

Does Earning from Commercial Motorcycles Alleviate Poverty amongst Riders: Evidence from Akoko North East Local Government Area, Ondo State, Nigeria

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ABSTRACT

The need to survive economically and financially in an unfriendly economy, Nigeria inclusive has driven many Nigerians both youth and old into riding of commercial motorcycles commonly known as 'Okada' business to earn a living. Therefore, this study examined the effect of commercial motorcycles earning on poverty alleviation in Akoko North-East Local Government Area of Ondo State, Nigeria. The study adopted a convenience sample technique in selecting 140 respondents in the study area using descriptive statistics and logit regression techniques. The descriptive statistics showed that 97% of the respondents were males and 3% females. Also, 23% of the respondents involved in daily money contribution, 25% weekly money contribution, 11% monthly money contribution and 41% did not. The logit result showed that daily estimated income level and accessibility to motorcycles had reduced poverty level by 99.9% within the study area. By implication, either daily, weekly or monthly estimated income and accessibility to commercial motorcycles by Nigerians youth were found to be a means of poverty alleviation in Nigeria. Furthermore, the study also proved that the level of education had contributed to poverty reduction by 79.3% within the study area. The study concluded that earning from commercial motorcycles had drastically reduced the poverty level among riders in Akoko North-East Local Government Area of Ondo state, Nigeria. The study therefore, recommended that seminars on good conduct amongst the riders should be organized either by the government, non-governmental organization or motorcycle union in order to increase earning amongst riders. Also, motorcycle unions or private bodies should make motorcycle available for users that intend to use them for commercial purposes in order to meet their daily needs, so as to significantly reduce poverty in the country.

KEYWORDS: Okada, Poverty, Motorcycle, Estimated income

I. INTRODUCTION

Developing nations, Nigeria inclusive are endowed with both natural and human resources, still yet, most of the developing countries are regarded as poor nations. In Nigeria for instance, in the year 2000, approximately 90 million Nigerians live on less than one dollar per day, and as at 2018, 86.9 million Nigerians lived in extreme poverty (World Bank, 2019). This displays that in Nigeria, a larger number of the entire population lives in extreme poverty which is also compounded by endemic corruption and unemployment among the teeming population. In line with this, Onifade, Aduradola, and Amao (2012) remark that the need to survive economically and socially within the societal have driven many Nigerians both youth and old into various jobs including riding of commercial motorcycle commonly known as 'Okada' business. Thus, thousands of okada riders barely trained and untrained are usually flock truck A, truck B and truck C roads carrying luggages and conveying people to their destinations. In developing countries, rise in population coupled with the unemployment rate among the teeming population especially the youths have caused the upward surge in the use of motorcycles for road transportation as a means of surviving in the country. Nyachieo (2016) opines that a rise in unemployment brings about a rise motorcycle rider as a means of living and also, aid to reduce poverty over time. In the part of developing countries like sub-Saharan countries are common to convey people from one place to another. In support, WHO (2015) stated that about 65% youths engaged in Okada riders in Africa.

Again, third world countries were identified as one of the mode of transportations and this is carried out by three-wheelers (WHO, *ibid*). Meanwhile, Nigeria was the leading country in the adoption of a three-wheeler mode of transportation from 1974 during the high revenue from the sale of oil revenue. For instance, Guyer (1997) noted that a rise in salary payments in the form of civil servants Udoji encouraged most of the civil servants to embrace motorcycles during the periods. This situation encouraged most of the tricycle companies to establish their industries in Nigeria. Therefore, it gave the low civil servant, farmers and others to have access to a motorcycle as the means of transportation, especially in the rural environment. In Nigeria of today, 49.82% means of transportation is carried out by motorcycles (Oyedepo, Fadugba, & Odesanya, 2016). While 50% is the dominant mode of transportation among the available mode of the transport system in Ondo-state. In Akoko North East Local Government Area, a motorcycle is also one of the major means of transportation. Olorunfemi and Basorun, (2013) further attributed this to door-to-door service provide by motorcycle in the area.

