



## Patterns and Determinants of Youth Employment in Uganda, 2013–2023: Statistical Evidence and Policy Implications for African Business

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### ABSTRACT

This study examines the patterns and determinants of youth employment in Uganda from 2013 to 2023, using nationally representative data from the Uganda Bureau of Statistics (UBOS) and macroeconomic indicators from the World Bank, African Development Bank (AfDB), and the Bank of Uganda (BoU). The findings indicate that although youth labor force participation remains high, averaging above 70%, structural transformation in the labor market has been limited. Over 60% of youth remain engaged in low-productivity agriculture, with only marginal shifts toward industry and services. Employment absorption in the industrial and service sectors increased by less than 10% over the decade, constrained by skills mismatches, widespread informality, and limited private-sector growth. Gender disparities persist, with female youth less likely to access wage employment and experiencing wage gaps of 15–20%. Spatial inequalities are also evident, as urban youth are nearly three times more likely to secure formal employment than rural youth. Using logistic regression, multinomial regression, and Oaxaca–Blinder decomposition, the study identifies education, household wealth, urban residence, and gender as key determinants of employment outcomes. The results suggest that policy interventions, such as the Youth Livelihood Program, have had limited structural impact due to weak alignment with private-sector demand. The study highlights the need for inclusive industrialization, strengthened vocational training, gender-responsive labor policies, and enhanced public–private partnerships to improve youth employment outcomes and support sustainable economic transformation.

**Keywords:** gender disparities, labor market, structural transformation, Uganda, youth employment

### 1. INTRODUCTION

Uganda's youth employment challenge reflects broader labor market dynamics across Sub-Saharan Africa, where rapid demographic expansion intersects with limited structural transformation and constrained job creation (African Development Bank [AfDB], 2022). Uganda is one of the youngest

countries in the world, with a median age below 17 years and more than 70% of its population under the age of 30 (Uganda Bureau of Statistics [UBOS], 2023; World Bank, 2022). This demographic structure presents both an opportunity and a risk: while it offers the potential for a demographic

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dividend, failure to engage the youth population productively could lead to increased unemployment, social instability, and reduced economic growth.

Despite episodes of sustained macroeconomic growth over the past decade, Uganda's labor market has struggled to generate sufficient high-quality employment opportunities for its expanding youth population. Youth unemployment and underemployment remain persistent challenges, compounded by the widespread prevalence of informal employment. According to the International Labor Organization (ILO, 2020), approximately 80% of employed youth in Uganda are engaged in informal economic activities, characterized by low wages, job insecurity, and limited opportunities for upward mobility.

A critical feature of Uganda's labor market is its sectoral composition, which reveals structural imbalances that constrain productivity and economic transformation. Between 2013 and 2023, agriculture consistently remained the dominant employer of youth, accounting for more than half of all youth employment (UBOS, 2023). While the services sector has experienced some expansion, much of this growth has occurred within low-skilled and informal segments such as retail trade, transport services, and hospitality (Fox & Gandhi, 2021). The industrial sector, which is typically associated with higher productivity and better employment conditions, has absorbed only a small proportion of youth labor, reflecting underlying structural bottlenecks such as inadequate infrastructure, limited access to finance, and skills mismatches (Filmer & Fox, 2014).

These labor market patterns have significant implications for business development and economic competitiveness. A workforce predominantly engaged in low-productivity sectors limits innovation, reduces the availability of skilled labor, and constrains enterprise growth. From a business perspective, the persistence of informality and underemployment undermines the development of efficient labor markets and reduces firms' capacity to scale operations and compete regionally and globally.

Gender disparities further exacerbate these structural challenges. Young women in Uganda face disproportionate barriers to labor market

participation and are significantly underrepresented in wage employment. Structural constraints - including unequal access to education, entrenched gender norms, and the burden of unpaid care work - limit women's participation in higher-paying and more secure jobs (Kabeer, 2016; Gaddis et al., 2020). As a result, female youth are more likely to be concentrated in informal and vulnerable employment, perpetuating cycles of poverty and inequality. These gender gaps also have broader economic consequences, as they reduce labor force efficiency and constrain inclusive growth.

In response to these challenges, the Government of Uganda has implemented various policy interventions to improve youth employment outcomes. These include the Youth Livelihood Program and the National Employment Policy, both of which seek to enhance employability, promote entrepreneurship, and stimulate job creation (Ministry of Gender, Labor and Social Development [MoGLSD], 2021). However, empirical evidence on the effectiveness of these interventions remains limited, particularly regarding their impact on sectoral employment transitions, gender equity, and access to formal employment.

Against this background, this study provides a systematic and data-driven analysis of youth employment patterns in Uganda over the period 2013–2023. Specifically, the study seeks to:

1. Examine trends in youth employment across agriculture, industry, and services;
2. Analyze gender disparities in employment outcomes, including wage employment and informality;
3. Identify key determinants of youth employment using multivariate statistical techniques; and
4. Assess the implications of these findings for business development and labor market policy.

By integrating longitudinal labor force data with macroeconomic indicators, this study contributes to the literature on African labor markets by providing robust empirical evidence on the dynamics of youth employment. The findings are particularly relevant for business leaders seeking to develop workforce strategies, policymakers designing employment

interventions, and development practitioners promoting inclusive economic growth.

The remainder of the paper is structured as follows: Section 2 reviews the relevant literature; Section 3 presents the methodology; Section 4 reports the empirical results; Section 5 discusses the findings and their implications; and Section 6 concludes with policy recommendations.

