

## **Impact of Private Bus Operations on Small and Medium Scale Enterprises (SMEs) Productivity in Ibadan Metropolis of Oyo State, Nigeria**

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### **ABSTRACT**

*Impact of private bus operations on SMEs productivity in Ibadan metropolis of Oyo state was examined in this study. Furthermore, it examined impact of bus operations on Small and Medium Scale Enterprises productivity and appraised flexibility of bus operations in the study area. The work was embarked upon in Ibadan. Random sampling technique was employed, as two hundred and five (205) SMEs outfits were randomly selected from three local government areas. Which was randomly chosen out of the 5 local government areas of the study area. Regression analysis and percentage frequency were used for data analysis. It was discovered that most SMEs in the study area had daily revenue range of between 30,001 – 50,000 naira. Also,  $R^2 = 0.779$ , meaning that 'extent to which private bus operations is cheaper than other transport means, private bus operations are readily available and private bus operations covers city haulage,' explained daily revenue was 77.9 percent. Also,  $F\text{-value} = 236.177$  and  $p\text{-value} = 0.000 < 0.05$ . Bus operations was discovered to have had both statistical and significant impact on small and medium scale enterprises. Conclusively, bus operations had impact on small and medium scale enterprises in Ibadan. While flexibility of operations was considerably poor in the study area.*

**Keywords:-**Private bus, operations, small and medium scale enterprises, productivity and metropolis.

### **INTRODUCTION**

The contribution of small and medium scale businesses to national development and economic growth is no doubt possessive, as it generates and creates service, demand and supply. One of such service is demand for transport services in which bus operations is indispensable. This transport services according to Adetunji [3] are grossly inadequate in quality and qualitative in most developing countries around the world like Nigeria that, depend largely on importation of fairly used automobiles for her travel demands. This poor service in transport system created limitation to smooth movement of people, goods and services in both rural and urban centers. There is

insufficient public transport services which gives room for the need for vibrant private sector participation in the provision of transport services, however, this private transport services participation is also inadequate both in quality and quantitative considering rate of population growth, urbanization and economic condition of average Nigerian on affordability of transport services to meet his or her travel needs or demands in recent time.

Government had made several attempts to fill the gap between available transport services, infrastructure and transport demand in Nigeria. Among such attempt is the structural adjustment programme which was done in middle 80's. This

program has proved abortive over the years. It is noteworthy to pin point the fact that 70 percent of all the trips made by vehicles were by public transport, which is dominated by private sector operators [3]. In the word of Adesanya, [2] common modes of public transport in the developing world are buses and minibuses, shared taxis, converted pick-up and vans. Basorun and Rotowa, [5] said role of the private sector in the public transport services supply associates highly (0.95) with patronage by commuters. Also Oyesiku [10] affirmed that more than 95% of all urban public transport trips in Nigeria were supplied by private sector operators through the use of taxis and para-transit buses mainly. Also private bus operations had been useful in the business of transport supply though it carrying capacity is more compared with that of taxi cab. On the other the cost implication of private bus operations is cheaper than that of taxi cab. This makes private bus operations' flexibility poor. In order words, though private bus operations is cheaper, however poor flexibility erodes cost effectiveness. Atoyebi, Gbadamosi, Nwokoro and Omole, [4] discovered that highest number of trips made by bus drivers per day was four which was has a result of traffic delay in almost all roads. While they also said major purpose for trip making was for business. Somuyiwa, Fadare and Ayantoyinbo [11] discovered that an inverse relationship existed between traffic congestion and workers' productivity. In other word, increase in rate of traffic congestion leads to low productivity.

Adesanya, Adeniji and Daramola [1] said urban poor in Nigeria pay a very high proportion of their income for transportation services and they spent long time travelling and waiting for infrequent and unreliable bus transport services. This does not exclude Small and Medium Enterprises (SMEs). How the operation of

bus operations impact on SMEs productivity needs to be investigated. To this end the specific objectives of the study are to: examine the impact of bus operations on Small and Medium Scale Enterprises productivity and appraise flexibility of bus operations. The work also hypothesized that bus operations does not impact Small and Medium Scale Enterprises productivity.

## **LITERATURE REVIEW**

This work is predicated on the modal choice of bus transport operations as a means of transportation supply to commuters especially SMEs in meeting their transport demand in a profitable manner to their businesses. Modal choice symbolized important individual's travel behavior in transportation study. Several theories abounds concerning literature that explained transportation planning issues. Among the theories are, gravity model, travel demand model, residential location model, traffic assignment model and modal split model. The appropriate theory for this study is travel demand model.

