Does Western Education Matter? Analysis of Wealth Index and Women Educational Attainment in Nigeria.

Abiola B A^{1,2}, Obokoh L.O.², Jaiyeola A. O.³

¹School of Economics, Faculty of Commerce, University of Cape Town, Cape Town, 8000, Cape Town, South Africa, E-mail:<abiola100417@gmail.com>

²Cost and Management Accounting Department, Faculty of Business & Management Sciences, Cape Peninsula University of Technology, Po Box 652, Cape Town, 8000, Cape Town, South Africa, E-mail: ²<obokohl@cput.ac.za>,

³Center of Development Studies, University of the Free State, Bloemfontein, 9301, Free State, South Africa, E-mail: ²<adesanya56@gmail.com>,

Corresponding Author: abiola100417@gmail.com; +27 727 886 166

Abstract

This study used the National Demographic and Health Survey 2013 data to provide empirical answer the question of the relevance of western education in Nigeria relative to ethnic-regional practices of almajiri in the light of women's educational attainment and wealth index in Nigeria. Women are the most vulnerable in the cultural practices in Nigeria as women's education in Sub-Saharan Africa is far below the world average. Nigeria was recently proclaimed the world capital of poverty because it is among one of the countries with the highest number of people living below poverty line in the world with a larger proportion of poor being women. Ordinary Least Square (OLS) and Ordered Probit Model were employed to analyse the data. The results revealed a significant effect of western education on women asset accumulation and the precaurious position of women resulting from lack of western education. This implies that higher attainment of western education increases the likelihood of being wealthy. The counterfactual effect of ethnic-regional practices of almajiri confirmed the disadvantage and backwardness of women staying in the region or coming from the ethnicity. This partly explains the likelihood of the differences in the level of development across the geopolitical zones and women welfare. Based on the findings the study recommends that policy maker should provide easy access to quality education, especially at both pre-primary and primary levels for all especially women. Also issues of graduate unemployment should be addressed as it reduces return from education.

Keywords: Wealth index, Women education attainment, Almajiri, Poverty, Nigeria.



1. Introduction

The National Demographic and Health Survey (NDHS) report that: Over one third of Nigerian women (35%) are abused by their husbands which often results in neglected children or refusal/denial of conjugal relationship by their husband as punishment for wrong-doing by their spouses. Nigeria's political space and government parastatals are full of unequal gender representation. According to (Sardinha & Catalan, 2018), women abuse or violence against women especially by their intimate partners is very prevalent in developing countries. In sub-Saharan African countries wife beating is sadly a societal acceptable norm.

Historically, many cultural groups in Nigeria do not believe in girl child education, coupled with the polygamous lifestyle of the majority of the populace. Also, (N. NPC & ICF, 2014) shows that one third of women who are currently married are in polygamous homes. This study specifically examines the effect of western education attainment on women wealth index (women poverty) in Nigeria.

Nigeria is the most populous African Country, with a population of over 180 million of which over 49% are women (Jaiyeola & Bayat, 2019). It was recently (N. NPC & ICF, 2014) reported that Nigeria has overtaken India as the world's most impoverished Country, where more than 87 million of the people are living in abject poverty (Adebayo, 2018; UNDP, 2016). One of the major challenges facing women in Nigeria is the financial burden associated with the number of children they have. Despite the decline in the growth rate of the world population, the Nigerian population growth rate remains one of the highest among sub-Saharan African countries. The growth rate of the population is greater than its current economic growth rate. It has been argued that a woman's educational pursuit keeps a check in birth rate, which then reduces the growth rate of the population (Bearak, Popinchalk, Alkema, & Sedgh, 2018; N. NPC & ICF, 2014; Starbird, Norton, & Marcus, 2016).

This examined two forms of education systems in Nigeria described as western education and Almajiri system of education which is predominantly practiced in the Northern part of the Nigeria as it relate to women education attainment. It also examined the relationship between wealth index and educational attainment among women in Nigeria considering the ethnicity, culture, and regional differences in the Country. The choice of wealth index is because of the global representation of the index and its wide use by researchers to measure the multidimensional poverty level and distribution of assets across populations.

2. Literature Review

This section reviews the concept and historical background of Almajiri system of education and its evolution in Nigeria as unofficial and culturally acceptable alternative to western education practiced in northern part of Nigeria. Also, the section summarise its integration with formal system of education known as western system of education (Boko). This discussion explains gender inequality which is illustrated in crises of women illiteracy, poverty and domestic violence prevalence in Nigeria. Moreso, regional development disparity was reviewed in line with wealth inequality, gender disparity and faith diversity in Nigeria. The section concludes with the analysis of regional disparity in primary school enrolment and women literacy.

2.1. Almajiri System of Education

The term Almajiri (singular) is derived from Arabic word 'Al-muhaajirun' which means someone who propages the peaceful course of Islam (Salifu, 2017). As practiced in Northern Nigeria, the Almajiri concept has outlived its purpose as such has become a breeding ground for child begging and potential terrorist camp in Nigeria (Chukwunka, 2018). Almajiri Education is an alternative education program in the northern region of Nigeria in which the Islamic school clerics bear the parental duties. In Hausa context the word "Almajiri" means someone who has migrated from home to look for Quranic Knowledge (Mashema, Idria, & Musa; Yushau, Tsafe, Babangida, & Lawal, 2013).

An approximate 8.5 million children attend Islamic schools in Northern Nigeria with a higher percentage of the schools characteristics of the Almajiri education system (Hoechner, 2014). The children who are meant to be trained to emarge as ulamas (Islamic cleric) have had to struggle to cater for themselves through begging rather than learning under the watch of Quranic teachers who themselves lack the necessary support, thereby using the system as a means of their livelihood (Faluyi, 2017). There are over 15 million destitutes in Nigeria which when compare to the population of Gambia, Togo and Liberia, is far more than the population of these countries (Omaamaka, 2020). More than half of the Nigeria's destitute population are mostly children who live in northern Nigeria. Over 7 million children that could have become Accountants, Economists, Engineers, Lawyers, Medical Doctors etc are wasted away. Obviously the Northerners and the parents of the Almajiris have abdicated their responsibilities of properly caring for and educating their children.