In Nigeria, poverty is a global phenomenon which has been on the increase over the years in most developing countries, Nigeria inclusive. This has denied many people access to the basic needs of life, such as quality education, healthcare, shelter, clothing and so on. Poverty seems as a multi-facet issue with many factors responsible for its existence especially in third world countries. According to Oderinde (2002), poverty is the inability of individuals to attain a minimum level of consumption and standard of living. In a democratic setting, society cannot be built when the majority of the population is living in extreme poverty. Similarly, World Bank, (2019) stated that around 86.9 million Nigerians lived in extreme poverty in 2018. The need for survival especially from the shackle of poverty among the teeming youth drives most of them into the business of motorcycles. Despite many poverty alleviation programs launched by the government as available evidences suggest that there are growing in the population of poor people in the country. For instance, evidences proved that 27.2% in 1980, 46.3% in 1985, 42.8% in 1992, 65.6% in 1996, 75.0% in 2001, and 63.5% in 2018 are poor in Nigeria (Okojie, 2001; World Bank, 2001; 2019). Akoko North East Local Government Area is a confluence and historic city in the central Akoko region in Ondo-State. It is predominant dominated by Yoruba people with a population projection of 241,700 in 2016 in which 64% of the population falls within the working population. However, increases of the population in Akoko North-East Local Government Area coupled with increases in commercial activities have facilitated commercial motorcycle operations in the town due to the fact that motorcycle has the advantage to ply roads that are too narrow or too rough for vehicles and they are also able to maneuver in traffic pile-up (Aderamo & Olatunjoye, 2013).

Past studies in Nigeria that include Adesanya, 1998; Fasakin, 1998; Oyesiku, 2001; Aderamo & Olatunjoye, 2013; Gambiyo, 2014; and Oyedepo *et al.*, 2016 had studied the effect of motorcycles on many macro-economic variables such as safety, employment, income *et cetera*. However, one particular research gap that seems obvious in these past studies is the effect of earning from commercial motorcycles on poverty alleviation especially at the grass-root level. Hence, this study examined the effect of commercial motorcycles earning on poverty alleviation in Akoko North-East Local Government Area, Ondo State, Nigeria. To guide this study, the following questions are - what is the nexus between commercial motorcycles earning and poverty? What has been the effect(s) of commercial motorcycles earning on poverty in Nigeria? The rest of this paper is organized as follows. Following this introduction, section two provides a literature review. Section three covers the method, section four deals with results while section five deals with concludes the study. This study has a significant role in literature. Firstly, test the link between commercial motorcycle earning and poverty reduction in Nigeria. Secondly, differing from previous studies, this study will use recent data to analyze the significant effect of commercial motorcycle earning on poverty reduction. Thirdly, findings of the study would help the policymakers to know the appropriate policy to be employed, taking into the cognizance the prevailing unemployment issue and the implications it imposes in the country.

II. EMPIRICAL STUDIES

There is an extensive amount of academic literatures dedicated to the relationship between commercial motorcycle earning and poverty alleviation. Some studies proved that commercial cycle business reduced poverty while other previous claimed that commercial motorcycle didn't reduce poverty level. Using human capital earning function analysis Arosanyin (2010) studied the determinants of commercial motorcycle operations in Ilorin, Nigeria. The study adopted the Stepwise Regression technique. The study discovered that mode of work, plate number, patronage index, years of experience and ownership status were statistically and positively related to earnings in commercial motorcycle transport. The study recommended that issues that have to do with police extortion, bad roads and harassment from other motorized traffic should be urgently addressed by the government. Also, the study by Onifade, Aduradola, and Amao (2012) that investigated effects of socio-economic survival of Okada riders in Abeokuta and Odeda, Ogun State, Nigeria using simple percentage for socio-economic characteristic and t-test statistical package for the formulated objectives discovered that Okada