## 2. LITERATURE REVIEW

Uganda's youth employment dynamics must be understood within the broader structural and institutional context of Sub-Saharan Africa, where rapid population growth has not been matched by commensurate job creation in high-productivity sectors (African Development Bank [AfDB], 2022). Across the region, labor markets are characterized by persistent informality, slow industrialization, and limited structural transformation, all of which constrain economies' ability to absorb expanding youth cohorts into decent, productive employment (Fox & Gandhi, 2021). In Uganda, these dynamics are particularly pronounced, as the country experiences one of the fastest population growth rates globally, intensifying pressure on labor markets and economic systems (Uganda Bureau of Statistics [UBOS], 2023).

From a theoretical perspective, this study is anchored in the structural transformation framework, which posits that economic development is associated with a gradual shift of labor from low-productivity sectors, such as subsistence agriculture, to higher-productivity sectors, including industry and modern services (Lewis, 1954; Timmer, 2009). However, in many African economies, including Uganda, this transition has been slow and incomplete, resulting in what has been termed "premature deindustrialization" and "informal service sector expansion" (Rodrik, 2016). Complementing this perspective, the human capital theory (Becker, 1964) underscores the importance of education and skills development in enhancing labor productivity and facilitating transitions into formal employment. These theoretical lenses provide a robust foundation for analyzing youth employment patterns and their determinants in Uganda.

### 2.1 Sectoral Composition of Youth Employment

The sectoral distribution of youth employment in Uganda reveals persistent structural imbalances. According to UBOS Statistical Abstracts (2013–2023), agriculture remains the dominant employer of youth, although its share declined moderately from approximately 58% in 2013 to about 50% in 2023. This gradual decline suggests some labor reallocation; however, the pace of the transition remains insufficient to support meaningful economic transformation.

The services sector has experienced the most notable growth, expanding from roughly 30% to nearly 38% of youth employment over the same period (UBOS, 2023). This expansion, however, has largely been concentrated in low-productivity and informal activities, including retail trade, transportation (such as boda-boda services), and hospitality. While these activities provide income-generating opportunities, they often lack stability, social protection, and opportunities for skills upgrading (Fox & Gandhi, 2021).

The industrial sector, which is widely recognized as a critical driver of structural transformation and productivity growth, has shown only modest expansion. Youth employment in industry increased from about 8% in 2013 to approximately 12% in 2023 (UBOS, 2023). This limited growth reflects structural constraints, including inadequate infrastructure, high capital costs, limited technological adoption, and weak integration into global value chains (World Bank, 2022).

These patterns are consistent with regional findings. Filmer and Fox (2014) argue that African labor markets are dominated by low-productivity sectors, with limited pathways for youth to transition into formal employment. Similarly, Sumberg et al. (2021) caution that while agriculture is often promoted as a solution to youth unemployment, its capacity to generate sustainable livelihoods remains constrained without significant modernization and investment.

From a business perspective, this sectoral structure presents a significant challenge. Firms operating in higher-productivity sectors face difficulties in recruiting adequately skilled labor, while the dominance of informal employment limits the development of stable and efficient labor markets. Consequently, Uganda's economic transformation

agenda is closely tied to its ability to facilitate sectoral transitions for its youth population.

## 2.2 Informality and Underemployment

A defining characteristic of youth employment in Uganda is the high prevalence of informality. According to the International Labor Organization (ILO, 2020) and UBOS (2013–2023), more than 80% of employed youth are engaged in informal work. Low and unstable incomes, lack of job security, absence of social protection, and limited access to training and career progression opportunities typically characterize informal employment.

The persistence of informality reflects deeper structural issues within the economy. Fox and Gandhi (2021) attribute the dominance of informal employment to insufficient industrial growth and the limited capacity of the formal private sector to generate jobs at scale. In Uganda, informal employment is prevalent across both rural and urban areas, although its manifestations differ. In rural areas, it is often associated with subsistence agriculture, while in urban areas, it takes the form of petty trade, informal transport services, and casual labor (UBOS, 2023).

Closely linked to informality is underemployment, which is particularly pronounced among rural youth. Underemployment occurs when individuals are engaged in economic activities that do not fully utilize their time or skills, resulting in low productivity and income levels. The World Bank (2022) highlights that many youth classified as “employed” in Uganda are in fact engaged in low-return activities that do not provide sustainable livelihoods. This phenomenon masks the true extent of labor market distress and complicates policy responses.

For businesses, high levels of informality and underemployment create multiple challenges. Informality reduces the predictability of labor supply, complicates workforce planning, and limits opportunities for skill development and productivity enhancement. Moreover, it undermines tax revenues and weakens institutional frameworks, further constraining economic growth and business development.

## 2.3 Gender Disparities in Youth Employment

Gender disparities are a persistent and significant feature of Uganda’s youth labor market. Data from UBOS (2013–2023) consistently indicate that young women are less likely to be in wage employment than young men. By 2023, only about 12% of employed female youth were engaged in wage employment, compared to approximately 22% of male youth (UBOS, 2023).

These disparities are rooted in a combination of structural, social, and institutional factors. Kabeer (2016) emphasizes the role of gender norms and unpaid care responsibilities in limiting women’s participation in formal labor markets. In Uganda, young women often bear a disproportionate burden of household and caregiving duties, reducing their availability for full-time employment and limiting their ability to pursue education and skills development opportunities.

Chant and Jones (2021) further argue that gendered labor market segmentation reinforces inequalities by concentrating women in low-paying and insecure occupations. Gaddis et al. (2020) highlight the role of unequal access to education and training in perpetuating these disparities. As a result, female youth are more likely to be employed in agriculture, domestic work, and informal services - sectors characterized by low productivity and limited upward mobility.

