

# THE ROLE OF AUTO RICKSHAW DRIVERS ON INCOME PERFORMANCE AMONG SOCIETY IN BANADIR REGION-MOGADISHU-SOMALIA

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## **Abstract**

*In the present era, it can be said that growing population has placed a higher demand on the transport system. Due to the prevalence, three wheelers bridge the gap between public transport and door-to-door services, providing an alternative to private vehicles. The purpose of this study was to assess The role of Auto rickshaw drivers on income performance among society in Banadir region-Mogadishu-Somalia. The target population was 301 respondents while sampled 172 using Sloverns formula from different people including drivers and non-drivers. The study showed that the role of both Bajaj owner drivers and rental drivers were significantly affect to the ' overall income performance among society since p-value is less than .05 Or 5%. It was found that working hours on a day have increased, as drivers try to compensate for lost earnings on the following rest day for the percentage of 62.2%. In addition that, the study shows that Been a taxi Rickshaw rental driver has become the mainly option for those who have insufficient money to cover their lives with the percentage of 73.3%.The study recommended that the Bajaj owners reduce rent price per day to satisfy both rental drivers and customers.*

**Keywords**— “Auto rickshaw”, “income”, “Owner divers”, “Rental drivers”, “performance”,

## 1.0 INTRODUCTION

The growing population has placed a higher demand on the transport system, and yet they have not been able to cater for the needs of people of easy traffic flow system. The use of three-wheelers for transport services started to take off around 1950, when the Indian Bajaj company started to sell three-wheelers using Italian Piaggio scooter components ('scooter' three-wheelers had been used in Italy as low-cost freight vehicles)(P.Starkey, Z.Batool, 2014). Auto-rickshaws are an important part of urban mobility and a step to improving sustainable transportation, as well as quality of life in Indian cities. Integrating auto-rickshaw services as a feeder mode complements public transportation systems, ensuring connectivity and easy access throughout the city. Auto-rickshaws also bridge the gap between public transport and door-to-door services, providing an alternative to private vehicles(Transport, 2012). India is home to three quarters of the world's auto-rickshaws, which are three-wheeled motor vehicles that are hired to move both people and goods (Mani and Pant, 2011). These vehicles play an important role in urban transport in the country, being used for a wide range of trip purposes, often for trips that cannot be practically undertaken on other types of public transport, at considerably lower cost than would be incurred in a taxi(Harding et al., 2016). In many low-income cities in Asia and Africa, scooter-based 'auto-rickshaws' or 'Bajajs' provide low-cost taxi services, that tend to be popular with users, but may antagonize car owners who may see them as badly-behaved and the cause of urban congestion. Some countries have banned them as transport services (eg, China [7] and Ghana [8], and many countries have limited their operations, prohibiting them from particular roads or areas(P.Starkey, Z.Batool, 2014). In Somaliland, The study revealed that 100 % of Bajaj drivers are males and the study showed that drivers generate an average gross income of Sl.sh 145,885 per day, but the per-day average net income was Sl.sh 48,274. The type of Auto-Rickshaw used In Burao was designed to take 3 passengers at a time, but, according to this study, 64% of the Auto-rickshaw drivers carry 4 persons per trip, 35% carry 5 persons per trip and only 1% of the drivers carry 3 persons per trip. The data were analyzed using SPSS version 20 (Kunle et al., 2019). In Somalia, People go for Moto Bajaj services as they find them more flexible in many ways such as timing, routes, destinations etc. They provide door-to-door services and are easily accessible and affordable. Moto Bajaj can be hired anywhere anytime, and prior booking is not required(Mohamed et al., 2022). Many Auto-rickshaw drivers manage lives of their family mostly men with highly trained. They work long hours and maximize incomes by overloading, stopping anywhere and congregating around markets and terminals(P.Starkey, Z.Batool, 2014). Despite of this, The researcher felt that the context is very few in this area of Banadir region since it has scarcely been touched by researchers. The specific objectives is to assess the role of Bajaj on own drivers income among society and also to find out impact of Bajaj on rental drivers income among society in Banadir region-Mogadishu-Somalia. This study helps government officials, unemployed people and investors those interest in business Bajaj industries of this region.

