Sociodemographic Determinants and Types of Employment in Tanzania: Evidence from Integrated Labour Force Survey Data

Dr. Jaha Mulema, PhD

1 Muslim University of Morogoro, P. O. Box 1031 Morogoro, Tanzania.

* Correspondence ORCID ID: https://orcid.org/0000-0002-4162-6611; Email: jahamulema@mum.ac.tz

ABSTRACT

This study scrutinises the link between sociodemographic factors and types of employment in Tanzania, leveraging data from the 2020-2021 Integrated Labour Force Survey collected by the Tanzania National Bureau of Statistics. Age, gender, education, and geographical area (rural or urban) are analysed for their influence on employment outcomes. The Integrated Labour Force Survey dataset, offering a national representative sample, forms the foundation for this research, facilitating a comprehensive investigation of employment types and sociodemographic characteristics. Two analytical techniques are employed – cross-tabulation analysis and the Chi-Square test of independence – allowing for exploring employment distribution across sociodemographic categories and the significance of the observed relationships. A key finding is the predominance of self-employment across all education levels, ages, gender and regions, with a subtle rise in wage employment correlating with higher education. Rural areas predominantly rely on self-employment, indicating their economic reliance on agriculture and small businesses. Urban areas show increased wage employment, indicating a wider array of job opportunities. Gender disparities are evident, with self-employment slightly more common among men while women engage more in unpaid work, reflecting traditional gender roles. Age-related analysis reveals a tendency for self-employment to increase, suggesting older individuals shift towards entrepreneurship, while unpaid work is more common among the younger population. Although the study design identifies associations, not causality, it offers more profound insights into the intricate relationship between sociodemographic characteristics and employment types in the Tanzanian context. This research enriches our understanding of Tanzania’s employment landscape, underlining the importance of sociodemographic determinants in shaping types of employment in the population.

APA CITATION

INTRODUCTION

Employment dynamics in developing countries, particularly in Sub-Saharan Africa, have been a subject of immense interest for policymakers and researchers due to their implications for economic growth, income distribution, and poverty reduction. Tanzania offers a unique context to study these dynamics as a developing country due to its vast sociodemographic diversity and labour market characteristics (World Bank, 2021). This research paper examines the sociodemographic determinants and type of employment in Tanzania using Integrated Labour Force Survey (ILFS) data.

The literature provides ample evidence that sociodemographic characteristics, such as age, gender, educational attainment, and place of residence, significantly influence employment outcomes (African Development Bank, 2018; Kinyondo & Pelizzo, 2015). Studies on Tanzanian employment patterns indicate a strong correlation between these sociodemographic variables and the types of employment individuals engage in, be it wage employment, self-employment, casual labour, or unpaid family work (Kweka & Fox, 2011; Ndyali, 2016). Nevertheless, a gap persists in the comprehensive understanding of these dynamics, particularly considering the country’s transitioning economic structure and the burgeoning youth population (Tanzania National Bureau of Statistics, 2020).

The study of sociodemographic determinants and employment type is further necessitated by the need to design better-targeted policy interventions that promote decent work and sustainable economic growth in line with the United Nations’ Sustainable Development Goals (SDGs) (United Nations, 2015). Evidence-based policymaking can be significantly informed by the nuances of sociodemographic dynamics in the labour market, contributing to inclusive growth and reduced inequalities (International Labour Organization, 2019).

This paper builds on prior work by utilising more recent Integrated Labour Force Survey data to explore how sociodemographic factors in Tanzania determine the types of employment, filling the identified knowledge gap and providing relevant policy recommendations. This research aims to contribute to a richer understanding of the interplay between sociodemographic characteristics and employment type in Tanzania. This dynamic is crucial for implementing effective labour market policies and development strategies.

MATERIALS AND METHODS

The research employs data from the 2020-2021 Integrated Labour Force Survey of Tanzania, a nationally representative dataset containing detailed information on employment patterns and sociodemographic characteristics such as age, gender, education, marital status and place of
These sociodemographic variables serve as independent variables, while the dependent variable is types of employment, categorised into employed, self-employment, and unpaid family work as defined by the Integrated Labour Force Survey.

A combination of cross-tabulation analysis and the Chi-Square test of independence was used to analyse the relationship between sociodemographic determinants and employment types. Cross-tabulation enabled the observation of the distribution of employment types across different categories of each sociodemographic factor. At the same time, Chi-Square tests were performed to determine the statistical significance of the observed relationships. All analyses were conducted using IBM SPSS Statistics. It is pertinent to mention that the research findings demonstrate associations rather than causality due to the study design.