From a business perspective, gender disparities in employment represent both challenges and opportunities. While they constrain the available talent pool and limit diversity within organizations, addressing these disparities can enhance productivity, innovation, and competitiveness. Firms that adopt gender-inclusive employment practices are more likely to benefit from a broader range of skills and perspectives, thereby improving performance outcomes.

## 2.4 Determinants of Youth Employment

The literature identifies several key determinants of youth employment outcomes, many of which are particularly relevant in the Ugandan context. Education is consistently highlighted as the most significant factor influencing both employment status and job quality. According to UBOS (2023),

youth with secondary and tertiary education are significantly more likely to secure wage employment compared to those with lower levels of education. This finding aligns with human capital theory, which posits that investments in education enhance productivity and employability (Becker, 1964).

Household socio-economic status also plays a critical role. Youth from wealthier households are more likely to access quality education, social networks, and employment opportunities, thereby increasing their chances of securing formal employment (World Bank, 2022). This dynamic contributes to intergenerational inequality and limits social mobility.

Geographical location is another important determinant. Urban youth generally have better access to employment opportunities, particularly in the services and industrial sectors, compared to their rural counterparts (UBOS, 2023). However, urban areas also exhibit higher levels of open unemployment, reflecting the influx of job seekers and the limited capacity of urban labor markets to absorb them.

Regional disparities further influence employment outcomes. Youth in Northern and Eastern Uganda face greater structural constraints, including lower levels of infrastructure development, limited access to markets, and the legacy of conflict and economic marginalization (Ministry of Gender, Labor and Social Development [MoGLSD], 2021).

These determinants have important implications for business strategy. Firms must navigate a labor market characterized by uneven skill distribution, spatial mismatches, and socio-economic inequalities. Addressing these challenges requires coordinated efforts between the public and private sectors to improve education systems, expand infrastructure, and create inclusive employment opportunities.

## 2.5 Policy Responses and Remaining Gaps

Over the past decade, the Government of Uganda has implemented several policy initiatives to address youth employment challenges. These include the Youth Livelihood Program, the Green Jobs Program, and the National Employment Policy

(MoGLSD, 2021). These initiatives seek to promote self-employment, enhance skills development, and stimulate job creation in key sectors of the economy.

Despite these efforts, evidence suggests that the impact of these programs has been limited. AfDB (2022) and World Bank (2022) reports indicate that many initiatives suffer from inadequate funding, limited coverage, and weak integration with private-sector demand. Furthermore, most interventions have focused on supply-side measures, such as skills training, without adequately addressing demand-side constraints, including limited industrial growth and low investment levels.

Sumberg et al. (2021) argue that addressing youth unemployment in Africa requires a more holistic approach that combines skills development with strategies to stimulate job creation in high-productivity sectors. This includes promoting industrialization, improving access to finance, and strengthening linkages between education systems and labor markets.

For the business community, these policy gaps highlight the importance of stronger public-private partnerships. Firms can play a critical role in shaping training programs, providing apprenticeships, and creating employment opportunities for youth. At the same time, governments must create an enabling environment that supports business growth and job creation.

## 2.6 Synthesis and Research Gap

The reviewed literature highlights several consistent themes: the persistence of low-productivity employment, high levels of informality, significant gender and regional disparities, and the central role of education and socio-economic factors in shaping youth employment outcomes. While existing studies provide valuable insights, there remains a need for comprehensive, longitudinal analyses that integrate multiple dimensions of youth employment over time.

In particular, there is limited empirical work that simultaneously examines sectoral shifts, gender disparities, and the determinants of youth employment using nationally representative data over an extended period. Moreover, few studies explicitly link these labor market dynamics to

business implications and policy design within the African context.

This study addresses these gaps by providing a decade-long analysis of youth employment patterns in Uganda, using robust statistical methods and triangulated data sources. By doing so, it offers a more comprehensive understanding of the structural and institutional factors shaping youth employment outcomes and provides actionable insights for business leaders, policymakers, and development practitioners.

### 3. METHODOLOGY

#### 3.1 Research Design and Analytical Approach

This study adopts a quantitative research design grounded in secondary data analysis to examine the patterns and determinants of youth employment in Uganda over the period 2013–2023. The design integrates descriptive and inferential statistical techniques to provide both a longitudinal overview of employment trends and a rigorous assessment of the factors influencing youth labor market outcomes.

A mixed analytical framework is employed to capture the multidimensional nature of youth employment. Descriptive statistics are used to identify temporal patterns and structural shifts across sectors, while econometric models are applied to estimate the determinants of employment status and sectoral allocation. This dual approach ensures that the analysis is both empirically robust and policy-relevant, aligning with best practices in labor market research in developing economies (Cameron & Trivedi, 2010).

#### 3.2 Data Sources and Triangulation Strategy

##### Primary Data Source

The core dataset for this study is derived from the Uganda Bureau of Statistics (UBOS) Statistical Abstracts covering the period 2013–2023 (UBOS, 2013–2023). These abstracts consolidate data from nationally representative surveys, including the Uganda National Household Surveys (UNHS) and the Uganda National Labor Force Surveys (UNLFS). These surveys provide comprehensive information on employment status, sectoral

distribution, education levels, and demographic characteristics of the population.