riding has both direct and indirect effect on the cultural values of the society Paul (2016) examined the benefits and challenges of increasing motorcycle use for rural access using descriptive statistics. The study discovered that within ten years motorcycles usage in Tanzania increased from the initial 10,000 to 800,000; while in Cameroun, Nigeria, Rwanda, Sierra Leone, Ghana and Kenya it increased within 70-80% or more. In the same vein, a study by Fredrick (2015) that studied the contribution of commercial motorcycles in promoting agriculture in Laikipia East Sub-County using the Chi-square (χ^2) test and Spearman's Rank techniques discovered a statistically significant relationship between the promotion of agriculture and commercial motorcycles; while a non-significant relationship was established between previous employment and commercial motorcycles contribution to poverty alleviation. The study, therefore, concluded that commercial motorcycle contributes 10 percent towards poverty alleviation in Laikipia East Sub-County and recommended that the government should establish a well updated and accurate database on commercial motorcycle activities for their sustainability. Gambiyo (2014) studied the economic implications of transport infrastructure on the Nigerian economy using road transport as the case study. The study employed Multinomial logit and Ordinary Least Square (OLS). The OLS results revealed that public investment and maintenance estimated showed low investment expenditure on roads due to fiscal problems. Also, Oyedepo *et al.*, (2016) studied the effect of a commercial motorcyclist on economic growth in developing countries using Akure township as the case study and discovered that daily income of commercial motorcycle operators varies depending on individual efficiency (32%), aggressiveness (16%) and duration of operations (42%). In addition, the study established that the average highest daily income was N3,000 (\$10) with 70.1% of the riders made a minimum of N1,600 (\$5.3) daily.

III. THEORETICAL FRAMEWORK AND METHODS

This study adopted the vicious cycle of poverty of the neoclassical theory as propounded by Nurkse (1953). The theory posited that vicious cycle of poverty is responsible for the backwardness of developing countries. The cycle depicts that poverty is a web that requires a constellation of forces of capital formation to break. The theory reveals that low income leads to meagre savings; meagre savings, in turn, result in low investment; the lack of capital causes low productivity resulting in low income and thus completes a circle. According to Fredrick (2015) motorcycling is life-enhancing through the provision of means of the transport system for the majority of rural and urban people to easy movement of carrying luggage and conveying people to their destinations. Nurkse (1953) argued that capital formation is required to break the circular constellation forces of vicious cycle of poverty, therefore, resulting in this study adopting the vicious cycle of poverty as the theoretical framework. In order to examine if earning from commercial motorcycles could break the circular constellation forces of the vicious cycle of poverty in Akoko North-East Local Government Area, Ondo State Nigeria the Vicious cycle theory is expressed mathematically below

$$POV = f(Y, S, I, O) \dots \dots \dots (3.1)$$

The schema form of the vicious cycle of poverty is given below;

$$POV \uparrow \rightarrow Y \downarrow \rightarrow S \downarrow \rightarrow I \downarrow \rightarrow O \downarrow \dots \dots \dots (3.2)$$

Where; POV = Poverty level, Y = Income level, S = Saving, I = Investment, O = Productivity output

Model specification : The theoretical underpinning of the study was the vicious cycle theory which establishes the relationship between the poverty level and income level, saving, investment and productivity output. The improved version of the model in line with the objective of the study is stated below as;

$$POV = f(EDU, INL, MAC, FAS) \dots \dots \dots (3.3)$$

Putting equation (iii) in econometric form, it becomes

$$POV = \beta_0 + \beta_1 EDU + \beta_2 INL + \beta_3 MAC + \beta_4 FAS + \varepsilon \dots \dots \dots (3.4)$$

Where;

POV = Poverty level, EDU = Educational Level, INL = Income level (proxy for earning from motorcycles), MAC = Motorcycles Accessibility, FAS = Family size, $\beta_0, \beta_1, \beta_2, \beta_3$ and β_4 were parameters estimated, ε = stochastic variable or random term

