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ORIGINAL SCIENTIFIC PAPER

The Role of Migration in Women Entrepreneurship and Empowerment: Evidence from Nigeria



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ABSTRACT

The research examines the relationship between the migration of men and the empowerment of women who remain in the households. The study looks at Nigeria – a Sub-Saharan African country with the highest migration outflows and prevalent gender inequality. The core research question is to examine whether the migration of men affects the entrepreneurship and empowerment of Nigerian women. For the purpose of this study, private entrepreneurship will state the employment status of women from both migrant and non-migrant households while the amount of housework and degree of decision-making power will constitute empowerment. The data is obtained from Nigerian General Household Survey 2018-2019. The sample used in the current analysis consists of 12,199 women, 15 years and older. The Ordinary Least Squares model is applied to assess the changes men's migration might bring to the housework of women who remain in the household. Logit regression addresses the entrepreneurship and decision-making power of women in Nigeria. Probit regression serves as a robustness check for Logit, and as a separate econometric model. The findings generally support the pre-experiment

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expectations: migration of men decreases the amount of housework of women in Nigeria, encourages them to run businesses, but reduces their decision-making power

KEY WORDS: *migration, entrepreneurship, women empowerment, gender and development, household decision-making, development economics, Nigeria*

Introduction

Given equal standing with men in the business world, women entrepreneurs would have brought 12 trillion dollars into the global economy (McKinsey Global Institute, 2015). Women entrepreneurship is a well-known and worldwide accepted driver of human and economic development. Women-run enterprises are as successful as businesses owned by men (Zenger & Folkman, 2019). Not only does it empower women themselves, but it also stimulates sufficient improvements in the economy and society. More established enterprises mean the creation of new jobs, enhanced access to resources, building of social capital, and efficiency in the supply-demand chain. Moreover, women entrepreneurs diversify the business activities in rural areas and bring interest to key sub-sectors of the economy, which should further benefit society (Mukhopadhyay & Mukhopadhyay, 2018). What requires further studying is which social factors may affect them and also how significant the changes will be.

Most research devoted to the association between migration and women working and empowerment emphasises the impact of men's absence on housework, wage-paid employment, and the decision-making power of women remaining in the household (Desai & Banerji, 2008). The main goal of the study is to analyse whether coming from migrant families affects the prevalence of women business owners and their bargaining power within a household.

This research focuses on Nigeria – a country in the Sub-Saharan African region. According to Pew Research Center, Ethiopia, Ghana, Kenya, and Nigeria contribute to more than half of emigrants to the USA. Nigeria is a leader among them in terms of migration outflow, with 280,000 migrants in 2017. At the same time, Nigeria remains at the top of countries-origins of emigrants to Europe: 390,000 emigrants in 2017 (Pew Research Center, 2018). With these numbers, remittance inflow constituted 22 billion USD, which is equivalent to 5.9% of GDP in 2017 (World Bank, no date). Furthermore, 74% of Nigerian adults want to leave their motherland, and

out of them, every fifth intend to migrate. On the other hand, Nigeria is a country with a prevalence of gender inequality. High male segregation in the private sector and significant stagnation for women's human development dominate in Nigerian society due to patriarchal norms (Makama, 2013).

The research question of this paper is to analyse and evaluate whether the migration of men affects the entrepreneurship and empowerment of women in Nigeria? The first specific objective is to examine if migration lifts the housework burden on women who are left in the household. The second objective is to test whether migration influences the tendency of women who remain in the household to run private businesses. The last objective of the research is to analyse the association between men's migration and women's decision-making power. In the case of this research, housework is denoted as part of women's empowerment – the more time women spend on housekeeping, the less they have the power to advocate their interests in their households.

Migration and Household Standards

The most common factor driving migration is earning more income for the family, consequently, the standard of living and the wealth of households improve. A household can afford to spend more money and change its usual consumption bundles (Ahmed, 2020). Migration benefits the financial position of migrant households – they are more income advantageous than their non-migrant counterparts (Sikder & Higgins, 2016). Moreover, migration may have a positive long-term impact on the welfare of future generations. Migrant families allocate less share of their income to consumption and more to other expenses. Migration and remittances help fight malnutrition and child mortality (Azizi, 2018).

Migration brings changes not only to the wealth of the household but also deviates from its living. Migration affects the internal structure and relations of the household. When a person migrates to another location, his household labour responsibilities are reallocated among the remaining members. House repair work, ripping of firewood, and other labour that requires physical inputs, generally refer to men. When men leave the household, they leave responsibilities at home. The remaining members are required to add these tasks to their existing duties (Hanson, 2007).

Another change migration may bring to the household is its involvement in a local business environment. Remittance received from a

migrant member can serve as a source of extra capital. The household can use this money as an investment for self-employment and setting up businesses. Particularly, operating small and medium enterprises (SMEs) positively respond to migration and remittance inflows (Woodruff & Zenteno, 2007).