The Almajiris are mostly sent off from the rural areas by their ignorant parents between the ages of 6 – 12 to the cities without any provision under despicable condition to learn the Quran (Omaamaka, 2020). The Almajiris are seen in almost all cities in northern Nigeria. They appear on streets with cups and plates while dressed in rags, scavenging on food remnants (Gomment, & Esomchi, 2017). These children are involved in different types of work, they live under the bridges, motor parks, market stall etc. This make them vulnerable to different health, psychological and physical hazards (Abiodun, Onafowora, & Ayo-Adeyekun, 2019). The system of Almajiris in northern Nigeria has outlived it purpose which was to train the children to become learned ulamas and to become the touch bearers for Islam rather than breeding ground for miscrants, thugs and vagabonds in the society and now the major cause of poverty in northern Nigeria (Abiodun, Onafowora, & Ayo-Adeyekun, 2019). The problem of Almajiris in northern Nigeria has also been link to pourus border of Nigeria where Almajiris from neibouring countries such as Niger republic, Mali and Senegal move into northern Nigeria through the borders.

2.2. History of Almajiri System of Education

Trending down the memory lane, Northern Nigeria now known as Kanem and Borno was first introduced to Islam religion in 9th century primarily through trade and migration (Mashema et al.). While study shows that Almajiri started in the 11th century, when Islam was practiced by the Northern rulers. Seven centuries later, in 19th century an Islamic scholar Known as Usman da Fodio founded the Sokoto caliphate and broadened the cause of Islamic leaning (Mashema et al.). Research shows that prior to British arrival in Nigeria, almajiri children attended tsangayu to learn about Quran from home (Omeni, 2015). Since almajiri schools were close to students' home and provincial emir coordinated and funded the schools through revenue from state treasury, sadaqqah, sometimes students farm output, the community, and parents zakah controlled by local emirs.

Prior to the precolonial era alamajiri children were not beggers arguably due to sufficient funding for feeding and clothing. Thereafter, the British colonial era in 1904 formed the era of chaos for almajiri system as the British deposed most of the emirs and defunded the almajiri system (Omeni, 2015). Both teachers and students had no financial support and turn to alms begging and menial jobs for survival which eventually became the norm (Gomment & Esomchi, 2017; Taiwo, 2013). The British colonial government neither established formal schools nor advanced the existing institutions (Hoechner, 2014). As most western education (Boko) was conducted by Christian missionaries, but this education was arguably available to a small portion of Nigerians and since religion was the bases for the introduction of western education, that meant with more resistance with more of the children with less likelihood chance of being educated (Hoechner, 2014). Post-independence era came with Oil boom of 1970 which decreased the revenue from farming followed by Structural Adjustment Programme (SAP) in 1986 that aggravated the poverty situation of Nigerians and exacerbated almajiri system crises (Gomment & Esomchi, 2017).

The modern day Almjiri system of education is very common among uneducated and poor northerner and the characteristics of the system illustrate early enrolment at similar age a child supposed to be at formal education system. A student at Almajiri school focused on learning Quranic education fast. This becomes early desirable behaviour as these students visits Islamic religion rich elite and leader house to recite Quran and also leads prayer in the mosque. It is a common belief in Northerner Nigeria that the system of education teaches piousness to make them good people that benefits the society, therefore it was a desirable pro-social behaviour at the early stage (Yushau et al., 2013). The latter end of the system arguably produces unequipped populace for workforce, promotes youth poverty and youth delinquency. Their introduction to larger society in Nigeria presents them with another world where the only recognized system of education is formal school as a preparation to enter workforce. Therefore, they become readily available for gangs and Boko-haram recruitment (Hoechner, 2014; Omeni, 2015).

2.3. Challenges of the Integration of Almajiri System into Formal Educational System

Several attempt to both reform or formalized the almajiri system of education with more workforce with equipped structure has low or limited results as the maintenance of initial capital funding has always being the challenges (Mashema et al.; Yushau et al., 2013). Many argued that the porous nature of the borders make planning for almajiri system unsustainable as children migrated to Nigeria from neighbouring countries (Chad Republic, Niger and Sudan) to over flood the schools (Olaniran, 2018). It was that the Almajiri system pushes children to develop antisocial behaviour which make them psychologically act againt their hostile environment (Alao, 2017). Begging seems to have become a profession in the northern part of Nigeria as the cities are filled with beggers.

The prevalence of begging in northern Nigeria has resulted to the chronic poverty level in the region (Hoechner, H., 2018). Northern region of Nigeria has the highest poverty rate in the country which is endemic in the rural areas (Odusola, 2018). It is obvious that crime rate in Nigeria ranks high in northern Nigeria because of the effect on poverty, uneducated youths in the north and as resulted to increase in unemployment rate in the region (Chibuike, & Eme,

2019). Other obvious effect of poverty in the northern Nigeria are social relationship problem, insecurity, poor leadership, abuse of power, limited capabilities and disempowering institutions (Dumbili, & Nnanwube, 2019).

2.4. Formal Education

The formal education in Nigeria is publicly referred to as the western education (Boko). This system of education was described forbidden by one of the deadliest terrorist (Boko-Haram) group ravaging and causing the insecurity situation in Northern part of the Country for close to two decades (Mashema et al.; Olofinbiyi & Steyn, 2018). The western system of education is overseen by the Federal Ministry of Education through different regulatory bodies. Although, state government implement several control policies to coordinate and fund several state schools. The system of education is categorized as early-childhood education (Otherwise known as Kindergarten), followed by primary school education, then successful candidate moves to secondary education of which its graduate with good record from Secondary School Certificate in Education (SSCE) proceed to tertiary education (Abdullahi & Abdullah, 2014; Aminu, 1990).