Putting equation (iv) in logit regression form, equation (3.4) is constructed as:

$$\log \left(\frac{\text{Pro}(POV)}{\text{Pro}(1-POV)} \right) = \Omega_0 + \Omega_1 EDU + \Omega_2 INL + \Omega_3 MAC + \Omega_4 FAS + \mu_t \dots \dots \dots (3.5)$$

Study Area : The study area was Akoko North-East Local Government Area in Ondo State. Akoko North-East Local Government Area. Ikare Akoko acts as the head sit and the largest city in Akoko Area. The towns in this local government area comprise of Ikare Akoko, Ugbe, Iboropa, Auga Akoko, Ise Akoko, and Ikakumo Akoko.

Population of the Study :The commercial motorcycle riders popularly known as Okada riders were the population for the study.

Sample and Sampling Techniques :This study adopted a convenience sample technique in selecting 140 respondents by assigning twenty (20) questionnaires to commercial motorcycle riders in each of the seven commercial areas in Akoko North-East Local Government Area that comprised IkareAkoko, Ugbe, Iboropa, AugaAkoko, IseAkoko, and IkakumoAkoko.

IV. PRESENTATION OF RESULTS AND INTERPRETATION

Table 1: Socio-demographic Characteristics of Respondents

Age	F	(%)	Education	F	(%)	Family Size	F	(%)
>20 year	60	42.9	No-formal education	39	27.9	Single	51	36.4
20-25year	40	28.6	Primary-Education	59	42.1	2- 5 family	46	32.9
26-30 years	6	4.3	Secondary-Education	23	16.4	6-10 family	31	22.1
31-35year	23	16.4	ND/NCE	17	12.2	11- 15 family	9	6.5
36–above	11	7.8	HND/B.Sc/Postgraduate	2	1.4	16- above	3	2.1
Total	140	100.0	Total	140	100	Total	140	100

Where F indicates frequency, (%) indicates the percentage

In table 1 above 42.9% of the respondents were within the age grouping below 20 years, 28.6% were within the age ranges of 20-25year, 4.3% were within the age ranges of 26-30 years, 16.4% that indicated 23 respondents were within the age ranges 31-35year; while 7.8% were within 36year–above. The finding suggested that majority of the motorcycle riders were within the range of the working population. The distribution of respondents based on the level of educational attainment revealed that 27.9% had no formal education, 42.1% attained primary educational, 16.4% had secondary school education, 12.2% attained the level of either National Diploma (ND) certificate, or Nigeria Certificate of Education (NCE), 1.4% attained either Higher National Diploma (HND), first degree or postgraduate. This showed that 30% of the respondents were educated beyond the primary school level in the study area. The frequency distribution for family size in Akoko North-East Local Government Area shows that 36.4 % representing 51 respondents had single family, 32.9% had family between 2- 5 family, 22.1% had a family size of 6-10 family, 6.5% had a family size of 11- 15; while 2.1% had family 16- above.

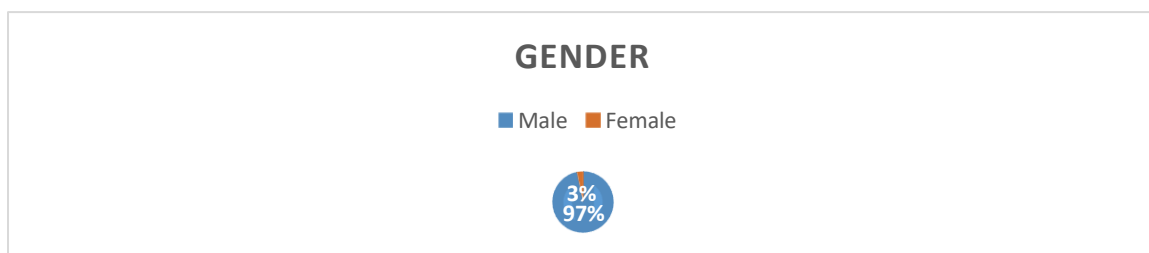


Figure 1: Respondents' Gender Displayed in Pie Chart

Figure 1 shows both sexes were represented with male gender having the highest respondents. This was such that 97% of them were males, while 3% were females.