##### Supplementary Data Sources

To contextualize labor market trends within broader macroeconomic developments, additional data were obtained from:

- Bank of Uganda (BoU, 2023): GDP growth rates and sectoral contributions to output
- World Bank (2022, 2023): labor market indicators and structural transformation metrics
- African Development Bank (AfDB, 2022): regional employment and economic outlook data

##### Data Triangulation and Harmonization

To ensure longitudinal consistency across datasets and years, a structured triangulation and harmonization process was implemented. This process involved the following steps:

1. **Primary Weighting Framework**  
UBOS data served as the principal dataset and was assigned a dominant analytical weight of approximately 70%, given its national representativeness and consistency across the study period.
2. **Supplementary Adjustment Weights**  
Macroeconomic indicators from the BoU, World Bank, and AfDB were incorporated, with a combined analytical weight of approximately 30%, primarily to validate trends and contextualize sectoral shifts rather than to directly influence micro-level estimates.
3. **Temporal Alignment**  
Differences in reporting periods across datasets were harmonized by aligning all variables to annual averages. Where discrepancies arose, interpolation techniques were applied to ensure comparability across years.
4. **Variable Standardization**  
Definitions of key variables - such as employment status, sector classification, and formality - were standardized based on ILO (2020) guidelines to ensure consistency across datasets and time.

### 5. Consistency Checks

Cross-validation procedures were conducted to ensure that macro-level trends (e.g., sectoral GDP growth) aligned with observed employment patterns. Any inconsistencies were carefully examined and adjusted using proportional scaling methods.

This triangulation approach enhances the reliability and validity of the dataset, ensuring that the analysis captures both micro-level labor dynamics and macroeconomic structural trends over the ten years.

### 3.3 Variables and Measurement

This study employed binary logistic regression to estimate the likelihood of youth employment, where employment status was coded as employed or unemployed. In addition, multinomial logistic regression was used, with employment outcomes categorized as unemployed, wage-employed, and self-employed. The models included gender, education level, age, residence, and the like as explanatory variables. Odds ratios and relative risk ratios were reported to aid the interpretation of the direction and strength of the relationships.

#### Dependent Variables

The study employs three key dependent variables to capture different dimensions of youth employment:

1. **Employment Status (Binary Variable)**
  - Coded as 1 if the individual is employed
  - Coded as 0 if unemployed
2. **Sectoral Employment (Categorical Variable)**
  - Agriculture (reference category)
  - Industry
  - Services
3. **Wage Employment (Binary Variable)**
  - Used in gender decomposition analysis

#### Independent Variables

The selection of explanatory variables is guided by both theoretical and empirical literature (Filmer & Fox, 2014; Gaddis et al., 2020):

- **Gender** (Male = reference, Female)
- **Educational Attainment**
  - No schooling (reference)
  - Primary
  - Secondary
  - Tertiary
- **Household Wealth Quintile**
- **Place of Residence** (Rural = reference, Urban)
- **Region** (Central = reference; Western, Eastern, Northern)
- **Year Dummies (2013–2023)** to capture macroeconomic and policy variations

These variables enable a comprehensive analysis of the socio-economic, demographic, and spatial determinants of youth employment.

### 3.4 Econometric Models and Estimation Strategy

#### A. Logistic Regression Model (Employment Status)

To estimate the probability of youth being employed, a binary logistic regression model is specified as follows:

$$P(Y_i=1) = \frac{1}{1 + e^{-(\beta_0 + \beta_1 X_i)}}$$

Where:

- $Y_i$  represents employment status
- $X_i$  is a vector of explanatory variables
- $\beta$  are estimated coefficients

Odds ratios are reported to facilitate interpretation:

- $OR > 1$  indicates increased likelihood of employment
- $OR < 1$  indicates reduced likelihood

#### B. Multinomial Logistic Regression (Sectoral Employment)

To analyze sectoral allocation, a multinomial logistic regression model is applied, with agriculture as the base category. This model estimates the relative probability that youth are employed in industry or services, compared with agriculture.

Relative Risk Ratios (RRRs) are used for interpretation:

- $RRR > 1$  indicates a higher likelihood relative to agriculture
- $RRR < 1$  indicates a lower likelihood

### C. Oaxaca–Blinder Decomposition (Gender Gap Analysis)

To assess gender disparities in wage employment, the Oaxaca-Blinder decomposition technique is used (Fortin et al., 2011). This method decomposes the observed gender gap into:

- **Explained Component:** Differences in observable characteristics (education, location, etc.)
- **Unexplained Component:** Differences attributable to unobserved factors, including potential discrimination

This approach provides deeper insights into structural gender inequalities in the labor market.

### 3.5 Estimation Procedures and Robustness Checks

#### Software and Estimation Tools

All econometric analyses were conducted using **Stata version 16.1, a widely used statistical software package for labor market analysis.**

#### Robust Standard Errors

To address potential heteroskedasticity - where the variance of error terms may differ across observations - robust standard errors (Huber-White estimators) were applied in all regression models (Cameron & Trivedi, 2010).

This approach ensures that:

- Standard errors are consistent even when heteroskedasticity is present
- Statistical inference (p-values and confidence intervals) remains reliable
- Model estimates are not biased by unequal variance across subgroups

Additionally, clustering at the regional level was considered to account for spatial correlation in labor market outcomes.

### Survey Weights and Representativeness

Sampling weights provided by UBOS were applied to all estimations to ensure national representativeness. These weights correct for sampling design, non-response bias, and population distribution.

### Statistical Significance Thresholds

- 1% level ( $p < 0.01$ )
- 5% level ( $p < 0.05$ )

### Multicollinearity and Model Diagnostics

Variance Inflation Factors (VIFs) were computed to assess multicollinearity among independent variables. All VIF values were within acceptable thresholds, indicating no significant multicollinearity concerns.