The then president Goodluck Ebele Jonathan in 2012 declared the almjiri system very dangerous to national development and reemphasized the need to equip them with formal education (Ezegwu, Adedokun, & Ezegwu, 2017). Also, in 2015 there was reenergized movement of Universal Basic Education Commission (UBEC) with a laudable goals of providing Universal Basic Education to all almajiri children, to eliminate begging and to facilitate the integration of Islam studies and formal school teaching education (Ezegwu et al., 2017).

The figure 2 and 3, describes the regional differences in the primary enrolment, indicated by the percentage of total pupils of school age and women literacy rate across state. The map reveal huge disparity across the six region with wider gap between the south and northern part of the country.

2.5. Women Illiteracy, Poverty and Domestic Violent Crises in Nigeria

The current crisis in Nigeria that is affecting women and children does not only impact on the poverty level in the Country, but also affects future of the growing population. Nigeria's population demographics show that about 45% is below 15 years, while the changes in the number of children out of school age ranges from 10 million to 13.2 million between 2017 and 2018. More than 60% of the children that are out-of-school are female and mostly from the northern part of Nigeria (UNDP, 2016). The problem of out-of-school children in Nigeria, especially female children coupled with the insecurity challenges in the northern part of the Country, has assumed different dimensions in recent times under successive governments (Ezegwu et al., 2017).

According to (Psacharopoulos, 2014), about half of the Nigerian population aged 15 years and above are classified as illiterate, while an estimated 41 million adults are illiterate which impact negatively on the world's literacy league. Young people between the ages of 15-24 years are estimated to be 10 million out of the 41 million adult illiterates. Gender parity is another issue of concern in primary schools especially in Nigeria's northern states where females account for only one-third schools enrolments compared to other parts of the country where gender parity equally distributed between boys and girls. In the rural areas, about 50% of the women are illiterated against 14% of males in urban areas.

In the North, there is four times likelihood of a person or child not to be educated compared to the population in the South (Psacharopoulos, 2014). This raises the issue of the poor schooling quality that is prevalent in Nigeria's education system given that cognitive skills, are significantly associated with economic growth. This is because in their world cross-section study, found that a one standard deviation advantage in test scores is associated with a 2.6 percentage point's higher per capita income growth rate ((Hanushek & Woessmann, 2009). Some of the factors that contributes to poor quality of education are poor physical facilities, inadequate sanitation, lack of textbooks and the number of unqualified teachers. This is made worse by the high percentage of male teachers compared to their female counterparts in the

North, which has prompted many families to withdraw their girl children from school (Psacharopoulos, 2014).

2.6. Regional Inequality in Nigeria: Wealth, Gender and Faith

Regional disparity inevitably restricts incremental development in education in any part of the world where it occurs. The study of regional inequality in Nigeria and many developing regions is hardly complete without tracing the evolution of education to map out how the different regions responded to the introduction of Western education in the Country (Aluede, 2006; Onwuameze, 2013). As explained above the missionaries initiated the first formal Western education in Nigeria and were the major educational distributors in the colonial era and early post-colonization times. As a result, coastal areas in southern Nigeria and other parts of West Africa with more missionary settlements were given greater access to education than remotely located northern parts (Aguolu, 1979).

As a result of Nigeria 's rapid expansion of education, enrolment has increased for northern children, but evidence that northerners are still sceptical of Western education remains obvious and many attributes this as the main cause of North-South educational disparity. The Southern regions are more advantaged in education than the Northern regions in the Nigerian context and the source of this inequality is usually traced to cultural differences. Specific educational outcomes such as enrolment and achievement in schooling are defined by area in Nigeria. Some studies found the participation rates in western education in the Northern regions to be slightly lower than in the Southern regions (Lincove, 2009; Kazeem, Jensen, & Stokes, 2010). For example, (Lincove, 2009; Onwuameze, 2013) found that 65 percent of his sample included children from the poorest regions of the Northeast and Northwest, and over 90 percent of out-of-school children were also in both regions. Also, the concept of Christian children being more beneficial in education than Muslim children is also linked to the Nigerian region (Onwuameze, 2013). The Northern regions are predominantly Muslim, and many scholars

characterize their delay in education as resulting primarily from religious dogmatism, and then from poverty and cultural norms (Onwuameze, 2013).

This region-religion based inequality that began from the colonial era has persisted until now and continues to plague the Country's socio-economic structure. In an empirical study, it was found that children from Christian households are five times more likely to attend school than their Muslim household counterparts (Kazeem et al., 2010). Religion's influence on attendance also ranked second most important after influence on wealth. Lincove (2009) found in another study that muslims residing in the Northeast and Northwest have a significant negative association with attendance at school. Onwuameze (2013) indicated that Muslim children are the least likely to attend school, with an enrolment rate of 53.6 per cent. Interaction between the sexes and Islam was also stressed in the report (Onwuameze, 2013). Being a northerner in Nigeria and a girl significantly reduces the probability of attendance at school much more than being a boy. Gender and Socio-economic status are amongst other dimensions of regional inequality (Onwuameze, 2013).

Poverty in the Northern Nigeria and being female are related to low educational outcomes. Political and socioeconomic forces in Northern Nigeria are combining to work against towards advancing female education (Csapo, 1981; Niles, 1989; Onwuameze, 2013). The regional disparity represents both sex and gender, according to (Pittin, 1990). The author also described the impact of the British colonial educational system that required girls in the North to obtain domestic education (to avoid confrontation with Northern Muslims) as the reason why Northern Nigerian muslim girls are underprivileged in education. This Almajiri education system provided support for early marriages.