Women Entrepreneurship

A study by Mukhopadhyay (2020), that reviews the impact of women entrepreneurs in the renewables industry and how solar energy-based micro enterprises transform rural lives, also argues that entrepreneurial initiatives led by women in rural societies are not only actively engaging in complex business decision making processes but also making, servicing, marketing, installing and selling smart technologies. It is important to recognise the business acumen as well as the technical competence of women entrepreneurs in rural societies in developing countries. It is a well-known fact that the development of the private sector is a vital part of the development of the economy as it stimulates competitiveness in the market. Competitiveness guarantees technological advancements in production and management, creating new jobs, and ensuring fair prices. It is increasingly noticeable that women engage in many various activities apart from housework, particularly private entrepreneurship (Brush & Cooper, 2012). The number of businesses established and run by women continues to increase. Recent researches paid keen attention to women-owned micro enterprises (Mukhopadhyay & Ianole, 2021). Essentially, what challenges they overcome while running their businesses, and what benefits they bring to households, society and the economy. In addition, it is important to recognise the role of a quality educational system that enhances the prospects for women to become entrepreneurs (Radovic-Markovic et al., 2012).

De Vita, Mari and Poggesi (2014) find women entrepreneurship as a key driver of the progress of developing countries. Not only does women entrepreneurship significantly improve the economic and social environment of the nation, but it also addresses the gender gap in employment. According to the authors' findings, the proportion of male and female workers in women-owned enterprises are equivalent. Moreover, women entrepreneurship significantly promotes positive shifts in gross domestic product, financial and social inclusion, and poverty reduction

(Sajuyigbe & Fadeyibi, 2017). However, women still face obstacles in achieving access to various facilities that can help them successfully operate in the private sector. government and microfinance organizations must pay special attention to assisting women in establishing businesses (Sajuyigbe & Fadeyibi, 2017; Mukhopadhyay, 2020).

The development and support for women's business activities result in solving regional disparity (Ezeibe et al., 2013). Rural areas specialise in the agriculture sector, and rural businesses commonly focus on agriculture and livestock. Studies evidence that the promotion of women entrepreneurship stimulates the diversification of business specialisations. It improves the rural private sector capabilities. Diversification in enterprises requires different knowledge and skills. With an increasing number of businesses, more people would be involved in financial and social activities, stimulating rural employment along with technological and capital advancements.

Women entrepreneurship brings a set of social benefits as well. When a woman earns money, she is more likely to efficiently allocate money to health and education for other household members (Orser, Riding & Manley, 2006). Women entrepreneurship significantly benefits children's development. Some sceptics argue that women owning a business may jeopardise child care and household sustainability. Schindehutte, Morris and Brennan (2003) prove otherwise. Not only do women adequately balance the time and efforts on both business and child care, but they also significantly impact household wealth and child schooling. With more money at hand, the household can afford higher expenses on the child's health and education. At the same time, some studies propose some suggestions about the positive impact of women entrepreneurship on the schooling attainment of children with business-women mothers (Schindehutte et al., 2003).

Women Empowerment and Migration

Several experts have conducted econometric research to identify whether men's labour migration affects women's decision-making power. Some of them have found a positive association between men's migration and women's empowerment. In a nuclear family, without a male head of the household, women act as the apparent head and decide on the usage of remittances and other sources of income. Women do not necessarily remain powerless in the absence of their husbands and oblige in-laws, which puts

an additional burden of housework on them. There is no additional workload for women since women do all the housework themselves. Men's preferences take priority in women's housework: at what time the husband wants to eat breakfast, by what time the house should be cleaned, etc. In the absence of men, women solely decide how to allocate their work time based on their utility, which could be a sign of empowerment (Datta & Mishra, 2011).

Women from migrant families may have higher bargaining power compared to their counterparts from non-migrant ones. Men tend to control the social life and interactions of women. For example, women in Bangladesh need permission from their husbands to visit their maternal family and friends. Migrant wives are 20% more likely to engage in social life freely than women who belong to non-migrant families (Fakir & Abedin, 2020). Integrating into society broadens the common knowledge of women about their opportunities apart from domestic duties. Women from migrant households also have higher access to financial institutions services, like bank deposits (Fakir & Abedin, 2020).

Migration may not have such a clear positive effect on local households and their women in some cases. Migration can be internal – moving to another city in the motherland, or international when a person leaves for a foreign country. International migration may improve women's decision-making power; domestic migration may not affect it (de Haas & van Rooij, 2010). Domestic migration allows men to have control over the household and women's activities; since they have not moved too far from the family. There also exists some possibility of mental distress and severe uncertainty for women who remain in the household (Jetley, 1987).