The travel demand model has four steps which are; Trip Generation, Trip Distribution, Modal Choice and Route Assignment. The Trip generation is the model that determines the rate of origins or destinations trips in each zone by trip purpose, which is a function of land use by household demographics, and other socio-economic and cultural factors. Trip distribution matches origins of trip to destinations, it explains the relative activity at point of origin and destination and friction of overcoming distance decay between them. Modal choice computes quantity of trips between each point of origin and destination which use particular transportation mode for example bus transport. What route assignment model does is to allot trips between a particular origin to a particular destination through a particular mode to a route.

Spatial structures of settlements towns and cities especially in developing countries are of high variance from one to another. Some regions have needed services and facilities for developmental activities while others don't have such facilities or are grossly inadequate. The variation in the spatial structure is as a result in diverse socio-economic and cultural characteristics of human. In most third world countries like Nigeria, quality of life in most cities are poor and closely related to non availability and poor accessibility to social amenities needed for good life experience [12]. Generally speaking, car ownership in Nigeria is low compared to other developing countries. Adesanya [11] discovered that major cities of Nigeria had average of 4 cars per 1000 population, which can be interpreted to about 0.004 cars owned per person. With such relatively low level of car ownership when compared to other developing countries, Nigeria cities experience so much congestion on the high way. However, the situation differs in some developing countries, for example, saturation point of car ownership was 0.831 in Brazil, 0.8 in Argentina, 0.825 in South Africa, and 0.683 in India [5]. Oluwole [9] put it forward that bus service reliability is the major determinant of public transport accessibility level in Abuja Nigeria, this access might be linked to ownership structure. Nwankwo, Fawohunre and Obasanjo,[8] put it forward that, there are no dedicated lanes for buses, long waiting time, poor reliability, discourteous drivers and motor boys, uncomfotability while in the vehicle, low efficiency and also long-down time of vehicles due to lack of proper maintenance. Desmond and Dickson[7], find out that BRT commuters were satisfied with BRT operations concerning safety/security, identity and image, fare structure, speed and comfortability, travel time and capacity in Lagos state, nevertheless a few expressed dissatisfaction in, reliability and waiting time while severity of the problems commuters encountered are overloading,

delay in the arrival of buses / inadequate number of buses and inadequate maintenance of buses. Wojuade and Adewumi [6]; affirmed that four underlying factors that contributed more to satisfaction with bus services are, comfort, service reliability, security and accessibility.

### **METHODOLOGY**

This work was done in Ibadan metropolis. Ibadan is one of the urban centers in Nigeria. It has five local government areas which are Ibadan North, Ibadan North West, Ibadan South West, Ibadan South East, Ibadan North East. This study randomly selected two hundred and five (205) SMEs in three local government areas namely: Ibadan North, Ibadan North West and Ibadan North East. They were randomly chosen, out of the five local government areas in the study area. Regression analysis was employed to test objective one which was to examine the impact of bus operations on SMEs productivity and percentage frequency was employed to test for objective two which was to appraise flexibility of bus operations in the study area.

### **RESULT AND DISCUSSION OF FINDINGS**

Table 1 presented the socio demographic characteristics of respondents sampled for the study. It was observed that 26.8 percent, 18 percent, 21 percent and 34.1 percent had age range of 21 to 30 years, 31 to 40 years, 41 to 50 years and 51 to 60 years respectively. Furthermore, marital status had 17.1 percent single, 27.8 percent married, 14.6 percent separated, 13.7 percent divorced and 26.8 percent widow. Likewise the religion of the respondents had 45.4 percent Christianity, 41 percent Islam and 13.7 percent accounted for others. The education of the sampled respondents had 12.7 percent no formal education, 66.3 percent primary and 21 percent secondary. As a result the majority of the sampled respondents were matured, capable of owning legal business outfits.

**Table 1:-Socio-demographic character of respondent**

Variables	Measure	Frequency	Percentage
<b>Age</b>			
	21 to 30 years	55	26.8
	31 to 40 years	37	18.0
	41 to 50 years	43	21.0
	51 to 60years	70	34.1
	<b>Total</b>	<b>205</b>	<b>100.0</b>
<b>Marital status</b>			
	Single	35	17.1
	Married	57	27.8
	Separated	30	14.6
	Divorced	28	13.7
	Widow	55	26.8
	<b>Total</b>	<b>205</b>	<b>100.0</b>
<b>Religion</b>			
	Christianity	93	45.4
	Islam	84	41.0
	Other	28	13.7
	<b>Total</b>	<b>205</b>	<b>100.0</b>
<b>Education</b>			
	No formal education	26	12.7
	Primary	136	66.3
	Secondary	43	21.0
	<b>Total</b>	<b>205</b>	<b>100.0</b>

Source: Authors Field Survey, (2020).