## 2.0 LITERATURE REVIEW.

According to the Somali Human Development report (2012) issued by the United Nations Development Program (UNDP), Somalis under 30 constitute 70 percent of the population has allowed to work as Bajaj drivers and make a living. It is obvious that Bajaj has changed the landscape for youth and created many job opportunities for thousands for youths to earn daily income and to support their families. As a result, Bajaj has not only increased the purchasing power of the youths but also contributed to the reduction of youth migration from Mogadishu. Even though there is no official figure regarding the number of youths that migrated before and after, it is evident that many youth members stayed in Mogadishu due to the opportunities they have received from driving Bajaj(All, 2013). There is also a contentious public debate about the faults of auto-rickshaws, the attitudes and actions of their drivers, and the policies to address these issues. While auto-rickshaw users and the public have understandable concerns regarding these issues, this debate does not, for the most part, take into account the perspectives of the drivers, an oversight the paper attempts to rectify(Harding et al., 2016).

### Concept of the Auto-rickshaw drivers on income performance among society in Banadir region

#### 1. The concept of Bajaj owner drivers on income performance

Men in Mogadishu mainly work as Auto Rickshaw/Tuk tuk drivers as it generates income for them to take care of themselves and their families. Usually their poor families all put together a lot of money under tough circumstances to purchase these vehicle for their sons operated as Taxis (Qanyare, 2019). Though, 30 % of Auto-Rickshaw own drivers are illiterate, 12.5% have primary school certificate, 45 % have Secondary school certificate and 12.5 % have knowledge higher than these levels, this sector generates a large revenue per year, so it must be considered as an inspiring group with a huge potentiality of generating revenue that can affect the whole economy positively (Kunle et al., 2019). Though, Bajaj rotation system changed the nature of work and allowed bajaj drivers to have a day off every two days. This means they now get 15 rest days each month. It allowed the drivers to spend time with their families, which wasn't possible before this system. The bajaj drivers used to work on average six days a week, and it was hard to get time for their families except for a small portion who maintained a work-life balance. The drivers' daily income from the bajaj has reportedly also increased. As per the author's interaction and discussion with bajaj drivers, the average income on a good day was previously between \$20 to \$35, and this has increased now to around \$30 – \$45 with some occasionally getting up to \$50. While this increase is significant, it doesn't make up for the potential missed income from the now mandatory rest days. The daily increase comes from the reduction of the bajajs using the roads on a single day, giving those operating the chance to get more passengers as the competition is decreased. Also, the working hours on a single day have increased, as drivers try to compensate for lost earnings on the following rest day (Jibril, 2023).

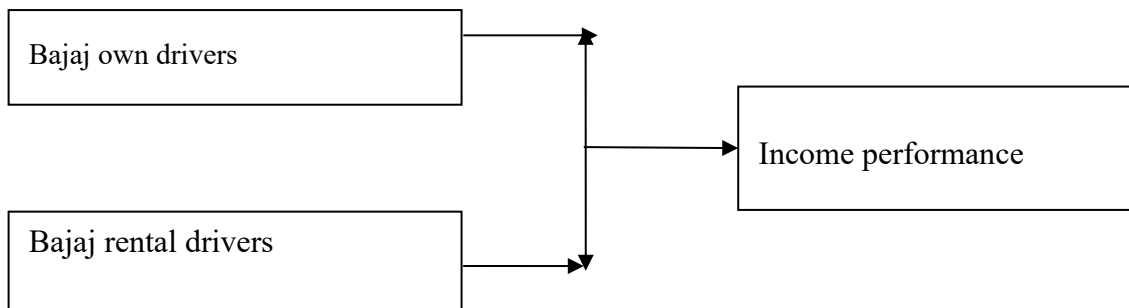
**2. The concept of Bajaj rental drivers on income performance**