The migration of men, in some probability, can stimulate the decision-making power of women in case they come from small families, but likewise, increase the burden of domestic responsibilities. A small family implies that few members can control women, like a mother/father-in-law. For example, in-laws can share housing and childcare responsibilities. Women from large households may not experience any significant changes in living conditions, working and decision-making power (Desai & Banerji, 2008).

Methodology

This research wants to evaluate the existence and nature of the relationship between migration and women's employment and empowerment in Nigeria. To narrow down the definition of employment, the research will focus on the entrepreneurship of women in Nigeria. To accomplish the objectives of the research, I specify the respective hypotheses.

The research attempts to test the following hypotheses:

H₁: women from migrant households engage in less housework than women from non-migrant ones in hours per week

H₂: women from migrant households engage more in private business than women from non-migrant households

H₃: women from migrant households have more power in deciding on expenditures than women from non-migrant families

Model and Variables: Definition

The general econometric equation for these three models represents the theoretical concept behind the relationship between male labour migration and women employment:

$$Y_{ih} = \alpha_0 + \alpha_1 * M_{ih} + \alpha_2 * H_i + \alpha_3 * W_{ih} + \alpha_4 * U_{ih} + \varepsilon_{ih} \quad (1)$$

Y_{ih} is the variable of interest. It describes the employment and decision-making status of women i from household h . There are three variables used as Y_{ih} to evaluate the employment and family position type of women in Nigeria (see Appendix 1 and 2). M_{ih} is the main explanatory variable and presents if a woman comes from a household, where at least one member has been abroad for employment and spent at least 6 months. H_i is a vector of household characteristics. W_{ih} is a vector of individual characteristics of woman i . U_{ih} is a community-level factor, a place of residence. ε_{ih} states for a residual term. The tests for the correctness of model specification and endogeneity are presented as well.

Model and Variables: Econometric Identification and Checks

The developed equation and models will be addressed in two different econometric approaches. Model 1 applies the dependent variable –

housework. Since housework is a total sum of hours women spend on various domestic responsibilities, the variable is continuous. The continuous variables require the implementation of the Ordinary Least Square method (Acosta, 2011). The dependent variable of Model 3 is binary, representing the degree of decision-making power of women. Binary variables of interest should be addressed with Logit regression (Desai & Banerji, 2008).

Model 2 is one of the first approaches to defining migration and entrepreneurship of women. There is still a lack of research on this topic, which could have further clarified the econometric approach. In the current study, Model 2 will implement the logit method as Model 3, since the dependent variable is also binary and the set of explanatory variables remains the same.

The robustness is one of the main indicators of an appropriate econometric model. It informs about the stability of the model in predicting the studied relationship. The research will address Probit regression as a robustness check (Chib & Greenberg, 1998). If variables are extracted correctly and the model is accurately specified, then Probit findings will be similar to the results of Logit. Additionally, Probit will serve as another econometric model itself for Model 2 and Model 3.

The final step in modelling migration's impact on entrepreneurship and women's empowerment would be specific econometric tests. They should signal the correctness of the model, the presence of multicollinearity, and endogeneity.

Data and Summary

NGHS 2018-2019 and Research Dataset

Nigerian General Household Survey 2018-2019, Panel 4 is a component of the LSMS program aimed at analysing the quality of living and socio-economic conditions of Nigerian households. To conduct the NGHS survey, the LSMS executive group, with support from the Nigerian Bureau of Statistics, has chosen 4976 representative households from 6 regional zones – 1,573 households from urban regions and 3,403 households from rural areas. The current research focuses on the relationship between migration and women entrepreneurship and empowerment. The dependent and explanatory variables represent women, household, and community levels. Thus, individual characteristics, household rooster, working status, and migration dataset have been extracted from the initial NGHS 2018-

2019. The datasets have been merged by key identification indicators, rather than appended; hence, the panel element should not deviate from the models.

Descriptive Statistics

Table 1: Summary statistics

Dependent variables		All women	Women-heads	Women-spouses	Women-member
Number of hours spent on housework per week	Mean	12.29	10.22	8.78	8.54
Own business	Portion	45.04%	40.44%	48.37%	50.96%
Decide on expenses	Portion	10.33%	18.82%	9.96%	9.29%
Independent variables:					
Migrant family	Portion	16.67%	12.95%	6.65%	11.29%
Remittance receiving	Portion	1.20%	6.08%	1.24%	1.23%
Age	Mean	36.75	56.40	38.15	26.86
Primary education	Portion	12.69%	28.59%	21.95%	12.44%
Secondary education	Portion	23.00%	17.83%	26.02%	58.22%
Higher education	Portion	2.13%	2.69%	2.23%	5.30%
Region (urban)	Portion	30.57%	34.56%	27.38%	33.10%

Source: NGHS 2018-2019

Findings and Analysis

As mentioned in the methodology, the research focuses on 3 subcategories: entrepreneurship representing women employment, housework, and decision-making index stating for empowerment. The results will be discussed in the following order: 1) analyzing the findings on household responsibilities of women from migrant and non-migrant families; 2) explaining the outcomes of men's migration and women entrepreneurship; 3) interpreting the results of the analysis on the decision-making power of women from migrant and non-migrant households.