Many conservative northerners still believe strongly that the girls' education is "un-Islamic" (Csapo, 1981). Islamic girls are typically coerced into early marriages, and it is only the parents who determine whether they attend school or not. Ogunjuyigbe & Fadeyi (2002) and Onwuameze (2013) put forward the perspective that Islamic parents prefer their daughters to go to Islamic schools because it ensures the preservation of their religious values and helps

them perform their traditional roles. The study also stated that the lack of support for educating of girls at the household level included the belief that "female education ends in marriage" and is "believed to be destabilizing, as many trained women are now agitating for reform in traditional roles and decision-making processes" (p. 116). While several of these stratification studies conducted detailed analyses in developing countries, Onwuameze, (2013) concluded that their results were largely inconclusive due to the nature of the data used. Some of the studies used small samples of the study which lack geographic representations or use poor sampling techniques to appropriate policy inferences.

This study therefore make use of demographics and health survey to empirically investigate the importance of western education and to bring into limelight the contribution of education on women poverty disparity and wealth accumulation inequality across regional group. Other researchers in Nigeria using nationally representative data, such as (Kazeem et al., 2010; Lincove, 2009) analysed attendance and participation in the schooling while Onwuameze, (2013) analyse education inequality at literacy and achievement level.

This research fills the literature gap by utilizing nationally representative data to measure both wealth accumulation and poverty simultaneously using wealth index which is in line with global standard not only for global comparison but also to appraise regional or ethnicity differences. In order to draw appropriate inferences for policy framework to address gender inequality and women poverty. The wealth index compute as continuous variable and also as a categorical five quantile class variable will make data appropriate for methodological comparison. And a deep dive into the dynamics impact of education attainment on wealth index. These dynamics will show the importance of western education on wealth accumulation/poverty through counterfactual.

The counterfactual question posits: does western education matters for women wealth index/poverty? and does its higher attainment means better wealth. Does region early acceptance matter and if yes then does women staying in the region that accept alternatives better off or worse off in term of wealth accumulation? At what wealth index threshold does

education attainment become relevant and important or does it effectively contribute at all Spectron of wealth index or poverty. As many of these research questions begs for answers the role of empirical research prove imperatives.

NIGERIA





Figure 1: Map of Nigeria showing the study area

The NDHS data has a nationwide representative sample of 38,948 women for all represented households, in particular women of reproductive age between 15 to 49 years. The selected households were interviewed in 2013. The NDHS was able to achieve 98% response rate for women. The 2013 NDHS data sample provide estimates that cover all urban-rural areas, for all the six geopolitical zones, and all major ethnic and religious groups for each of the 36 states, including the Federal Capital Territory (FCT).

Figure 2: Map of Nigeria showing primary school enrollment of the study area

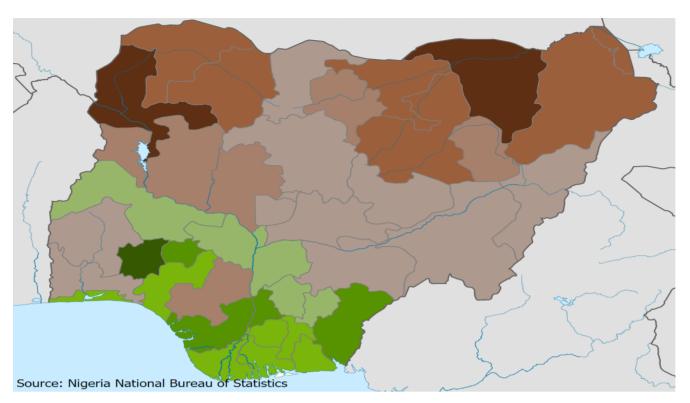
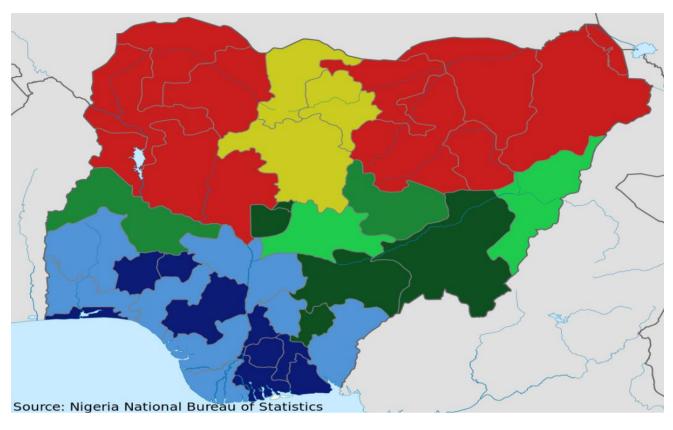




Figure 3: Map of Nigeria showing female literacy of the study area





3. Data and Descriptive Statistics

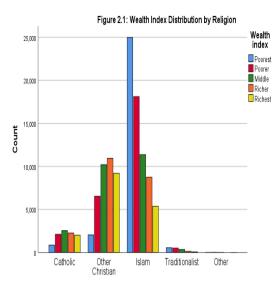
The survey data used in this study was sourced from Demographic and Health Survey (DHS) data of 2013. The first of its kind was conducted in 1990 during the military regime in Nigeria. However, since 1998, DHS data has been consistently conducted every five years with a wide range of variables ranging from household characteristics, health and demographic data to wealth. Nigeria Demographic and Health Survey 2013 (NPC, 2014) was conducted by the National Population Commission of Nigeria. The 2013 data fieldwork spans February to June 2013 and covers all men and women in the age range of 15 to 49 years. The national coverage

was said to be 100% representative of the population of Nigeria. The data size entails 38,522 households completed survey with 38,948 women's survey completed and 17,359 men's survey completed while 8,658 were married couples.