**RESULTS**

This section presents the analysis of the results of demographic factors which influences the type of employment. Data in Table 1 presents the results of the relationship between educational level and type of employment. The researcher categorised the type of employment into three broad categories: employed, self-employed and unpaid work. Among those who have never attended any educational institution, the majority are self-employed (75.3%). Only a small fraction (8.3%) are employed, while a significant portion (16.4%) are doing unpaid work. For individuals who have only primary education, self-employment remains the dominant employment type (65.6%), but a higher percentage of people (12.4%) are employed compared to those who never attended any school. Unpaid work also increases to 22.0%.

As the education level increases to the secondary level, the researcher sees a similar trend with a slight increase in employment (15.2%) and a decrease in self-employment (59.7%). However, unpaid work jumps to its highest at 25.1% in this category. There is a considerable increase in the employed percentage for those with vocational training (21.0%), although the majority still remain self-employed (63.6%). Interestingly, the percentage doing unpaid work decreases to 15.4%, which is the lowest among all categories, suggesting vocational training might lead to more secure and paid work. Regarding tertiary non-university and university, the trend for these two categories is similar. The employment rate hovers around 20% (20.0% and 19.8%, respectively), and self-employment remains the dominant form of work (63.9% and 63.1%, respectively). Unpaid work is slightly lower than it is at the secondary level but higher than vocational training.

<table>
<thead>
<tr>
<th>Education Level</th>
<th>Type of Employment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed (%)</td>
<td>Self-Employed (%)</td>
</tr>
<tr>
<td>Never Attended</td>
<td>8.3</td>
<td>75.3</td>
</tr>
<tr>
<td>Primary</td>
<td>12.4</td>
<td>65.6</td>
</tr>
<tr>
<td>Secondary</td>
<td>15.2</td>
<td>59.7</td>
</tr>
<tr>
<td>Vocational Training</td>
<td>21.0</td>
<td>63.6</td>
</tr>
<tr>
<td>Tertiary Non-University</td>
<td>20.0</td>
<td>63.9</td>
</tr>
<tr>
<td>University</td>
<td>19.8</td>
<td>63.1</td>
</tr>
</tbody>
</table>

Overall, the data suggest that as education level increases, there is a modest increase in employment and a corresponding decrease in self-employment. However, self-employment remains the dominant form of work across all educational levels. Unpaid work percentage varies across educational levels, with the lowest rate observed among those who received vocational training. Analysis of the Chi-Square test indicates that the relationship between
education level and type of employment is statistically significant ($p=0.000$).

The study explored the relationship between geographical area (urban or rural) and the type of employment. Data in Table 2 provides a snapshot of the relationship between the type of geographical area and the type of employment individuals are engaged in – either employed, self-employed, or doing unpaid work. For individuals living in rural areas, the majority are self-employed (67.9%). The rate of employment is comparatively lower (11.0%), while a significant percentage (21.2%) are involved in unpaid work. In contrast, in urban areas, while self-employment still constitutes the majority (62.8%), the rate of employment is noticeably higher (15.6%) compared to rural areas. Interestingly, the percentage of unpaid work (21.6%) is slightly higher than in rural areas. Analysis of data by using the chi-square test indicates the relationship between geographical area and type of employment is statistically significant ($p=0.000$).

Table 2: Relationship between Geographical Area and Type of Employment

<table>
<thead>
<tr>
<th>Geographical Area</th>
<th>Type of Employment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed (%)</td>
<td>Self-Employed (%)</td>
</tr>
<tr>
<td>Rural</td>
<td>11.0</td>
<td>67.9</td>
</tr>
<tr>
<td>Urban</td>
<td>15.6</td>
<td>62.8</td>
</tr>
</tbody>
</table>

From the data, it can be inferred that self-employment is the most common form of work in both urban and rural areas, though it is more dominant in rural areas. This could be attributed to the nature of rural economies, which often rely more on agricultural activities and small businesses, sectors typically characterised by higher levels of self-employment. The employment rate is higher in urban areas, which might reflect the broader range of job opportunities in structured organisations available in such areas. The slightly higher rate of unpaid work in urban areas is intriguing. This could be linked to a higher prevalence of informal work or internships, volunteer work, or other forms of unpaid labour in urban areas, though further data would be required to confirm this.