Migration and the Time Spent on Household Chores by Women

Since housework is denoted in the total number of hours spent on different daily chores, thus being continuous, Model 1 applies OLS as the regression estimate method.

Appendix 3 shows the key findings from Model 1 of migration and housework of women in Nigeria. Due to some missing values in the dataset, out of a total of 12,199 women, only 7,877 are eligible for the regression analysis. R-squared states that the implemented model and set of independent variables account for 0.5% of deviation in the number of hours spent on chores. The main independent variable of identifying women from migrant and non-migrant households supports the proponents of migration as a stimulator for women empowerment.

Model 1 satisfies the pre-experiment Hypothesis 1 and corresponding findings from literature: migration degrades women's housework. Women in Nigeria from migrant households spend less time on household responsibilities than women from non-migrant families. Women originating from migrant households spend 85% less time on housework than women from non-migrant houses. Migration especially benefits women if they are the head of the household. Women-heads have more than two times less housework than female heads of non-migrant families. If a woman is a spouse, men's migration does not affect her house workload significantly. Though, wives in migrant households still spend 17% less time doing chores than their peers from non-migrant families. The same effect migration has on other female members of the household. Daughters, nieces, sisters, etc. from migrant households have 80% less time on housework.

Some other regressors show an expected discouraging effect on the domestic workload of women as well. Receiving remittances negatively impacts the housework of women in Nigeria. Overall, receiving monetary and in-kind support from abroad allows women from migrant families to do almost three times fewer chores than women from non-migrant houses. Women-heads prosper from remittance transfers the most. Remittances reduce the hours women-heads spend on housework by four times. Not least is the impact of remittances on the spouse of the house. Wives devote almost four times less time to housework if they receive assistance from abroad. On the other hand, remittances do not significantly serve women if they are any other members of the household.

Age remains a significant factor in the domestic responsibilities of women in Nigeria. The older a woman becomes, the more time she spends on housekeeping. Generally, each additional year of age increases the number of hours doing housework by 3%. Increasing age discourages domestic responsibilities only if a woman is the head of the household. Though, the effect is insufficient. However, growing older puts an extra

housework burden on women-spouses, though insufficiently, by less than 1%. Furthermore, age significantly increases the number of hours for housekeeping if a woman is some other member – not head or spouse. Other female members of the family spend 3% more time on chores when growing in age.

In contrast to previous research on women's employment and empowerment, education does not play a significant role in lifting the housework burden on women in Nigeria. Education has a definite negative impact on the number of hours spent on domestic responsibilities. On average, women with at least primary or secondary education spend 50% less time doing chores. The decrease is by 30% if the woman is the spouse of the head. The magnitude of this effect is even higher for women-heads and other female members of the family – more than 80% fall in hours of housekeeping. Despite education's clear discouraging effect on women's housework burdens in Nigeria, it is still insignificant.

Regional identity has a significant negative effect on the time women in Nigeria devote to domestic responsibilities. Urban women spend 87% less time on chores than rural women. Further sufficient impact urban location has if women are spouses and other female relatives. Urban wives and other members do chores 1.16 and 1.1 times less than their peers from rural areas. The only advantage rural women have is if they are the head of the household. In this case, rural women spend fewer hours on housework than urban female heads.

Migration and Women Entrepreneurship

Model 2 describes the relationship between migration and women entrepreneurship, and uses binary variable *business* to represent whether the participant owns any private business. With binary dependent variables, the preferable model would be Logit.

Appendix 4 presents the results of estimating the association between migration and women entrepreneurship in Nigeria. The number of observations in Model 2 remains the same for all women samples and its other subsets as in the case of the housework model. R-squared describes that independent variables can imply 0.5% of the variation in women's business ownership. The main independent variable representing the entrepreneurship status of women in Nigeria from migrant and non-migrant households supports the main idea of the research. Migration encourages women entrepreneurship.

Model 2 confirms the righteousness of Hypothesis 2 and the author's predictions: migration of men stimulates business ownership of women. Women in Nigeria from migrant families are more prompt to own and run private businesses than women from non-migrant households. Migrant-household women are 16% more likely to be entrepreneurs than women from non-migrant families. Women-heads of migrant families are almost 11% more likely to own a business than their fellows from other households.