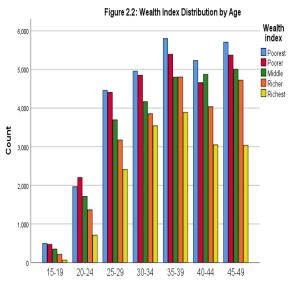
This research uses individual women's survey, given the historical antecedent in Nigeria where some regions do not allow female children to attend school because of the low value attached to girl-children education. Also, the women's survey data has pertinent variables that will assist to explain wealth index distribution in Nigeria. One variable of interest is wealth index, which was conducted using Principal Component Analysis (PCA) of all assets possessed by individuals, ranging from electrical appliances to goats, land, and others. The wealth index was computed for all respondents in two formats. The first ranked respondents into five categories; 5 for the richest, 4 for the rich, 3 for middle, 2 for the poorer, and 1 for the poorest. The second wealth index was classified into six decimal places and this forms a continuous variable.

Other variables of interest include educational attainment, classified as 'No primary school', 'Primary school', 'Secondary school', and 'Tertiary school'. The location was categorised as rural, and urban; four major religious groups; the six geopolitical zones known as regions; and nature of employment, among others.

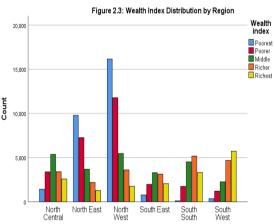
Stylised Facts about Wealth Index in Nigeria



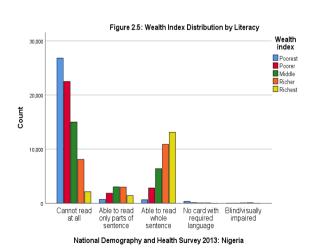
National Demography and Health Survey 2013: Nigeria

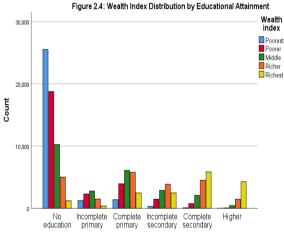


National Demography and Health Survey 2013: Nigeria

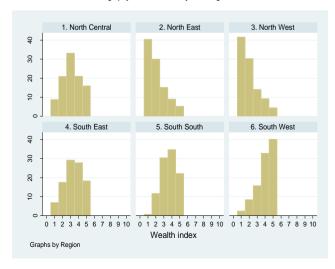


National Demography and Health Survey 2013: Nigeria





National Demography and Health Survey 2013: Nigeria



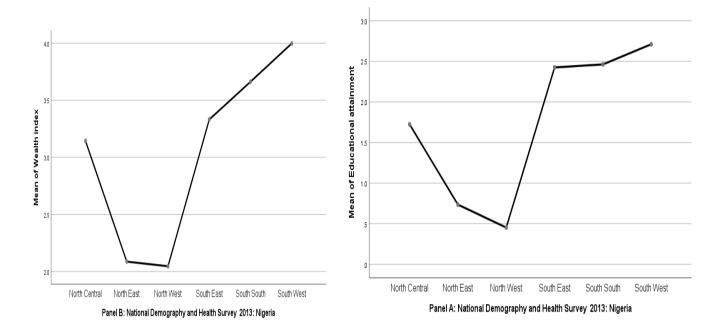


Figure 2.2 shows the distribution of wealth by age. The age distribution ranges between 15 to 49 years, thus underscoring the youth and adult as well as the strength of the economy. However, since the wealth index measures various assets individuals possess, there is a positive relationship between age and wealth index, as the stylised facts clearly indicate. The age range between 15 to 19 years is the poorest because they belong to the young schooling age and have not started acquiring assets.

3.1. Estimation Technique

• Multiple Linear Regression

$$y_i = \beta_0 + \beta_1 Hiedu + \beta_2 age + \beta_3 region + \beta_4 religion + \beta_5 location + \beta_6 Ethnicity$$

 $+ \beta_7 Employ + \varepsilon_i \dots (1)$

The analysis, with simple econometric models, investigates further the relationship between educational attainment and wealth index. Ordered Probit Model was used to ascertain whether educational attainment has a differential impact on women's wealth in different wealth quintiles. To derive the dependent variable Yi, sampled individuals were ranked into five categories of wealth assets recorded in the course of the survey: 1 = poorest, 2 = poorer, 3 = middle, 4 = richer and 5 = richest. We can think of the ranked wealth index in terms of

multidimensional poverty/assets measurement – that is, women in the lower quintiles are relatively poorer than women in higher quintiles. Algebraically, the comprehensive model can be written as follows:

$$y_i = \beta_0 + \beta_1 Hiedu + \beta_2 age + \beta_3 region + \beta_4 religion + \beta_5 location + \beta_6 Ethnicity + \beta_7 Employ + \varepsilon_i \dots (2)$$

where the explanatory variables in Eq. (1) are defined as follows: highest education completed (Hiedu); age of the women grouped into four categories ranging from 15 to 49 years (age); the six geopolitical regions in Nigeria (region); the religion of respondent (religion); the location of the respondent, which can be either rural or urban (location); major ethnic group (ethnicity) which includes: Hausa, Yoruba, Fulani, Igbo, Ijaw and others; employment type, which is categorised by all years, seasonal and occasional (employ). ε_i is the error term, which is assumed to be normally distributed with constant variance of one.

4. Results and Discussion

4.1. Multivariate Regressions Result

Multivariate regression was used to explain the relationship between wealth index and educational attainment in Nigeria. The result of regression 1 and 2 in Table 1, second column (2) indicates a regression with wealth index with six decimal places, which represents the standard Ordinary Least Square Method (OLS) since the wealth index generated from Principal Component Analysis (PCA) is a continuous variable. Although one of the major problems of OLS is heteroscedasticity, given the nature of the cross-section data, the result of Breusch-Pagan test of heteroscedasticity shows that we reject the null hypothesis of constant variance.