With regard to the sex of respondents, data in Table 3 gives an overview of the relationship between sex (male and female) and the types of employment. The majority of males are self-employed (69.5%), with a smaller but significant proportion employed (16.6%) and a relatively smaller proportion engaged in unpaid work (13.9%). For females, while self-employment is also dominant (63.3%), the proportion of those employed is nearly half that of males (8.7%). Strikingly, a much higher proportion of females are involved in unpaid work (27.9%) compared to males. Analysis from the chi-square test indicates that sex and type of employment are statistically significant ($p=0.000$).

Table 3: Relationship between Sex and Type of Employment

<table>
<thead>
<tr>
<th>Sex</th>
<th>Type of Employment</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Employed (%)</td>
<td>Self-Employed (%)</td>
</tr>
<tr>
<td>Male</td>
<td>16.6</td>
<td>69.5</td>
</tr>
<tr>
<td>Female</td>
<td>8.7</td>
<td>63.3</td>
</tr>
</tbody>
</table>

From these observations, it can be inferred that self-employment is the dominant form of work for both males and females, although it is slightly more prevalent for males. This might suggest that entrepreneurship or informal labour markets are common forms of work for both sexes. The higher rate of employment for males might indicate that males have more access to formal employment.
opportunities, possibly due to societal or cultural factors. The most significant difference between the sexes lies in the percentage of those engaged in unpaid work, with females being involved at almost double the rate of males. This could be due to traditional gender roles that often place females in unpaid domestic and care work. This is an important trend to acknowledge as it relates to broader discussions around gender equity and economic empowerment.

Moreover, the researcher related the respondent’s age and type of employment. Data in Table 4 provides insights into the relationship between age and type of employment. First, in the age group, 15 – 24 years researcher found the lowest percentage of employment (11.1%), a majority involved in self-employment (61.2%), and the significant percentage engaged in unpaid work (27.6%). In the age group 25 – 35 years, they have a significant rise in the employed percentage (20.3%) and a slight increase in self-employment (61.8%) compared to the younger group. It has a noticeable decrease in the percentage involved in unpaid work (18.0%). The age group 36 – 64 years were characterised by a slight decrease in the percentage of those employed (19.1%) and a noticeable increase in self-employment (65.8%) compared to the previous age group. The percentage of unpaid work drops further to 15.0%. For those with 65+ years, the employment percentage drops significantly (7.6%), whereas self-employment skyrockets to (80.5%). The unpaid work percentage drops slightly further (11.9%). Analysis of the chi-square test showed that the relationship between age and type of employment is statistically significant (p=0.000).

Table 4: Relationship between Age and Type of Employment

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Employed (%)</th>
<th>Self-Employed (%)</th>
<th>Unpaid work (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>15 – 24</td>
<td>11.1</td>
<td>61.2</td>
<td>27.6</td>
<td>100.0</td>
</tr>
<tr>
<td>25 – 35</td>
<td>20.3</td>
<td>61.8</td>
<td>18.0</td>
<td>100.0</td>
</tr>
<tr>
<td>36 – 64</td>
<td>19.1</td>
<td>65.8</td>
<td>15.0</td>
<td>100.0</td>
</tr>
<tr>
<td>65+</td>
<td>7.6</td>
<td>80.5</td>
<td>11.9</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on these data, self-employment is the most common form of work across all age groups. However, the percentage increases as the age group increases, which indicates that older people are more likely to run their own businesses or continue in existing businesses. Employment percentages increase from the youngest age group to the 25 – 35 years age group, reflecting the transition from education to employment. However, the employment percentage decreases in the older age groups due to retirement. The percentage of individuals engaged in unpaid work is highest in the youngest age group, which could be due to internships, traineeships, or other forms of unpaid work common among younger people. The percentage decreases as the age group increases, possibly reflecting a transition to paid work.

Furthermore, data in Table 5 gives a view into the relationship between marital status – categorised as Single, Married, Cohabit, Widowed, Divorced, and Separated – and the type of employment. The single category shows the lowest percentage of those employed (7.3%), a majority involved in self-employment (67.2%), and the significant percentage engaged in unpaid work (25.6%). Regarding the married category, the researcher observed a significant increase in employment percentage (17.5%) and a slight decrease in self-employment (64.4%) compared to singles. It also has a noticeable decrease in the percentage of those engaged in unpaid work (18.0%). For cohabit group, there is a slight increase in employment (18.1%) and a similar decrease in self-employment (64.2%) compared to the married category. The percentage of unpaid work dips slightly further (17.6%).