At the same time, women-spouses are only 2% more probable to become a business person. However, while coefficients are relatively high, the effect of migration on the entrepreneurship of Nigerian female heads and spouses remains insignificant. Migration benefits women most significantly if they are some other household members – not head or spouse. Other females from migrant families have a 38% higher chance of owning businesses than those from non-migrant families.

Remittances positively affect the private entrepreneurship of women in Nigeria. For all women from migrant families, receiving monetary and in-kind assistance from abroad helps operate their businesses. Women receiving remittances are about 9% more likely to become entrepreneurs than women from non-migrant households. Female household heads in Nigeria prosper from remittance transfers in particular. Remittances increase the probability of women-heads owning a business by almost 25%. On the other hand, remittances negatively impact the likelihood of entering the private sector if a woman is a spouse. Spouses who receive monetary and in-kind support from migrant members are 15% less likely to own and run enterprises. The most noticeable impact of remittances is on females who are not heads and wives of the household. The coefficients measuring the effect of remittances are high enough but insignificant while estimating women entrepreneurship.

Age is negatively related to women entrepreneurship. The older woman becomes less likely to own any private business. Each additional year of age reduces the likelihood of owning and running the business by 0.3%. Growing older enhances the commitment of private business only if a woman is not the head nor the wife in the household. Though, the effect is sufficient for women entrepreneurship only in general; and insignificant for women's diversified status.

Education has a mixed association with a tendency to own private businesses. In general, having at least a primary level of education increases

the likelihood of entering the private sector by almost 33%. The magnitude of the impact is even higher for women-spouses. They are 37% more likely to own their businesses. Primary education has a notably keen impact if we look at women being heads of their households. Primary-level educated women-heads have a 62.5% more chance of owning a business. Secondary education shows the same positive effect on the entrepreneurship of women in Nigeria. For women, in general, it is a positive 26% likelihood; 81% and 36% for women-heads and women-spouses respectively. However, none of the educational levels significantly impact other females in the household. What contradicts the initial Hypothesis 2 is that higher education is negatively associated with women entrepreneurship. Having a bachelor's, master's, or PhD degree reduces the probability of running a business by 16% for women in general; by 50%, 22%, and 6.5% for female heads, spouses, and other female members, respectively.

The location of the household significantly benefits women entrepreneurship. Urban women have a 66% more chance to start up their businesses than rural ones do. At the same time, particularly female heads of the households and spouses are 65% and 59% more likely to own private businesses if they come from urban areas. The highest advantages have other female members of the household coming from urban regions. They have 79% more chances to be entrepreneurs.

The probit model is implemented for an additional check of the estimation. Since probit applies probabilities in estimating regression results, it should show similar accurate results (Chib & Greenberg, 1998). As the methodology explained, if probit findings correspond to logit results, then the model is used correctly. Since the above tables show the same signs of coefficients and significance levels, thus probit agrees with logit, Model 2 and variables are specified correctly (see Appendix 5).

Migration and the Decision-Making Power of Women

Model 3 analyses the association between migration and women's decision-making power from migrant and non-migrant households. Model 3 applies the same number of observations as Model 1 and Model 2. Binary dependent variable necessitates implementing Logit model.

Appendix 6 shows the findings of Model 3 estimating the relationship between migration and the decision-making power of women in Nigeria. R-squared states that the implemented model and set of independent variables account for 0.5% of deviation in women's bargaining power. The main

independent variable of identifying women from migrant and non-migrant households supports the opponents of migration as a driving force of women empowerment.

Model 3 does not uphold the pre-experiment Hypothesis 3: men's migration deteriorates women's decision-making power. Women in Nigeria from migrant households have less power in deciding on household expenditures than women from non-migrant families. Women from migrant households are almost 15% less likely to solely decide on the expenses than women from non-migrant houses. Migration especially disrupts the bargaining position of women if they are the spouses in the household. The absence of men reduces their bargaining power by 31%. Women-heads of migrant households also have less power over family expenditure decisions.

The positive effect of migration is realised by other female household members. Daughters, mothers, sisters, etc. of the head of migrant households are 17.8% more likely to participate in deciding income spending. However, migration insignificantly affects the decision-making power of women in Nigeria.

Some other regressors also show the unexpected discouraging effect on women's bargaining power. Receiving remittances negatively impacts the decision-making of Nigerian women from migrant households. Overall, receiving monetary and in-kind support from abroad increases the likelihood of women from migrant families deciding on how to spend income by 1.6%. In contrast, when dividing the sample into status categories, remittances reduce the likelihood of women-heads, spouses, and other female members deciding on household expenditures. On the other hand, remittances do not significantly impact women's decision-making power.

Age remains a significant stimulating factor for the empowerment of women in Nigeria. The older a woman becomes, the more chances she has to decide how to spend the household's wealth. Generally, each additional year of age increases the number of hours doing housework by 1.13%. Increasing age empowers a woman if she is the head of the household. Though, the effect is insufficient. However, growing older deduces the decision-making power of women-spouses, though insufficiently, by less than 1%. Other female members of the family also benefit from growing older.