Been a taxi Rickshaw driver has become the mainly option for those who have insufficient money to cover their lives. With unemployment persons those vary in age start work as tuk tuk drivers usually rent price per day in specified money (Qanyare, 2019). Some Bajaj owners don't want to drive themselves. Instead, they rent to other drivers with a daily payment required from the renters. At first, when Bajaj joined the transport business, this service was not available for customers due to few drivers at the time, but as the market grew and new rental drivers joined it because there was a need to extended the services to 24/7 to satisfy the demand at night and to make more money as most of the drivers were leasers, who had to pay \$10-15 dollars per day to their Bajaj owners before the division of A and B system in Banadir region. At this time, With the new rotation system, the fee increased to \$15 to \$20 per day because of they work one day and rest next one (All, 2013). According to the Bajaj rental drivers, One potential reason could observe why youth favor driving Bajaj is because unemployment is higher among the youth and secondly availability of Bajaj either for rent, a loan from the bank paying monthly installment or personal investment(Researchers et al., 2020). Despite this, there hasn't been an increase in the bajaj fare. Although bajaj drivers tried to increase the fare rate at first, it wasn't sustained as the people's income situation remained the same. However, bajaj drivers deal with the fare differently, charging as much as possible depending on the expected wealth of the passenger (Jibril, 2023).

**2.2. Conceptual Model of the Research Study**

Figure 1 indicates that the conceptual framework of the undertaken study in which we showed the role of Bajaj drivers on financial support / income performance among society in Banadir region. Moreover, we have also shown the impact of Bajaj own drivers and rental drivers on income variables among society in this region.

Independent Variables    Dependent Variable



**3.0 MATERIAL AND METHODS**

**3.1 Research design**

Descriptive research design selected to explore association between dependent and independent variables to assess any effect between these variables. According to (Sekaran Uma, 2014) descriptive design is often used to investigate “what is” by combining qualitative and quantitative research methodologies as the researcher investigates “What is the role of Bajaj on drivers income among society in Banadir region-Mogadishu-Somalia?” This was used questionnaires to collect data from secondary school students (Bello & Aliyu, 2022). This method is also suitable for the study because it will support the collection of the data from sizeable population.

**3.2 Sampling Strategy and Sample Size**

The researcher used quota sampling technique which is one of the non-probability sampling to select a sample that can be representative of the target population. This is equivalent of stratified sampling. Like stratified sampling, the researcher first identifies the stratum and their proportions as they are represented in the population. Then convenience or judgment sampling is used to select the required number of subjects from each stratum (Omar, 2017). The researcher populated 301 respondents. The investigator also sampled 172 questionnaires distributed to the drivers whether owners or renters and customers using Bajaj as tax for that the researcher employed Slovene’s formula to determine the sample size with maximum acceptable error of 5%.  $n = \frac{N}{1+N\alpha^2}$ ,  $n = \frac{301}{1+301(0.05)^2} = 172$ , n. stand for sample size, N. stand for population and a. stand for acceptable error.

**3.3 Data Processing and analysis**

According to (Omar, 2017) data analysis refers to examining what has been collected in a study and making deductions and inference. The researcher used Statistical Package for the Social Sciences (SPSS) software to carry out the quantitative analysis. Descriptive statistics applied to organize, summarize, and present data in an informative way. After collected data through the ODK, Excel uploaded directly to the SPSS software analyzer by using frequency, percentages and tables. . However, the regression model be used is  $Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \epsilon$ , where Y= the dependent variable (Income performance IP). X= the independent variable (leader ship style).  $X_1$  = Bajaj owner drivers.  $X_2$ =Bajaj rental drivers.  $\epsilon$  = Error term and  $\beta_0$  is the intercept

**3.4 Demographic characteristics of the respondents**

This part presents the background information of the respondents who participated in this study. Its purpose is to find out the characteristics of the respondents in socio-demographics profiles. In total 172 respondents filled in the questionnaires through ODK of selected both Bajaj drivers and customers in Banadir region- Mogadishu-Somalia.

**Table 3.2** Profile of the respondents

Demographics		frequency	Percent
Gender	Male	95	55%
	Female	77	45%
Marital status	Single	77	45%
	Married	95	55%
Age in yrs	Under 18 years	29	17%
	18-25	66	38%
	26-35	61	36%
	Above 35	16	9%
Education level	Illiterate	17	10%
	Primary	9	5%
	Secondary	109	63%
	Bachelor	37	22%

**4.0 Results**

The researcher employed regression analysis to analyze the role of Bajaj drivers (independent) on income performance among society (dependent variable) in Banadir Region. The researcher applied the statistical package for social sciences (SPSS V 20.0) to calculate and compute the variables of the study. The researcher also conducted Model summary, Anova, Coefficients in regression statistical analysis. The study also used descriptive analysis to present the responses in an informative method.