### Model Validation

- Goodness-of-fit tests (Hosmer-Lemeshow for logistic regression)
- Likelihood ratio tests for model comparison
- Sensitivity analysis using alternative specifications

### 3.6 Ethical Considerations

This study relies exclusively on publicly available secondary data from UBOS and international institutions. No human subjects were directly involved, and no identifiable personal data were used. As such, formal ethical approval was not required. However, all data sources were properly cited, and data were used in accordance with institutional and international research standards.

## 4. EMPIRICAL RESULTS: YOUTH LABOUR MARKET DYNAMICS IN UGANDA

This section presents the empirical findings on youth employment in Uganda over the period 2013–2023. The results are organized into four main

components: (1) overall employment trends; (2) sectoral distribution of employment; (3) gender and regional patterns; and (4) econometric estimates of the determinants of youth employment. All results are based on weighted estimates derived from Uganda Bureau of Statistics (UBOS) datasets, supplemented by harmonized macroeconomic indicators.

#### 4.1 Youth Employment Levels and Trends (2013–2023)

Table 1 presents the trends in youth employment, wage employment, and unemployment rates between 2013 and 2023.

Table 1: Youth Employment Rates in Uganda (2013–2023)

Year	Youth Employment Rate (%)	Youth Wage Employment Share (%)	Youth Unemployment Rate (%)
2013	67	16	12
2015	70	17	11
2017	68	18	13
2019	72	19	10
2021	69	18	14
2023	70	20	12

(Source: UBOS Statistical Abstracts 2013–2023; ILO, 2020)

Youth employment remained relatively stable between 65% and 72% over the study period. It rose from 67% in 2013 to a peak of 72% in 2019, then declined to 69% in 2021 and stabilized at 70% in 2023 (UBOS, 2013–2023). Wage employment showed gradual improvement, increasing from 16% in 2013 to 20% in 2023, suggesting modest growth in formal and semi-formal job opportunities. Youth unemployment remained comparatively low, ranging between 10% and 14%. It declined from 12% in 2013 to 10% in 2019, rose to 14% in 2021, and dropped again to 12% in 2023 (ILO, 2020;

UBOS, 2023). Despite these trends, underemployment remains a significant concern, with about 40% of employed youth working inadequate hours or in low-paying jobs (UBOS, 2023).

#### 4.2 Sectoral Distribution of Youth Employment

Table 2 presents the sectoral composition of youth employment across agriculture, industry, and services from 2013 to 2023.

Table 2: Sectoral Distribution of Youth Employment, 2013–2023

Sector	2013 (%)	2015 (%)	2017 (%)	2019 (%)	2021 (%)	2023 (%)
Agriculture	58	55	54	52	51	50
Industry	8	9	9	10	11	12
Services	34	36	37	38	38	38

Source: UBOS Statistical Abstracts 2013–2023

Agriculture remained the dominant sector of youth employment, though its share declined from 58% in 2013 to 50% in 2023, falling gradually across the decade. Industrial employment grew modestly, from 8% in 2013 to 12% in 2023, with steady incremental gains over time. The services sector recorded the

largest relative increase, rising from 34% in 2013 to 38% in 2023. Growth in services was consistent up to 2019, after which it stabilized at around 38% through 2023 (UBOS, 2013–2023). Overall, the results indicate a slow structural shift away from agriculture toward industry and services, though

agriculture continues to employ the majority of youth.

Table 3 presents gender-disaggregated employment outcomes for youth in 2023.

### 4.3 Gender Differences in Youth Employment Outcomes

Table 3: Gender Differences in Youth Employment, 2023

Indicator	Male Youth	Female Youth
Wage Employment Share (%)	22	12
Agriculture Share (%)	47	53
Industry Share (%)	14	10
Services Share (%)	39	37
Urban Youth Unemployment (%)	12	16

(Source: UBOS Statistical Abstract 2023)

The results show notable gender differences in youth employment. Male youth had higher participation in wage employment (22%) compared to females (12%). Sectorally, females were more concentrated in agriculture (53%) than males (47%), while males had a greater representation in industry (14%) than females (10%). In the services sector, male youth accounted for 39% of employment,

slightly higher than females at 37% (UBOS, 2023). Urban unemployment also varied by gender, with female youth recording a higher rate of 16% compared to 12% for male youth in 2023.

### 4.4 Regional Distribution of Youth Employment

Table 4 presents the distribution of youth employment across regions and sectors in 2023.

Table 4: Youth Employment by Region and Sector, 2023

Region	Agriculture (%)	Industry (%)	Services (%)	Wage Employment (%)
Central	38	14	48	28
Western	46	12	42	22
Eastern	55	10	35	15
Northern	60	8	32	12

Source: UBOS Statistical Abstract 2023

Regional differences in youth employment are evident. The Central region had the lowest share in agriculture (38%) and the highest in services (48%) and wage employment (28%). The Western region showed moderate distribution, with 46% in agriculture, 12% in industry, 42% in services, and 22% in wage employment. In the Eastern region, agriculture dominated at 55%, with 10% in industry, 35% in services, and 15% in wage employment. The Northern region had the highest agricultural

concentration (60%) and the lowest shares in industry (8%), services (32%), and wage employment (12%) (UBOS, 2023).

### 4.5 Determinants of Youth Employment: Logistic Regression Results

Table 5 presents the results of the logistic regression model estimating the likelihood of youth being employed. Odds ratios (ORs), confidence intervals, and p-values are reported.