Education plays a significant role in lifting the household bargaining power of women in Nigeria. There is a definite positive impact of education on the chances of women to participate in deciding expenditures. On

average, women with primary education are 26% more likely to make decisions on family spending. The empowerment is 27% for women-heads, but the effect is insignificant. The sufficient increase in decision-making power is by 23% if the woman is a spouse of the head. There is no sufficient empowerment for other female members of the family due to being primary-educated.

Women with at least a secondary level of education have an even higher likelihood of having a voice in deciding how to spend their income. It is 34% for women in general and 51% for wives. Higher education remains insignificant in empowering women, though the effect is positive. For other female members of the family, all levels of education are negligible.

Regional identity is a significant factor in measuring the empowerment of women in Nigeria. Urban women have almost 36% more chances to decide on income spending than rural women. At the same time, urban female heads of the households are 37% more likely to allocate family wealth. The greatest impact that urban location has on other female members – mothers and sisters, for example. There is a 56% more probability they can decide on expenditures.

The probit model, as an additional check of the estimation, shows the same signs of coefficients and significance levels (see Appendix 7). Probit supports the results of logit, Model 3, and variables are specified correctly.

Discussion

The findings of the research generally met the expectations the author had in the pre-experiment stage: migration lifts the housework burden on women in Nigeria and encourages them to own private businesses. The same nature of impact has to receive remittances. Additionally, urban identity benefits women in all models. On the other hand, some variables showed an unexpected effect on housework, entrepreneurship, and women's bargaining power.

First, none of the educational variables has a significant impact on the time women spend in housekeeping in Model 1. One possible reason could be that Nigeria is a relatively conservative country when it comes to household relations. Women are still considered housekeepers and manage most of the domestic responsibilities. Even for those who are educated, women remain the one who cooks, clean the house, and do other housework

chores. In a limited number of cases, highly-educated women spend less time on housework. However, on such a large scale of 7877, the importance of education may lose its value.

The second impact is shown by the age variable in Model 2. It states that a woman has less chance to own a business entity when she grows older. This effect may have resulted from the changes in household structure. When a woman is young, she may have enough time, strength, and motivation to realise herself as an entrepreneur. As time passes, she marries and eventually has children. She has to dedicate a lot of her time looking after her husband and kids as the family grows with time. It requires a lot more time when she has sons since boys do not share housework. When sons become adults and start earning money for the family, initially, women entrepreneurs may quit their businesses or transfer the ownership to their sons.

Finally, Model 3 did not prove the righteousness of the respective hypothesis. The migration does not necessarily stimulate the decision-making power of women in Nigeria. The effect is the opposite – women from migrant households have less power in deciding the usage of income compared to women from non-migrant families. This is an unexpected outcome of the research. Though migration encourages women in Nigeria to spend less time on domestic responsibilities and be entrepreneurs, there may still be some social obstacles to realising their potential. Nigeria is a Sub-Saharan African country with a high prevalence of gender inequality. Even if a woman generates the income for the household, men and older members of the household have more voice in allocating the wealth. We can see that the highest negative coefficient is for women-spouses.

Conclusion

There is still no clear implication whether the migration of men benefits women who reside in the household or burdens them. Some experts state that women who remain in the household freely decide the allocation of their time on domestic tasks, social participation, and employment. In the absence of men, women de-facto take the lead role in household relations. At the same time, they may receive remittances and decide on using the same. Others claim that the absence of men may harm women in many ways. Women from migrant families take on the responsibilities of migrants, with less assistance from other household members, and a lack of

psychological support and security. The paper focuses on the relationship between migration and private entrepreneurship, and the empowerment of women in Nigeria. The methodology specifies the position of women within the household: whether they are head of the family themselves, spouses, or any other female relatives. Thus, this specification allows a more in-depth analysis of women living based on their status. Migration discourages the housework of women; more importantly, it motivates them to become entrepreneurs and generally limits their decision-making power.

Future Study

When researching households and human development, mixed-method comes to great use. The quantitative method can numerically prove the existence and nature of a particular relationship. On the other hand, the qualitative approach may help answer questions about in-depth household relations and living standards. The current research implies only a quantitative analysis in estimating the impact of migration on women entrepreneurship and empowerment in Nigeria. The scope of the study allowed the use of secondary data of NGHS only. It supports two out of three pre-experiment hypotheses. Migration eases the domestic responsibilities of sample women and encourages them to enter the private sector. Future research could address the following questions: Why is education insignificant in decreasing the amount of time that women in Nigeria spend on housework? Is it due to patriarchal relations within the family? Why do women from migrant households experience a limit on their decision-making power after their men leave? Do they feel a lack of support that their husbands provided? A qualitative approach may help in finding answers to these questions more accurately.