The respondents' opinion on public bus operations in the study area was presented in table 2. It was observed that 44.9% of the respondents strongly agreed and 55.1% agreed that private bus operation is cheaper than other transport means. Interestingly the entire sample size consented positively to the fact that private bus is cheaper than other forms of transport ownership.

Furthermore, 44.9% of the respondents agreed that private bus was readily available, 35.6% indifferent and 19.5% disagreed that private bus are always available. Likewise, 5.9% of the respondents strongly agreed that private bus covers city haulage, 21.0% agreed that private bus covers city haulage, 46.3% disagreed that private bus cover city haulage and 26.8% strongly disagreed that private bus covers city haulage.

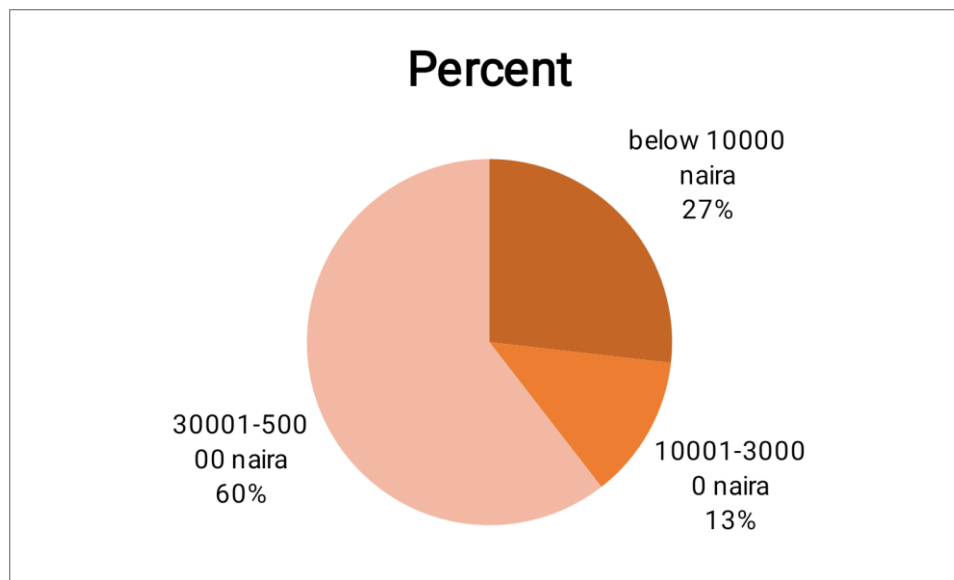
**Table 2:-Respondent opinion on public bus operation**

Variables	Measure	Frequency	Percentage
<b>Private bus operation is cheaper than other transport means (Q1)</b>			
	strongly agreed	92	44.9
	Agreed	113	55.1
	<b>Total</b>	<b>205</b>	<b>100.0</b>
<b>Private bus operation is readily available (Q2)</b>			
	Agreed	92	44.9
	Indifferent	73	35.6
	Disagreed	40	19.5
	<b>Total</b>	<b>205</b>	<b>100.0</b>
<b>Private bus operation covers city haulage</b>			
	Strongly agreed	12	5.9
	Agreed	43	21.0
	Disagreed	95	46.3
	strongly disagreed	55	26.8
	<b>Total</b>	<b>205</b>	<b>100.0</b>

Source: Authors Field Survey, (2020).

The daily revenue of small and medium businesses in the study area was presented in Figure 1. It was observed that 26.8 percent of the sampled respondents had daily revenue level below 110,000 naira. Also 12.7 percent had 10,001 -30,000

naira daily revenue level, 60.5 percent had revenue level of 30,001-50,000 naira daily revenue level. It was deduced that majority of the sampled respondents had daily revenue range between 30,001 – 50,000 naira.



**Fig.1:-Daily revenue of SMEs**

Source: Authors Field Survey, (2020).

In a bid to examine the impact of bus operations on SMEs productivity in the study area, multiple regression analysis was employed and the result was as presented in Table 3-5 respectively. The coefficient of determinant  $R^2$  was 0.779 which implied that the extent to which the predicting variables (private bus operation is cheaper than other transport means (Q1), private bus operation is readily available (Q2) and private bus operations covers city haulage (Q3) explained the dependent variable (daily revenue) was 77.9 percent. Furthermore the multiple correlation coefficient R was 0.883 which implied that there is a strong association between the predicting variables and the dependent

variable. Likewise, the F ratio was 236.177 and critical p-value was 0.000 which was lower than 0.05 significant level. The general rule stated that when the critical p-value is lower than the 0.05 level of significant then reject the null hypothesis and accept the alternate hypothesis. Since, critical p-value was 0.000 which was lower than 0.05 significance level then null hypothesis which stated that bus operations does not impact SMEs productivity was rejected and the implied alternate hypothesis which stated that bus operations does impact SMEs productivity was accepted. Thus, it was inferred that bus operations have both statistical and significant impact on SMEs.