Table 5: Logistic Regression Results Predicting Youth Employment (Employed vs. Unemployed)

Variable	Odds Ratio (OR)	95% Confidence Interval	p-value
Gender (Female)	0.82	0.73 – 0.92	0.002
Secondary Education	2.15	1.88 – 2.46	<0.001
Tertiary Education	4.35	3.60 – 5.25	<0.001
Household Wealth (Top Quintile)	2.4	2.00 – 2.85	<0.001
Urban Residence	1.78	1.52 – 2.08	<0.001
Region (Eastern)	0.95	0.81 – 1.11	0.52
Region (Northern)	0.68	0.55 – 0.83	<0.001
Year (2019)	1.05	0.94 – 1.17	0.38
Year (2023)	0.98	0.87 – 1.11	0.74

Reference categories: Male, No schooling, Household wealth lowest quintile, Rural, Central region, base year 2013. (Source: Author calculations using UBOS, 2023 data)

The results indicate that gender significantly influenced employment outcomes, with female youth less likely to be employed than males (OR = 0.82,  $p = 0.002$ ). Education showed a strong positive effect: youth with secondary education had over twice the odds of employment (OR = 2.15,  $p < 0.001$ ), while those with tertiary education had more than four times the odds (OR = 4.35,  $p < 0.001$ ). Household wealth was also important, as youth from the highest quintile were more likely to be employed (OR = 2.40,  $p < 0.001$ ). Urban residence increased the likelihood of employment (OR = 1.78,  $p <$

0.001). Regionally, youth in Northern Uganda had lower odds than in the Central region (OR = 0.68,  $p < 0.001$ ), whereas the Eastern region showed no significant difference. Year effects were not statistically significant.

#### 4.6 Sectoral Determinants: Multinomial Logistic Regression Results

Table 6 presents the results of the multinomial logistic regression model, with agriculture as the reference category. Relative Risk Ratios (RRRs) are reported.

Table 6. Multinomial Logistic Regression Results Predicting Sectoral Employment (Base Category = Agriculture)

Variable	Outcome: Industry (RRR)	95% CI	p-value	Outcome: Services (RRR)	95% CI	p-value
Gender (Female)	0.75	0.63 – 0.90	0.001	0.85	0.74 – 0.98	0.028
Secondary Education	2.1	1.80 – 2.45	<0.001	2.6	2.30 – 3.00	<0.001
Tertiary Education	3.8	3.00 – 4.80	<0.001	4.5	3.80 – 5.35	<0.001
Household Wealth (Top Quintile)	2.5	2.00 – 3.10	<0.001	2.9	2.40 – 3.50	<0.001
Urban Residence	2.2	1.80 – 2.70	<0.001	3.2	2.70 – 3.80	<0.001
Region (Eastern)	0.85	0.70 – 1.05	0.14	0.92	0.78 – 1.09	0.33
Region (Northern)	0.65	0.50 – 0.85	0.002	0.7	0.56 – 0.88	0.003

Reference categories: Agriculture sector, Male, No schooling, Household wealth lowest quintile, Rural, Central region, base year 2013.

Gender was statistically significant across sectoral outcomes. Female youth were less likely than males to work in industry (RRR = 0.75,  $p = 0.001$ ) and services (RRR = 0.85,  $p = 0.028$ ) relative to agriculture. Education had strong positive effects: secondary education increased the likelihood of employment in industry (RRR = 2.10,  $p < 0.001$ ) and services (RRR = 2.60,  $p < 0.001$ ), while tertiary education further raised these probabilities (industry: RRR = 3.80; services: RRR = 4.50, both  $p < 0.001$ ). Household wealth was also significant, with youth from the highest quintile more likely to work in industry (RRR = 2.50) and services (RRR = 2.90, both  $p < 0.001$ ). Urban residence strongly increased non-agricultural employment, particularly in services (RRR = 3.20,  $p < 0.001$ ). Regionally, Northern youth were less likely to work in industry (RRR = 0.65) and services (RRR = 0.70), while Eastern region effects were not significant.

#### 4.7 Summary of Empirical Results

The results presented above describe the distribution and determinants of youth employment in Uganda between 2013 and 2023. These findings provide the empirical basis for the discussion of policy and business implications presented in the next section.

### 5. DISCUSSION OF EMPIRICAL FINDINGS

This study examined the patterns and determinants of youth employment in Uganda between 2013 and 2023, with a particular focus on sectoral dynamics, gender disparities, regional inequalities, and the socio-economic drivers of employment outcomes. The empirical results presented in the previous section provide a robust statistical foundation for interpreting the structural characteristics of Uganda's labor market and their implications for business development and policy design.

#### 5.1 Persistence of Low-Productivity Employment and Limited Structural Transformation

The findings show that Uganda's youth employment remains concentrated in low-productivity sectors, especially agriculture and informal services. Although employment rates average about 70%, job quality is a major concern. Many youths are engaged in subsistence agriculture and informal activities that offer low incomes, limited productivity, and weak prospects for advancement. This pattern aligns with

structural transformation theory, which emphasizes the shift of labor from low- to high-productivity sectors. However, the modest decline in agricultural employment - from 58% to 50% over a decade - indicates slow and incomplete transformation. Growth in the services sector has not significantly improved job quality, as much of it is concentrated in informal activities such as petty trade, transport, and hospitality. These are characterized by low entry barriers, minimal capital requirements, and high vulnerability to shocks, which limit long-term economic progress. From a business perspective, this structure constrains growth. Firms in high-value sectors struggle to find skilled labor, while widespread informality weakens labor market development, reduces productivity, limits innovation, and undermines Uganda's competitiveness in regional and global markets.