**4.1 Descriptive analysis of variables**

**4.1.1 Bajaj owner drivers on income performance**

This independent variable investigates the Bajaj owner drivers towards income performance using descriptive analysis.

**Table 4.1 Bajaj owner drivers**

IV1	N	A	D	Mean	Std
IV1.1 Auto rickshaw owner drivers generate large revenue per year by saving some of that money	172	F %	67 39.0	105 61.0	1.61 .489
IV1.2 Bajaj owner drivers can affect the whole economy of society positively.	172	F %	103 59.9	69 40.1	1.40 .492
IV1.3 Bajaj owner drivers are happy to have day off every two days instead of working 7 days a week.	172	F %	93 54.1	79 45.9	1.46 .500
IV1.4 The average of owner driver’s income on a good day is between now to around \$30 – \$45."	172	F %	100 58.1	72 41.9	1.42 .495
IV1.5 Working hours on a day have increased, as drivers try to compensate for lost earnings on the following rest day	172	F %	107 62.2	65 37.8	1.38 .486
IV1.6 Bajaj owner divers get time for their families by not worrying this day off every two days.	172	F %	102 59.3	70 40.7	1.41 .493

Table 4.1 IV 1.1 indicates that 39.0% of the respondents answered Auto rickshaw owner drivers generate large revenue per year by saving some of that money but 61.0% refused that matter meaning that they don’t save huge money from this job with the mean of 1.61. 59.9% were of the statement that the Bajaj owner drivers can affect the whole economy of society whereas 40.1% did not agree that responses with the mean of 1.40. 54.1% were of the statement that Bajaj owner drivers are happy to have day off every two days instead of working 7 days a week whereas the rest of the respondents 45.9% opposed these responses for the mean of 1.46. 58.1% said that The average of owner driver’s income on a good day is between now to around \$30 – \$4 while 41.9% of the respondents did not agree for the situation with the mean of 1.42. 62.2% declared that Working hours on a day have increased, as drivers try to compensate for lost earnings on the following rest day while 38.8% refused this situation for the mean of 1.38. 59.3% said that Bajaj owner divers get time for their families by not worrying this day off every two days as the rest 40.7% did not agree the statement with the mean of 1.41. Built on the proposed answers, Great number of individuals allowed that Bajaj own drivers contributes income performance among society in Banadir region.

**4.1.2 Bajaj rental drivers on income performance**

This IV investigates the role of Bajaj rental drivers on income performance among society in Banadir region Mogadishu-Somalia.

**Table 4.2 Bajaj rental drivers**

IV2	N		A	D	Mean	Std
IV2.1 Been a taxi Rickshaw rental driver has become the mainly option for those who have insufficient money to cover their lives.	172	F %	126 73.3	46 26.7	1.27	.444
IV2.2 Daily payment required for rental drivers is between \$15-\$20 per working day,	172	F %	105 61.0	67 39.0	1.39	.489
IV2.3 Some rental drivers extended the services to 24/7 to satisfy their demand until midnight.	172	F %	99 57.6	73 42.4	1.42	.496
IV2.4 Rental drivers could not get time for their families because they are working 7 days with A & B.	172	F %	94 54.7	78 45.3	1.45	.499
IV2.5 Every unemployment persons start work as Bajaj drivers usually rent price in specified money.	172	F %	102 59.3	70 40.7	1.41	.493
IV2.6 As the Bajaj market grew, there is less availability of new rental drivers.	172	F %	103 59.9	69 40.1	1.40	.492

Table 4.2 IV 2.1 shows 73% of the respondents supported that Been a taxi Rickshaw rental driver has become the mainly option for those who have insufficient money to cover their lives while the rest did not support this statement, meaning that Bajaj is the easiest option and affordable for those who are jobless for M=1.27. Followed by 61.0% of the respondents supported that Daily payment required for rental drivers is between \$15-\$20 per working day whereas 39.0% of them did not obey the situation for the mean of 1.39. Likewise 57.6% declared that Some rental drivers extended the services to 24/7 to satisfy their demand until midnight while the rest were 42.4% with mean 1.42. In addition that 54.7% obeyed Rental drivers could not get time for their families because they are working 7 days with A & B while the remaining responses were 45.3% for the mean of 1.45. Followed by That Every unemployment persons start work as Bajaj drivers usually rent price in specified money as supported 59.3% with M=1.41. On the other hand, 59.9% of the respondents obeyed that as the Bajaj market grew, there is less availability of new rental drivers while 40.1% did not agree the responses for the mean of 1.40. Based on the above explanation, most of the respondents supported rental drivers greatly contribute income growth in Banadir society.