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Appendices

Appendix 1.

VARIABLES AND DEFINITIONS	
	Definition
<u>Model 1</u>	
<i>housework</i>	The sum of hours per week woman spends on unpaid housework tasks: $\Sigma(\text{cooking}; \text{cleaning}; \text{childcare}; \text{repairment}; \text{housing})$
<u>Model 2</u>	
<i>business</i>	1 = woman owns private business 0 = woman does not own private business
<u>Model 3</u>	
<i>decisind</i>	0 = woman cannot decide how much money to spend solely 1 = woman can decide on the usage of money independently
Independent variables:	
<i>migrant</i>	1 = woman is from migrant household 0 = woman is not from migrant household
<i>remitt</i>	1 = received remittances in the past 12 months 0 = have not received remittances in the past 12 months
<i>age</i>	The age of woman
<i>edu1</i>	1 = woman has primary level of education 0 = woman does not have primary level of education
<i>edu2</i>	1 = woman has secondary level of education 0 = woman does not have secondary level of education
<i>edu3</i>	1 = woman has higher level of education 0 = woman does not have higher level of education
<i>region</i>	1 = woman belongs to urban household 0 = woman belongs to rural household

Appendix 2.

VARIABLES AND EXPECTATIONS	
	Expectation
<u>Model 1</u>	
<i>Housework</i>	total number of hours spent on cleaning, cooking, taking care of children, and other domestic responsibilities
<u>Model 2</u>	
<i>business</i>	private business ownership
<u>Model 3</u>	
<i>decisind</i>	power to decide on household expenses
<u>Independent variables:</u>	
<i>migrant</i>	Main explanatory variable in all three models. The research examines whether the employment and household position of women from migrant households differs from that of women who belong to non-migrant households. <i>migrant</i> is expected to have a negative effect on the number of hours spent on housekeeping, and positive on private entrepreneurship and decision-making power of women.
<i>remitt</i>	Remittances include monetary and in-kind assistance from abroad. Logically, if there is an additional source of income for the household, it should ease budget constraints. Thus, receiving remittance may allow women to have more financial freedom. Remittances are expected to alleviate the housekeeping responsibilities of women. At the same time, extra support may stimulate women to run businesses and participate in deciding family expenses.
<i>age</i>	The younger women, being daughters and daughters-in-law, may have more housework, and have a lower position within the household. As women get older, they tend to share chores with their daughters and have more rights in decision-making on day-to-day needs. I expect age to increase the amount of housework for women, while also discouraging business and stimulating decision-making power.
<i>edu1</i>	Theoretically, educated women have higher chances to get paid jobs, and become income-generators along with their husbands. It should negatively impact housework, and stimulate paid work. Educated women have higher chances to be involved in the decision-making process of allocating household wealth. Education should discourage housework, and enhance the entrepreneurship and decision-making power of women.
<i>edu2</i>	
<i>edu3</i>	

region Rural areas have more land for agriculture and livestock. Thus, rural women may have more housework than women from urban households. Households from rural areas may also have a quite conservative domestic regime, where both younger and older women follow the decisions of men. Urban identity may have a discouraging effect on housework and stimulating one on entrepreneurship and decision-making rights of women.

Appendix 3.

MODEL 1	HOUSEWORK			
	All women	Women-head	Women-spouse	Women-member
Migrant family	-0.849* (0.496)	-2.235* (1.151)	-0.178 (0.811)	-0.803 (0.744)
Remittance receiving	-2.945*** (1.054)	-4.039** (1.619)	-3.759** (1.792)	-0.846 (2.152)
Age	0.0271*** (0.00925)	-0.0128 (0.0285)	0.00135 (0.0168)	0.0318* (0.0166)
Primary education	-0.512 (0.388)	-0.434 (0.921)	-0.581 (0.508)	-0.668 (0.860)
Secondary education	-0.550 (0.361)	-1.714 (1.196)	-0.227 (0.502)	-0.869 (0.678)
Higher education	-0.398 (0.828)	-2.440 (2.488)	0.473 (1.374)	-0.926 (1.186)
Region	-0.872*** (0.318)	0.870 (0.824)	-1.158** (0.467)	-1.306** (0.510)
Constant	8.592*** (0.453)	11.67*** (1.872)	9.281*** (0.699)	8.855*** (0.872)
Observations	7,877	1,004	4,269	2,604
R-squared	0.005	0.014	0.003	0.008

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Appendix 4.