#### 5.2 Industrial Underdevelopment and Constraints to Job Creation

The findings show that the industrial sector absorbed only a small share of youth labor, increasing modestly from 8% to 12% over the study period. While this reflects some progress, it remains inadequate given Uganda's rapidly growing youth population.

This limited expansion is linked to structural constraints, including poor infrastructure, high production costs, limited access to finance, and weak integration into global value chains (World Bank, 2022; AfDB, 2022). These barriers hinder the growth of labor-intensive manufacturing, which is typically a key driver of job creation in developing economies.

The results align with the concept of "premature deindustrialization" (Rodrik, 2016), where industrial growth stagnates before generating substantial employment. In Uganda, this contributes to persistent informality and restricts youth access to stable, higher-paying jobs.

From a business perspective, this presents both challenges and opportunities. Although the industrial base is limited, strategic investments in manufacturing, agro-processing, and light industry could significantly expand employment, supported by improved infrastructure, lower business costs, and stronger industrial policies.

### **5.3 Gender Inequalities and Labor Market Segmentation**

The analysis highlights persistent gender disparities in youth employment outcomes, with female youth significantly less likely to access wage employment and more likely to be concentrated in agriculture and informal services. These findings are consistent with previous studies that emphasize the role of structural and socio-cultural barriers in shaping women's labor market participation (Kabeer, 2016; Gaddis et al., 2020).

The Oaxaca–Blinder decomposition results further suggest that a portion of the gender gap cannot be fully explained by observable characteristics such as education and location, indicating the presence of structural inequalities and potential discrimination. This aligns with broader evidence from Sub-Saharan Africa, where gender norms, unequal access to resources, and labor market biases continue to limit women's economic participation.

From a theoretical standpoint, these findings reinforce the importance of integrating gender analysis into labor market studies. Gender disparities are not merely a social issue but have significant economic implications. By excluding a substantial portion of the workforce from productive employment, economies forego potential gains in productivity, innovation, and economic growth.

For businesses, gender inequality represents a missed opportunity to harness a broader talent pool. Firms that fail to adopt inclusive employment practices risk limiting their competitive advantage. Conversely, promoting gender equity in hiring, training, and leadership development can enhance organizational performance and contribute to more inclusive economic outcomes.

### **5.4 Regional Inequalities and Spatial Mismatch**

The analysis reveals persistent gender disparities in youth employment, with female youth less likely to access wage employment and more concentrated in agriculture and informal services. This reflects structural and socio-cultural barriers that shape women's labor market participation (Kabeer, 2016; Gaddis et al., 2020).

Oaxaca–Blinder decomposition results show that part of the gender gap remains unexplained by observable factors such as education and location, suggesting structural inequalities and possible discrimination. This is consistent with evidence across Sub-Saharan Africa, where gender norms, unequal resource access, and labor market biases constrain women's participation.

The findings highlight the need to integrate gender analysis into labor market studies. Gender inequality is not only a social concern but also an economic one, as it limits productivity, innovation, and growth.

For businesses, this represents a missed opportunity to tap into a wider talent pool. Firms that fail to adopt inclusive practices risk reduced competitiveness, while those promoting gender equity in hiring, training, and leadership can improve performance and support more inclusive economic outcomes.

### **5.5 Determinants of Youth Employment: The Central Role of Human Capital and Socio-Economic Factors**

The regression analysis shows that education is the strongest determinant of youth employment. Youth with secondary and tertiary education are significantly more likely to secure jobs, especially in higher-productivity sectors, supporting human capital theory (Becker, 1964).

However, these benefits are unevenly distributed. Access to quality education is influenced by socio-economic status and location, with youth from wealthier households more likely to attain higher education and enter formal employment, reinforcing inequality.

Urban residence also plays a key role, reflecting the concentration of opportunities in cities. While urban areas offer better employment prospects, they also present challenges such as high competition and living costs.

Overall, the findings highlight the interaction between education, income, and location in shaping employment outcomes. Addressing these factors is critical for policymakers and businesses seeking to improve labor market efficiency and promote inclusive growth.

## 5.6 Policy and Business Implications

The findings have important implications for policy and business strategy. First, accelerating structural transformation is essential through targeted industrial policies that support labor-intensive sectors. This includes investing in infrastructure, improving access to finance, and incentivizing private-sector growth.

Second, education and skills systems must be strengthened and aligned with labor market demands. Public-private partnerships can help bridge gaps by offering practical training, apprenticeships, and industry-relevant certifications.

Third, gender-responsive policies are critical to addressing persistent inequalities. These should promote equal access to education, enforce anti-discrimination laws, and support work-life balance through childcare and flexible work arrangements.

Fourth, regional strategies should reduce spatial disparities by investing in infrastructure, supporting local industries, and improving market access in underserved areas.

From a business perspective, firms need to prioritize workforce development through training and skills enhancement. Inclusive employment practices can expand the talent pool and boost performance.

Ultimately, effective collaboration between the public and private sectors is vital for sustainable job creation and economic transformation.

## 6. CONCLUSION AND RECOMMENDATIONS

### 6.1 Conclusion

The findings carry important implications for both policy and business strategy. First, accelerating structural transformation is critical, achieved through targeted industrial policies that promote labor-intensive sectors. This requires sustained investment in infrastructure, improved access to finance, and incentives to stimulate private-sector expansion and job creation.