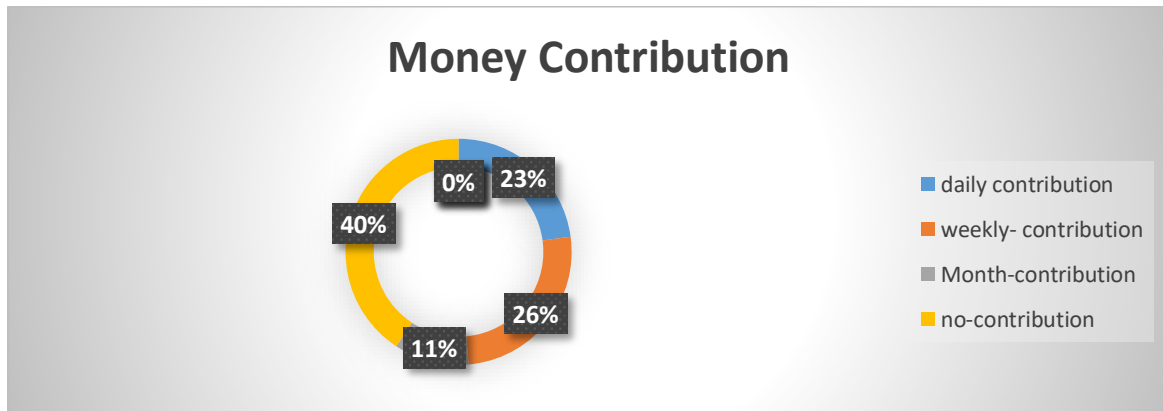


Figure 2: Money-Contribution by Respondents

The distribution showing respondents' money contribution showed that 23% of the respondents that indicates 32 involved in daily money contribution, 25% that represents 36 respondents involved in weekly money contribution, 11% that represent 15 respondents involved in monthly money contribution and 41% that represent 57 respondents did not involve in any of the contribution.

Table 2: The Empirical Result of Logit Regression

Variable	Coefficient	Std. Error	z-Statistic	Prob.
EDU	-0.7930291	0.487710	1.63	0.054 **
INL	-1.151663	0.1744200	6.60	0.045**
MAC,	-1.352597	0.6044040	2.24	0.037**
FAS	0.282555	0.848090	0.34	0.703
Constant	-0.7718465	4.073791	-0.19	0.850
Prob> chi2 = 0.8157 Pseudo R² = 0.0778				
Note:** indicates significance at 5%				

The finding in Table 2 indicates the estimated result of Logit regression. The finding revealed that the higher the level of education of tricycle riders the lesser the poverty level. The marginal impact shows that the degree of responsiveness of educational level to poverty level was 79.3% and was statistically significant at a 95% confidence level. The finding denotes that an increase in the educational level of tricycle riders reduces the poverty level. This finding was in conformity with the past study of Gbadamosi and Oluwaseyi (2017) that discovered that majority (56%) of motorcycle operators in Ogun state have secondary school level of education. The result on the educational level has two economic effects on poverty alleviation of the respondents in the study area. Firstly, the higher the level of a number of years of schooling or seminar on good conduct on the motorcycle, the better-exposed the tricycle riders. Therefore, they are adequately informed to devote a sizeable amount of the income to the basic need to maintain a particular level of standard of living suitable to their level of educational standard. For instance, the descriptive statistics revealed that 59.3% of the respondents (educated tricycle riders) that are educated to at least secondary school level in the study area involve in daily contribution in order to improve their standard of living. Secondly, income and educational status are directly related. Therefore, with improvement in the level of education, one is better placed in terms of income realization and therefore improved the purchasing power of the tricycle and accessibility to necessities of life.