**4.2 Regression Analysis**

**Table 4.2.1 Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error Estimation
1	.911a	.830	.828	.201

a. Predictors: (Constant), Bajaj owner divers, Bajaj rental drivers

The results in Table 4.21 indicate that regression coefficient (R) is 0.911 or 91.1% which implies that there is a great role of Bajaj drivers on income society in Banadir region while R-square is 0.830 showing that the predictor variable, represented by income performance, contributes (83.0%) to the performance in Banadir region.

**Table 4.2.2 ANOVA**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.119	2	16.560	411.257	.000b
	Residual	6.805	169	.040		
	Total	39.924	171			

a. Predictors: (Constant), Bajaj owner divers, Bajaj rental drivers

b. Dependent variable: income performance

The table 4.2.2 shows that the combination of other types of drivers in Bajaj significantly predicted income performance. This model is greatly significance in predicting how the role of Bajaj drivers on income performance among society in this region Since,  $p < 0.000$ ). this shows that the overall model was significant and less than the bench mark sig. = 0.05.

**Table 4.2.3 Coefficients**

Model		Un standardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	-.013	.051		-.253	.800
	Bajaj own driver	.470	.107	.443	4.410	.000
	Rental Drivers	.533	.112	.480	4.779	.000

a. Dependent variable: DV (Income performance IP)

Table 4.2.3 the multiple regression model for the IP as per indicators are  $Y = -.013 + .470X_1 + .533X_2 + .051$ , Bajaj owner drivers ( $B = .470, p < 0.05$ ) which indicates that this variable significantly contribute much to the prediction. Another variable, Rental driver ( $B = .533, p < 0.05$ ) implies that these drivers have great role to the prediction on income performance in the region. To have This was interpreted to mean that the combination of the above drivers was very important on the overall income performance among society in Banadir region-Mogadishu-Somalia. Lastly, to have a negative value on the constant should not generally be a cause for concern but to have a good sense of your model and the variables is needed. Typically, it is the overall relationships between the variables that will be of the most importance in a linear regression model, not the value of the constant (NONSO & MUJTABA, 2022).

### 5. Discussion

The results of the undertaken research demonstrate the role of Bajaj drivers on income performance among society in Banadir region, Mogadishu, Somalia. The previous literature exhibited that unemployment persons those vary in age start work as Bajaj drivers usually rent price per day in specified price of money while others purchase these vehicle for their sons operated as Taxis (Qanyare, 2019).

Based on the analysis of regression statistics indicates that the variables have a significant role between Bajaj drivers and income performance in society since  $p\text{-value} < 0.05$ . Likewise; the analysis of the descriptive statistics, the researcher found that 56% of IV1 moderately supported an issue while IV2 the respondents of 61% agree proposed activities in the statements of this independent variable. In IV1.5 also indicates that working hours on a day have increased, as drivers try to compensate for lost earnings on the following rest day for the percentage of 62.2%. In addition that IV2.1 shows that Been a taxi Rickshaw rental driver has become the mainly option for those who have insufficient money to cover their lives with the percentage of 73.3%.

### 6.0 Conclusions

The study showed that the role of Bajaj owner drivers was significantly affect to the overall income performance among society since  $p\text{-value}$  is less than .05 Or 5%. The research also indicated that An Auto-rickshaw rental drivers was greatly influence to the overall income performance among society in Banadir region since  $p\text{-value}$  is less than .05 Or 5%. In terms of IV, The finding indicates that significant positive relationship exists between driving Bajaj and the performance of income among society in Banadir region-Mogadishu-Somala.

### 7.0 Limitations and Recommendations

-The main constraints of the study were some drivers who are illiterate and others give you bias information.

-On the basis of findings the study suggests the following recommendations:

The study recommended that the Bajaj owners reduce rent price per day to satisfy both renters and customers.

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