Since heteroscedasticity with OLS will make us lose efficiency of our standard error, the first column of Table 1 presents the robust standard error correction of the heteroscedasticity problem. Therefore, OLS can be interpreted with less likelihood of error. The multiple regression result presents a highly statistical significance and economic meaningful relationship between educational attainment and wealth index in Nigeria. The general

assumption of the higher the educational attainment of an individual, the easier it becomes for greater achievements was clearly visible in the regression result.

The regression result in Column 1 shows that a unit point increase in average 6 years between no schooling and primary school completion will have 0.315 point increase on wealth index on the average, ceteris paribus. It also shows 0.733 point jump above the same no school level, while there is 1.296 point likelihood increase for tertiary education completed in Nigeria. The result is also consistent with Ordered Probit Model and further gives additional marginal effect that wherever the quantile of wealth index, an educated individual has a higher likelihood of improved wealth as a measure of improved wellbeing.

The age variable was classified as groups of five years and it shows a positive significant effect on wealth index. The base age is 15-19 years. This age bracket is most likely to still be in school and largely dependent on their parents. This is because the older one becomes the more assets one possesses. This result is consistent with the stylised facts explained in figure 2.2, and (Hanushek & Woessmann, 2009) assertion that educational attainment has a positive correlation with economic development.

Table 1: The regression model Analysis

Table 1	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
VARIABLES	REGRB	REG	OPROBIT	OR_Rearest	OR_Reerer	OP_Middle	OR_Richer	OP_Richest
1.Primary	0.315***(0.0149)	0.328***(0.0126)	0.554***(0.0268)	-0.108***(0.0052)	-0.0445***(0.0029)	0.0170***(0.0013)	0.0635***(0.0037)	0.0728***(0.0036)
2.Secondary	0.733***(0.0166)	0.739***(0.0134)	1.235***(0.0302)	-0.189***(0.0045)	-0.1281***(0.0047)	-0.0069***(0.002)	0.1155***(0.0045)	0.2086***(0.0054)
3.Tertiary	1.296***(0.0240)	1.322***(0.0184)	2.043***(0.0490)	-0.226***(0.0041)	-0.2154***(0.0058)	-0.0887***(0.0058)	0.1110***(0.0043)	0.4193***(0.0126)
2.20-24	0.0542**(0.0259)	0.0555**(0.0273)	0.129**(0.0562)	-0.024**(0.0104)	-0.0039**(0.0016)	0.0021**(0.001)	0.006**(0.0027)	0.0193**(0.0083)
3.25-29	0.123***(0.0246)	0.126***(0.0262)	0.256***(0.0540)	-0.046***(0.0100)	-0.0087***(0.0016)	0.0036***(0.0009)	0.0119***(0.0027)	0.039***(0.008)
4.30-34	0.153***(0.0250)	0.171***(0.0264)	0.301***(0.0548)	-0.0535***(0.0101)	-0.0107***(0.0017)	0.0041***(0.001)	0.0138***(0.0027)	0.0462***(0.0082)
5.35-39	0.191***(0.0252)	0.196***(0.0264)	0.351***(0.0550)	-0.0617***(0.0101)	-0.0131***(0.0018)	0.0044***(0.001)	0.0159***(0.0027)	0.0544***(0.0082)
6.40-44	0.182***(0.0258)	0.183***(0.0269)	0.309***(0.0557)	-0.0547***(0.0102)	-0.0110***(0.0018)	0.0041***(0.001)	0.0142***(0.0028)	0.0475***(0.0083)
7. 45-49	0.187***(0.0261)	0.191***(0.0269)	0.331***(0.0562)	-0.0585***(0.0103)	-0.0121***(0.0018)	0.0043***(0.001)	0.0151***(0.0028)	0.0512***(0.0084)
2.NE	-0.288***(0.0182)	-0.341***(0.0159)	-0.539***(0.0354)	0.0937***(0.0062)	0.0287***(0.0025)	-0.0076***(0.0008)	-0.278***(0.0025)	-0.087***(0.0056)
3. NW	-0.223***(0.0215)	-0.314***(0.0193)	-0.432***(0.0406)	0.0731***(0.0069)	0.0249***(0.0028)	-0.0052***(0.0007)	-0.0216***(0.0026)	-0.0712***(0.0067)
4. SE	-0.481***(0.0400)	-0.483***(0.0295)	-0.825***(0.0777)	0.1526***(0.0159)	-0.0343***(0.0025)	-0.0155***(0.0022)	-0.0464***(0.0044)	-0.125***(0.010)
5. SS	0.205***(0.0200)	0.162***(0.0166)	0.337***(0.0355)	-0.0438***(0.0045)	-0.0289***(0.0034)	-0.0029***(0.0007)	0.0129***(0.0151)	0.0627***(0.0067)
6. SW	0.0912***(0.0216)	0.0614***(0.0182)	0.175***(0.0403)	-0.0438***(0.0055)	-0.0141***(0.0035)	-0.0006***(0.0004)	0.0071***(0.0017)	0.0318***(0.007)
2.Islam	0.0635***(0.0149)	0.0917***(0.0132)	0.140***(0.0293)	-0.0232***(0.0048)	-0.0054***(0.0010)	0.0009***(0.0002)	0.0053***(0.0010)	0.0225***(0.0047)
3.Traditional	-0.215***(0.0378)	-0.220***(0.0385)	-0.398***(0.0748)	0.073***(0.0143)	0.0096***(0.0014)	-0.0054***(0.0014)	-0.0184***(0.0039)	-0.0584***(0.0102)
4.Others	-0.187(0.166)	-0.202(0.195)	-0.377(0.390)	0.0686(0.0746)	0.0092(0.0058)	-0.0050(0.0071)	-0.0172(0.0201)	-0.0555***(0.0532)
2.Rural	-0.753***(0.0132)	-0.694***(0.00980)	-1.266***(0.0239)	0.1784***(0.0031)	0.1241***(0.0039)	-0.0203***(0.0021)	-0.092***(0.0031)	-0.2304***(0.0049)
2.Fulani	-0.260***(0.0197)	-0.239***(0.0220)	-0.712***(0.0516)	0.1578***(0.0119)	0.0075***(0.0017)	-0.0302***(0.0028)	-0.0528***(0.0042)	-0.0824***(0.0056)
3.Igbo	0.411***(0.0404)	0.348***(0.0311)	0.702***(0.0798)	-0.1123***(0.0112)	-0.0528***(0.0080)	0.0075***(0.0011)	0.0419***(0.0054)	0.1157***(0.0137)
4.Yoruba	0.258***(0.0287)	0.186***(0.0244)	0.472***(0.0533)	-0.0816***(0.0089)	-0.031***(0.0045)	0.0087***(0.0013)	0.0296***(0.0039)	0.0743***(0.0085)
5.Ijaw	0.201***(0.0382)	0.148***(0.0296)	0.369***(0.0650)	-0.0658***(0.0110)	-0.0225***(0.0049)	0.0079***(0.014)	0.0236***(0.0044)	0.0568***(0.0104)
6.Others	0.167***(0.0214)	0.0910***(0.0189)	0.332***(0.0410)	-0.0599***(0.0076)	-0.0196***(0.0027)	0.0075***(0.0013)	0.0214***(0.0030)	0.0507***(0.0061)
2.Seansonal	-0.210***(0.0146)	-0.201***(0.0128)	-0.348***(0.0287)	0.0614***(0.0052)	0.0132***(0.0010)	-0.0041***(0.0005)	-0.0168***(0.0016)	-0.0538***(0.0043)
3.Occational	-0.0853***(0.0226)	-0.0810***(0.0224)	-0.159***(0.0492)	-0.027***(0.0086)	0.007***(0.002)	-0.0014***(0.0006)	-0.0072***(0.0024)	-0.0254***(0.0077)
cutl			-1.419***(0.0766)					
cut2			-0.388***(0.0758)					
cut3			0.548***(0.0757)					
cut4			1.665***(0.0765)					
Constant	-0.179***(0.0368)	-0.164***(0.0352)						
Observations	20,309	20,309	20,309	20,309	20,309	20,309	20,309	20,309
R-squared	0.670	0.640						
Robus	t standard errors in p	parentheses						
*** p<0.01, ** p<0.05, * p<0.1								