408 | This work is licensed under a Creative Commons Attribution 4.0 International License
Concerning the widowed category, the employment percentage is relatively lower (9.8%), and self-employment is the highest among all groups (73.6%). The percentage of unpaid work is on the lower end (16.6%). The divorced group have a significant increase in employment (17.6%) and a small decrease in self-employment (64.8%) compared to the widowed group. The unpaid work percentage rises slightly (17.6%). The separated group has similar employment (16.8%) and self-employment (64.6%) to the divorced group. The percentage of unpaid work increases slightly (18.6%). Analysis of the chi-square test showed that the relationship between marital status and type of employment is statistically significant ($p=0.000$).

### Table 5: Relationship between Marital Status and Type of Employment

<table>
<thead>
<tr>
<th>Age Group</th>
<th>Employed (%)</th>
<th>Self-Employed (%)</th>
<th>Unpaid work (%)</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Single</td>
<td>7.3</td>
<td>67.2</td>
<td>25.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Married</td>
<td>17.5</td>
<td>64.4</td>
<td>18.0</td>
<td>100.0</td>
</tr>
<tr>
<td>Cohabit</td>
<td>18.1</td>
<td>64.2</td>
<td>17.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Widowed</td>
<td>9.8</td>
<td>73.6</td>
<td>16.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Divorced</td>
<td>17.6</td>
<td>64.8</td>
<td>17.6</td>
<td>100.0</td>
</tr>
<tr>
<td>Separated</td>
<td>16.8</td>
<td>64.6</td>
<td>18.6</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Based on the above results, self-employment is the most common form of work across all marital statuses, although the percentage varies slightly. The percentage of those employed increases significantly for individuals who are married, cohabiting, divorced, or separated compared to those who are single or widowed, which could reflect the financial responsibilities or stability that come with these statuses. The percentage of individuals engaged in unpaid work is highest among single people, and it decreases for those who are married or in similar relationships, possibly reflecting a transition to paid work.

**DISCUSSION**

The presented results echo several trends outlined in previous studies concerning sociodemographic determinants and types of employment. Regarding educational level and types of employment results of this study indicates that self-employment is the most common form of work across all educational levels. This aligns with a study by van der Sluis et al. (2008) which found a significant relationship between lower educational levels and higher rates of self-employment, often due to limited access to formal employment opportunities. The gradual increase in employment rates with higher education levels, as seen in the data, is backed by prior research. For instance, a study by Chevalier and Lindley (2009) suggests a positive correlation between educational attainment and employment prospects. Higher education often equips individuals with qualifications making them more attractive to employers.

The relationship between vocational training and employment found in this study aligns with prior research. For example, a study by Hanushek et al. (2011) suggested that vocational training, due to its focus on practical skills, often results in a higher employability rate when compared to general education. Furthermore, the study suggests the difference in unpaid work across educational levels is a reflection of various socioeconomic and cultural factors. For instance, a study by Budig and Folbre (2004) suggested that lower education levels might be associated with higher levels of unpaid work due to socioeconomic constraints or cultural norms.

Interestingly, the data indicates that university education does not significantly raise the rate of employment compared to tertiary non-university or vocational training. A study by McGuinness and
Sloane (2011) similarly noted this trend, which could be due to the saturation of degree-holders in the job market, a mismatch between university-taught skills and employer demands, or economic conditions favouring self-employment.

With regard to the relationship between geographical location (urban or rural) and type of employment, the result of this study with the significant prevalence of self-employment in rural areas is consistent with previous research. Studies like those by Reardon et al. (2001) and Rijkers and Costa (2012) found that self-employment, especially in agricultural activities and small businesses, tends to be more prevalent in rural areas. These sectors typically have higher levels of self-employment due to the nature of rural economies. In contrast, the study indicates a higher rate of employment in urban areas. This observation aligns with research by Glaeser and Resseger (2010), who found that urban areas typically have more diverse employment opportunities, especially in structured organisations, due to higher economic activity and concentration of businesses.

The slightly higher percentage of unpaid work in urban areas is an interesting observation. This reflects patterns suggested by research by Dube and Ruiters (2003), who pointed out that urban areas may have more informal work, internships, or volunteer activities, which often fall under the unpaid work category.

