrupt the observed lifecycle patterns of gender inequality and reshape the labor market in Nigeria.

Based on these limitations, this study suggests that future research should further advance understanding of gender income disparities in Nigeria and similar contexts. While the findings of this study highlight gender differentials in income profiles over the lifecycle, they do not capture the heterogeneity of these patterns across Nigeria's diverse socio-cultural and economic contexts. Future research should therefore extend the analysis by incorporating regional, religious, and ethnic dimensions

to understand how these factors intersect with gender to influence income trajectories.

6. Conclusion

This study applies the NTA methodology to analyze gender disparities in lifecycle income trajectory in Nigeria. The result shows that, on average, men earn more than women, and this systematic discrimination against women in the labor market is more prominent between the ages of 30 and 68. Men dominated wage employment, and women showed marginal income advantages in self-employment, with occupational and sectoral segregation limiting women to petty trading. This finding underscores the precarious nature of informal work as a secondary option rather than a pathway to empowerment. Corroborating Budig & England's (2001) theory of motherhood penalty, the study also revealed a 27% reduction in women's earnings in Nigeria, highlighting the insufficient childcare support in developing countries.

The study suggests improving childcare and healthcare support, as well as redesigning social protection policies to account for gender disparities, as effective means to bridge the gender disparity gap and enhance the overall economic growth of the country.

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The author declares no conflict of interest.

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Not applicable.

Consent for publication

Not applicable.

Availability of data

All data used in this study were obtained from https://microdata.nigerianstat.gov.ng/index.php/catalog/81 (The 2018/2019 National Living Standards Survey) and https://www.nigerianstat.gov.ng/elibrary/read/1091 (2019 National Accounts Data).

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