Source: Arthur Computation, 2020

4.2 Ordered Probit Analysis of Rank Wealth Index

The results of the Ordered Probit of rank wealth index, as explained in the previous section, are shown in Table 1. The equation of the model is given as:

Where y_i^* is a latent variable equal to 1 ("poorest") if $y_i^* < cut_1$; equal to 2 ("poorer") if $cut_1 < y_i^* < cut_2$; equal to 3 ("middle") if $cut_2 < y_i^* < cut_3$; equal to 4 ("rich") if $cut_3 < y_i^* < cut_4$; equal to 5 ("richest") if $y_i^* > cut_4$. The error term is assumed to be normally distributed with standard deviation and variance of one, provided that the distance between the "cut-points" is relatively similar for all the subsamples under consideration. (The ordinal probit result from Table 1, column 4 to 8 shows a highly similar cut distances which can be approximated to first or second decimal places (Wittenberg, 2013). The similar normalisation then implies relative covariate. The impact can be efficiently compared without error. The marginal effect result confirms this by giving extremely significant and intuitive results across different quintile of wealth index. Therefore, we interpret only the little discrepancy between OLS and Ordered Probit Model. The marginal effects illustrates the role of situated knowledge in understanding the intuitiveness of the results and provide clearer reasons for regional development disparities across the Country and among ethnic groups the same across quantile of wealth index.

The Ordered Probit Models are highly consistent with the sign of the OLS model, since the wealth index was also used to rank individuals in the survey. The model indicates that being educated increases the likelihood of being wealthier so also is the wealth index according to figure 2.4 and 2.5. Also, the higher the education attainment the higher the likelihood of being wealthier. A further review of the wealth index quantile shows educational attainment increases likelihood of being poor, especially the poorest of the people. More so, having only primary school among the middle wealthier quantile increases likelihood of being rich relatively to no primary, and even more among secondary and tertiary school. The result of the wealthier and wealthiest quantile present converse probability as the educational attainment increases likelihood of being wealthier and even more with higher ladder of attainment. The causes of the educational attainment and wealth

index may be the higher chances of someone without education will likely possess artisans' skills and earn income which is better than unemployed educated women who have less chances of possessing any artisans skilled. Being employed seasonally or occasionally reduces the likelihood of being richer. In addition, an occasional job presents a better option than a seasonal job when both are compared to full time job. The age categorical variable in wealth index quantile revealed an intuitive result as the average increase in age reveal direct increase in wealth accumulation. However, a detail analysis of wealth index quantile revealed that the first two quantile of poor women in the smallest age group (16-19) are less likely to be poorer compared to the rest of the age group, while the other three quantile classification shows averagely the more older you get the more wealthy if you belong to the rich quantile. The intuitive reasoning behind the result revealed adding more years does not reduce poverty but increases the burdens more financial responsibility is added but wealth grows with time only for rich quantile group.

Ethnicity in Nigeria is very important and shows a very significant result in the wealth index model. Coming from the Hausa ethnic group reduces the likelihood of being poor when compared to Fulani, while the converse is true when compared to other ethnic groups in the Country. A cursory look into wealth index quantile revealed that among the poorest quantile: Fulani women have less chances of being poor relative to Hausa women but the both Fulani and Hausa are less likely to be poorer than other ethnicities. A similar pattern obtains among the next quantile (poorer). While the third quantiles (middle) reveal the reverse pattern being middle rich, rich, and richest Fulani women have less likelihood of being rich relative to Hausa women, and all other ethnic groups have more likelihood chances of wealthier than Hausa women. The reasons may not be farfetched as Fulani ethnic group are nomadic and their women have more chances of inherited livestock's and this may explain likelihood of better economic status at poorest quantile, but wealth can be well sustained with education. However, reaching the rich quantile may not be plausible as many of them stay in village and migrate with their livestock and are less likely to attend western education or formal school which account for more greater wealth accumulation in the long run on average.