In the context of the relationship between sex and type of employment, the results of this study illustrate that self-employment is dominant for both males and females, slightly more so for males. This echoes findings in a study by Leung (2006), which suggests that entrepreneurship or informal labour markets are common forms of work across both sexes. The higher rate of employment among males could potentially be attributed to greater access to formal employment opportunities, as suggested by Klasen and Pieters (2015), which propose societal or cultural factors as contributing to this trend. Also, the data points to a substantially higher rate of females involved in unpaid work. This corresponds to findings in research like Budig and England (2001) and Folbre (2014), which recognise that traditional gender roles often allocate unpaid domestic and care work to females, thus contributing to the gender disparities in unpaid work.

With respect to the relationship between age and employment type, the lower employment and higher unpaid work rates observed in the younger age group (15-24 years) align with a study by Bell and Blanchflower (2010) which suggests that younger individuals are often in transitional phases of their lives – moving from education to work. Therefore, they are more likely to engage in internships, traineeships, or other forms of unpaid work while seeking permanent employment. The increasing self-employment and decreasing unpaid work rates observed in the middle age group (25-64 years) could be linked to the stabilisation of careers. Individuals may have accumulated enough experience or resources to start their own businesses. Also, as pointed out by Burke et al. (2002), the decision to switch from salaried employment to self-employment often happens during these years. The significant increase in self-employment and decrease in employment in the older age group (65+ years) align with research by Zissimopoulos and Karoly (2007), which suggests that many older individuals transition into self-employment as they move beyond traditional retirement age, possibly due to flexible work arrangements or income supplementation needs.

In respect of the relationship between marital status and type of employment, the lower rate of employment and the higher rate of unpaid work aligns with research by Hofferth (2006), which suggests that single individuals, who are often younger, might be more engaged in transitional phases of their lives or might be pursuing educational opportunities, leading to lower employment and higher unpaid work rates. With regard to married and cohabiting Individuals, the
result of this study showing higher employment and lower unpaid work rates in these categories might reflect the financial responsibilities that come with these marital statuses. This aligns with a study by Schoeni (1995), which suggests that marriage or cohabitation often brings about a shift towards increased economic responsibility, leading to higher employment. With reference to widowed individuals, the high rate of self-employment observed in this group might reflect the necessity of maintaining income following the loss of a partner, as suggested by Coile (2016). As regard divorced and separated Individuals, the rise in employment rates among these groups could be due to the increased financial pressure following a separation, as noted in the research by Wilmoth and Koso (2002).

CONCLUSION

This research offers enlightening perspectives on the correlation between sociodemographic factors and employment forms in Tanzania. Its findings underscore the prevalence of self-employment across all educational backgrounds and regions, stressing the relevance of entrepreneurship and the informal labour sector within the Tanzanian framework. The role of education is deemed significant, with higher educational attainment linked to increased employment rates. Yet, the prevalence of self-employment across these higher education levels is noteworthy. Observations of gender discrepancies reveal a higher proportion of unpaid work among females, thereby accentuating the necessity for initiatives focused on gender equality and economic empowerment. Furthermore, the study brings attention to the fluctuations in employment trends based on age and marital status. These variations further indicate the intricate dynamics of employment in Tanzania and reinforce the importance of considering these sociodemographic factors when formulating policies and initiatives. Consequently, this research is vital for understanding the complex interplay between socio-demographics and employment types in Tanzania.

Recommendations

Based on the findings of this study, policymakers in Tanzania are recommended to design targeted policy interventions that address the challenges and opportunities identified in the relationship between sociodemographic factors and type of employment. This includes improving access to formal employment opportunities for individuals with lower educational levels, enhancing vocational training programmes to enhance employability, promoting gender equality and economic empowerment, implementing regional development strategies to stimulate rural and urban employment opportunities, conducting longitudinal studies to understand long-term impacts, and fostering collaboration and knowledge sharing between researchers and policymakers for evidence-based decision-making. These actions will promote inclusive growth, reduce inequalities, and achieve sustainable economic development in Tanzania.

ACKNOWLEDGEMENTS

I want to express my profound appreciation to the Tanzania National Bureau of Statistics for providing access to the Integrated Labour Force Survey data. Their continuous efforts to collect and maintain extensive, high-quality data on employment and sociodemographic characteristics have made this research possible.

REFERENCES


412 | This work is licensed under a Creative Commons Attribution 4.0 International License