Also, at a 5% level of significance income level was significant. The variables used shows that the ratio of the poverty level to income level had a negative co-efficient. The marginal degree of income level on the poverty level was -1.15 units and more than 100% effects on the poverty level. The finding suggested that an increase in income (earning from tricycle) tends to lower the poverty level by more than 100%. The finding was in-line with Fredrick(2015) that discovered that the gainful employment of commercial motorcycle alleviates poverty. Also, Olugbenga, *et al* (2016) discovered that okada operators get more than a monthly minimum wage of N18,000 (\$60) being paid to the Nigerian government workers. This, therefore, lessens the severity of poverty among tricycle the riders. Earning from tricycle has two effects on the poverty level. Firstly, literature had identified income as a determinant of poverty; therefore the higher the income level of tricycle riders, the lesser the poverty level.

For instance, tricycle riders earn daily income by this they have a higher purchasing power to meet their daily needs. Also, an increase in income level gives tricycle riders different forms of varieties of basic necessities of life. Thus, leading to income level reducing the poverty level. The logit regression shows that the motorcycle's accessibility negatively stimulates the poverty level within the study area. Motorcycles accessibility was found with a higher probability of poverty level. The marginal impact shows that the degree of responsiveness of motorcycles accessibility to the poverty level was -1.4 units with a 95% confidence level and the t-statistic (2.24) greater than the student t-test ($t_{0.05} = 2.042$) at 5 %. The implication of these findings is that the more tricycle riders are willing and ready to use motorcycles for a commercial purpose have access to motorcycles the smaller the poverty level. The negative sign of the ratio of motorcycles accessibility is in consonance with *a priori* expectation. The implication of the motorcycles' accessibility on poverty is of two types. Firstly, 57% of the respondents have more than one bikes this, therefore, enable them to have access to more funds apart from the one they use for commercial purpose. This shows that 57% of the tricycle riders have another source of income apart from the one they use by themselves; therefore, with these sources of the income poverty level would be reduced. Secondly, 35% of them were empowered either by the government or non-governmental organizations. Therefore, implies more income for tricycle in the study area. Findings for family size was not significant. The coefficient result of family size (FAS) was 0.28 with the t-statistic (0.34) less than the student t-test ($t_{0.05} = 2.042$) at 5 % and 10% significance level respectively. The sign of the finding was in line the *a priori* expectation. The non-significance of the family size on the poverty level is due to many factors. For instance, the majority of the tricycle riders practice polygamous family and they do not perform their fatherly roles on their wards. This shows that the effects of such an increase in the family is not felt by the fathers. Since they are not the ones responsible for the financial burden on their wards.

V. CONCLUSION AND RECOMMENDATIONS

Findings from the study had established that earning from commercial motorcycles alleviated poverty amongst riders in Akoko North-East Local Government Area of Ondo State, Nigeria. The finding revealed that motorcycles had alleviated poverty in areas that include education through seminars on good conduct on the use of motorcycles on truck A, truck B and truck C roads in carrying luggage and conveying people to their destinations, also, year of schooling of tricycle riders. On income level, it has alleviated poverty more than 100% through the provision of daily income to the rider in order to meet daily needs, speculative needs and precautionary needs. Also, accessibility to motorcycles by riders had alleviated the poverty level by more than 100%. While, family size had zero effect on the poverty level within the study area. The study therefore, concludes that earning from motorcycle had drastically reduced the poverty level among riders in Akoko North-East Local Government Area of Ondo state. The study therefore, recommends that more seminars on good conduct amongst the riders should be organized either by the government, non-governmental organization or motorcycle union in order to increase earning amongst riders. Also, motorcycle unions or private bodies should make motorcycle available for users that intend to use them for commercial purposes in order to meet their daily needs. In addition, motorcycle riders should keep more of their earning for speculative needs for the purpose of future returns on such investment.

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