BUSINESS				
MODEL 2	All women	Women-head	Women-spouse	Women-member
Migrant family	0.156* (0.0805)	0.106 (0.198)	0.0209 (0.128)	0.379*** (0.127)
Remittance receiving	0.0888 (0.172)	0.248 (0.276)	-0.147 (0.283)	0.486 (0.378)
Age	-0.00298** (0.00151)	-0.000477 (0.00495)	-0.000155 (0.00265)	0.00236 (0.00283)
Primary education	0.328*** (0.0629)	0.625*** (0.157)	0.371*** (0.0797)	0.139 (0.146)
Secondary education	0.286*** (0.0585)	0.809*** (0.203)	0.358*** (0.0788)	0.105 (0.116)
Higher education	-0.264* (0.135)	-0.787 (0.490)	-0.531** (0.222)	-0.120 (0.203)
Region	0.660*** (0.0519)	0.651*** (0.140)	0.596*** (0.0740)	0.798*** (0.0881)
Constant	-0.335*** (0.0738)	-0.939*** (0.326)	-0.385*** (0.110)	-0.406*** (0.149)
Observations	7,877	1,004	4,269	2,604
R-squared	0.005	0.014	0.003	0.008

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Appendix 5.

BUSINESS				
MODEL 2	All women	Women-head	Women-spouse	Women-member
Migrant family	0.0975* (0.0502)	0.0672 (0.122)	0.0136 (0.0795)	0.237*** (0.0792)
Remittance receiving	0.0546 (0.106)	0.156 (0.168)	-0.0926 (0.176)	0.302 (0.233)
Age	-0.00186** (0.000939)	-0.000278 (0.00305)	-9.11e-05 (0.00165)	0.00147 (0.00176)
Primary education	0.205*** (0.0392)	0.385*** (0.0970)	0.231*** (0.0498)	0.0871 (0.0911)
Secondary education	0.179*** (0.0365)	0.501*** (0.126)	0.224*** (0.0492)	0.0654 (0.0719)
Higher education	-0.163* (0.0839)	-0.491* (0.290)	-0.330** (0.137)	-0.0730 (0.125)
Region	0.412*** (0.0322)	0.405*** (0.0868)	0.372*** (0.0460)	0.498*** (0.0545)
Constant	-0.209*** (0.0459)	-0.582*** (0.201)	-0.240*** (0.0686)	-0.253*** (0.0925)
Observations	7,877	1,004	4,269	2,604
R-squared	0.005	0.014	0.003	0.008

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Appendix 6.

DECISION-MAKING				
MODEL 3	All women	Women-head	Women-spouse	Women-member
Migrant family	-0.148 (0.132)	-0.251 (0.261)	-0.317 (0.238)	0.178 (0.207)
Remittance receiving	0.0158 (0.253)	-0.138 (0.349)	-0.120 (0.477)	-0.00914 (0.619)
Age	0.0113*** (0.00233)	0.00222 (0.00605)	-0.00320 (0.00450)	0.00759 (0.00470)
Primary education	0.264*** (0.0995)	0.271 (0.193)	0.234* (0.136)	0.254 (0.250)
Secondary education	0.343*** (0.0951)	0.282 (0.248)	0.511*** (0.125)	0.185 (0.204)
Higher education	0.0193 (0.221)	-0.552 (0.641)	0.214 (0.350)	0.00398 (0.345)
Region	0.357*** (0.0780)	0.372** (0.169)	0.174 (0.116)	0.563*** (0.141)
Constant	-2.818*** (0.123)	-1.809*** (0.401)	-2.323*** (0.187)	-2.861*** (0.265)
Observations	7,877	1,004	4,269	2,604
R-squared	0.005	0.014	0.003	0.008

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

Appendix 7.

DECISION-MAKING				
MODEL 3	All women	Women- head	Women- spouse	Women- member
Migrant family	-0.0729 (0.0677)	-0.142 (0.144)	-0.151 (0.116)	0.0893 (0.107)
Remittance receiving	0.0200 (0.134)	-0.0658 (0.194)	-0.0709 (0.244)	-0.0253 (0.321)
Age	0.00578*** (0.00122)	0.00130 (0.00343)	-0.00167 (0.00224)	0.00394 (0.00243)
Primary education	0.135*** (0.0518)	0.155 (0.109)	0.116* (0.0689)	0.129 (0.127)
Secondary education	0.175*** (0.0489)	0.155 (0.142)	0.263*** (0.0649)	0.0967 (0.103)
Higher education	0.0104 (0.113)	-0.304 (0.337)	0.110 (0.180)	0.00146 (0.176)
Region	0.187*** (0.0412)	0.213** (0.0969)	0.0919 (0.0605)	0.288*** (0.0724)
Constant	-1.598*** (0.0626)	-1.082*** (0.227)	-1.343*** (0.0931)	-1.620*** (0.133)
Observations	7,877	1,004	4,269	2,604
R-squared	0.005	0.014	0.003	0.008

Standard errors in parentheses

*** p < 0.01, ** p < 0.05, * p < 0.1

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