Second, education and skills development systems must be strengthened and closely aligned with labor

market needs. Public-private partnerships are particularly important in bridging the gap between training and employment by providing apprenticeships, practical skills, and industry-relevant certifications.

Third, gender-responsive policies are essential for addressing persistent labor-market inequalities. Efforts should focus on ensuring equal access to education, enforcing anti-discrimination laws, and supporting work-life balance through childcare services and flexible work arrangements.

Fourth, regional development strategies should aim to reduce spatial disparities by investing in infrastructure, supporting local industries, and improving access to markets in underserved regions.

From a business perspective, firms must prioritize workforce development by investing in training and continuous skills upgrading to enhance productivity and competitiveness. Adopting inclusive employment practices can also expand the available talent pool and strengthen organizational performance.

Ultimately, achieving meaningful improvements in youth employment will depend on strong collaboration between public and private actors to create an enabling environment for job creation, inclusive growth, and sustainable economic transformation.

### 6.2 Recommendations

Based on the empirical findings and analysis, this study proposes a set of strategic recommendations to transform Uganda's youth employment landscape into a more inclusive, productive, and sustainable system. These recommendations are directed at policymakers, private-sector actors, and development partners.

#### 6.2.1 Accelerating Inclusive Industrialization

A central priority for Uganda is to accelerate structural transformation through inclusive industrialization. This requires targeted policies that promote labor-intensive industries capable of absorbing large numbers of youth. Investment in sectors such as agro-processing, light manufacturing, and value-added agriculture can

create pathways for youth to transition from subsistence activities into more productive employment.

To support this transformation, the government should strengthen industrial policy frameworks by improving infrastructure, reducing the cost of doing business, and expanding access to affordable financing for small and medium-sized enterprises (SMEs). The establishment of regional industrial parks with explicit youth employment targets can further enhance job creation, particularly in underserved regions.

### **6.2.2 Strengthening Education and Skills Development Systems**

The findings underscore the critical role of education in shaping employment outcomes. As such, there is a need to strengthen the alignment between education systems and labor market demands. This includes expanding access to secondary and tertiary education, particularly for disadvantaged groups, and enhancing the quality and relevance of vocational and technical training programs.

Public-private partnerships should be prioritized to bridge the gap between education and employment. Businesses can play a key role in designing curricula, providing apprenticeship opportunities, and supporting skills certification systems that reflect industry needs. In addition, integrating digital skills and entrepreneurship training into education programs can better prepare youth for emerging economic opportunities.

### **6.2.3 Promoting Gender-Responsive Labor Market Policies**

Addressing gender disparities in youth employment requires targeted and sustained interventions. Policymakers should implement gender-responsive labor market policies that promote equal access to education, training, and employment opportunities for young women.

This includes enforcing anti-discrimination legislation, supporting women's participation in non-traditional sectors, and addressing structural barriers such as unpaid care responsibilities. Investment in affordable childcare services and the

promotion of flexible work arrangements can significantly enhance women's labor market participation.

For businesses, adopting gender-inclusive practices - such as equitable hiring, mentorship programs, and leadership development initiatives - can improve organizational performance while contributing to broader social and economic goals.

### **6.2.4 Reducing Regional Inequalities and Expanding Economic Opportunities**

The study highlights the need for geographically targeted interventions to address regional disparities in youth employment. Policymakers should prioritize infrastructure development, including transport, energy, and digital connectivity, in underserved regions such as Northern and Eastern Uganda.

In addition, establishing regional skills development centers and youth entrepreneurship hubs can help stimulate local economic activity and create employment opportunities closer to where youth reside. Strengthening market linkages between rural producers and urban consumers can further enhance economic integration and reduce spatial inequalities.

### **6.2.5 Enhancing Labor Market Data Systems and Evidence-Based Policy**

Effective policy design requires reliable and timely data. Strengthening labor market data systems is therefore essential for monitoring youth employment trends and evaluating the impact of interventions.

The Uganda Bureau of Statistics should be supported to expand the frequency and scope of labor force surveys, with greater emphasis on disaggregated data by gender, region, and sector. The development of digital data platforms can improve accessibility and enable real-time analysis for policymakers, researchers, and businesses.

### **6.2.6 Supporting Youth Entrepreneurship and Private Sector Development**

Given the limited capacity of the formal sector to absorb all job seekers, youth entrepreneurship represents an important pathway for employment

creation. Policies should focus on creating an enabling environment for youth-led enterprises by improving access to finance, reducing regulatory barriers, and providing mentorship and business development services.

Targeted support for female and rural entrepreneurs is particularly important to address existing inequalities. In addition, fostering innovation ecosystems - through incubators, accelerators, and technology hubs - can enhance the scalability and sustainability of youth enterprises.

From a business perspective, partnerships with youth entrepreneurs can also create new value chains, expand markets, and drive innovation across sectors.

### 6.3 Synthesis and Way Forward

Uganda stands at a critical point in its development, with one of the world's youngest populations offering strong potential for economic growth. However, realizing this potential requires deliberate efforts to address structural constraints limiting youth employment.

This study shows that improving youth employment is not just about increasing the number of jobs but also about enhancing the quality, accessibility, and inclusiveness of opportunities. Achieving this will require sustained collaboration among government, the private sector, and development partners, supported by evidence-based policies and strategic investments.

If effectively implemented, these recommendations can help build a more inclusive and resilient labor market aligned with Uganda's long-term development goals. By linking youth employment strategies to broader economic transformation, Uganda can turn its demographic challenge into a strategic advantage, promoting sustainable growth, social stability, and stronger business competitiveness.

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