The regional analysis can be better understood from the map of Nigerian (figure 1). Coming from the northern part of the Country reduces the likelihood of accumulating assets to rank one as wealthier compared

to coming from the southern part. The North Central is the baseline of the analysis and is located in the middle of the map very close to the river Niger and the federal capital territory (FCT).

The result of the Ordered Probit Model, coupled with a clear understanding of the map, reflects a regional disparity and inequality in Nigeria, which also fuel gender disparity in the Country as revealed in the high level of women illiteracy in the regional map of Nigeria in figure 3. A closer look into the wealth index quantile reveal the regional disparity in Nigeria. Among the poorest group in the first quantile: Women staying in the southeast (SE) will be less likely to be poorer than women staying in any part of the north, but women staying in the north central are less likely to be poor than women staying in the south-south (SS) and southwest (SW). The second group revealed women staying in any part of the north are likely to be less poor than women staying in the south. The third quantile revealed that women staying in the north-central are likely to be richer than the women staying in the rest of the regions. The fourth and fifth quantile revealed that women staying in the south-south (SS) and southwest have more likelihood to be richer than the rest of the regions.

The entire result corroborates the findings of Psacharopoulos (2014) which revealed that attendance of preschool has numerous advantages such that it enhances the overall educational attainment and reduces the likelihood of dropout rates, better performance in the latter school, less likelihood of involvement in crime and most especially higher adult earnings. All these confirmed the benefits of western education in Nigeria. (Psacharopoulos, 2014) study also revealed that for each year of preschool investment, there is a likelihood chance of an increase of 7-12% lifetime earnings, with the most profitable gains for children from socioeconomically disadvantaged backgrounds in Nigeria. Also, (Chmielewski & Reardon, 2016) multivariate analysis results shows that income achievement gap as measured by wealth accumulation in our studies is positively and significantly associated with educational differentiation, and positively associated with national levels of poverty and inequality.

Finally, the result does not indicate any possibility of being wealthier or rich depend on coming from an ethnic group that practices almajiri system on a large scale or come from the region is dominance in almajiri education system. Conversely, the result proves otherwise as women that predominantly staying in the North West (NW) and North East (NE) or belong to the ethnic group that practice almajiri are less likely to be rich

relative to other ethnic groups as almajiri system neither teach any meaningful artisan skills nor integrate skills acquisition lesson but only religion knowledge and Arabic language which is not a formal language in Nigeria. Summarily, the western system of education is clearly important as it has empirically contributed to wealth accumulation and has indeed been a poverty alleviation tool. Also, rejection or late acceptance of it clearly explains the regional disparity in development, and the lack of it or less attainment of it explains the women's poverty situation in Nigeria.

5. Conclusions and Recommendation

The wealth quantile result shows that western education increases the likelihood of being poor when found among the poor and most impoverished quantile. In contrast, western education increases the chances of being rich among the rich and wealthiest quantile. The plausible reason for this result might be unemployment as the graduate unemployment in Nigeria is very high, coupled with the fact that an average Nigerian without education would have an artisan skill that gives them income. Also, getting additional education without appropriate earnings will make the return from education negatives, which can necessitate economic backwardness relative to a woman without the investment in education but invest in other rewarding incomegenerating businesses. The categorical age variable affirms that poverty does not get better with age but worsens the economic condition as more financial responsibility grows with age.

Conversely, the rich and richest quantile confirmed that wealth grows with age as the wealth generates more return with time. This confirmed the growing inequality as the rich are proposed to get richer, and the poor get poorer if wealth inequality is not addressed. The ethnicities and region result confirmed a large disparity in ethnicities and regional development in Nigeria, which need can be addressed with good quality education for all coupled with an aggressive employment creation policy to address graduate unemployment.

The research concludes that there is a significant disparity in educational attainment across geopolitical zones and among ethnic groups. This partly explains the likelihood of the difference in the level of economic development across the geopolitical zones and women's welfare. The result also shows that the higher the educational attainment, the higher the likelihood of being rich. Furthermore, the northern part of the country proportionately has the highest number of poor people with the lowest number of educated women. It can be seen that one of the ways to escape poverty is through education and that an increase in access to education

will help eradicate abject poverty but with creation of more employment oppurtunity. The government of Nigeria should, therefore, take the educational development of both the girl and boy children seriously. It was also found that being engaged in a full-time job increases the likelihood of being wealthier than being employed occasionally or seasonally. This means people's wellbeing can be improved by increased full-time employment opportunities.

The paper concludes that western education matters and, more importantly, women's educational attainment has a positive and significant impact on wealth accumulation, and this accounts for the developmental disparities across ethnic groups and political regions in Nigeria. Neglect of education has the likelihood of increasing the poverty level and has implications for the insecurity crises in Nigeria. The paper recommends that the Nigerian government increase women's access to education and enforce compulsory education, especially for female children with special attention to the northern part of the Country.

In view of the findings of this study and the empirical literature, the paper acknowledges that western education has played a vital role in most of the developmental progress experienced in Nigeria and that neglecting it will have a negative influence on poverty and insecurity. Indeed, western education matters, and all these facts contradict the ideology of some group that western education is bad.

The paper recommends that the federal government provide easy access to quality education, especially at both pre-primary and primary levels, and impose sanctions on parents who fail to enroll their children in primary schools to enable them to acquire basic education. This research opens up different areas of interest for researchers to look further into the real cause and effect of insecurity in Nigeria especially emanating fron the northern part of the country.

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