**Table 3:-Model Summary of the impact of bus operation on SMEs productivity**

Model	R	R Square	Adjusted Square	R	Std. Error of the Estimate
1	.883 <sup>a</sup>	.779	.776		.41385
<b>a. Predictors: (Constant), Q3, Q1, Q2</b>					

Source: Authors Field Survey, (2020).

**Table 4:-ANOVA of the impact of bus operation on SMEs productivity**

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	121.350	3	40.450	236.177	.000
	Residual	34.425	201	.171		
	Total	155.776	204			
<b>a. Predictors: (Constant), Q3, Q1, Q2</b>						
<b>b. Dependent Variable: Q7</b>						

Source: Authors Field Survey, (2020).

**Table 5:-Coefficients of the impact of bus operation on SMEs productivity**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
	(Constant)	2.794	.367		7.611	.000
	Q1	1.801	.131	1.028	13.725	.000
	Q2	-.693	.120	-.605	-5.768	.000
	Q3	-.367	.047	-.520	-7.841	.000
<b>a. Dependent Variable: Q7</b>						

Source: Authors Field Survey, (2020).

The work appraised the flexibility of bus operations in the study area with the adoption of percentage frequency and presented in Table 6. It was noticed that 34.1 percent of the respondents disagreed that private bus operators ply all route and 65.9 percent strongly disagreed that private bus operators ply all route. The whole sampled respondents ascribed to private bus operators plying all route. Similarly, 80.5 percent of the respondents strongly agreed that private bus operations

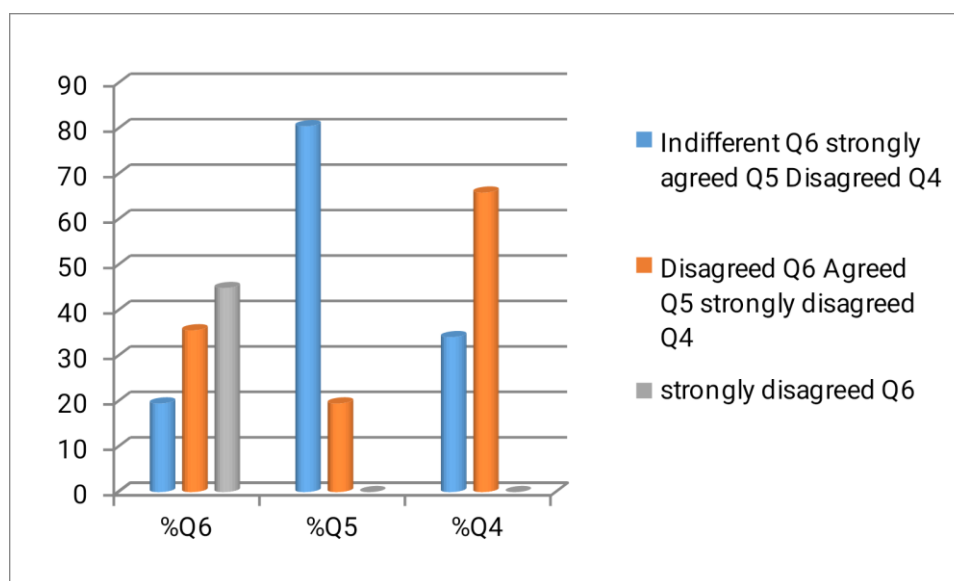
can be chattered and 19.5 percent agreed that private bus operations can be chattered. Furthermore, 19.5 percent of the respondents agreed, 35.6 percent disagreed and 44.9 percent strongly disagreed. A cumulative percentage of respondents (80.5%) consented negatively to the questions on private bus operations being very slow. It was deduced that, private bus operators does not ply all route and it is slow nevertheless it can be chattered. This was also supported in figure 2.

**Table 6:-Flexibility of bus operation**

Variables	Measure	Frequency	Percentage
<b>Private bus operation ply all route (Q4)</b>			
	Disagreed	70	34.1
	strongly disagreed	135	65.9
	<b>Total</b>	<b>205</b>	<b>100.0</b>
<b>Private bus operation can be chattered (Q5)</b>			
	strongly agreed	165	80.5
	Agreed	40	19.5
	<b>Total</b>	<b>205</b>	<b>100.0</b>
<b>Private bus operation is very slow (Q6)</b>			
	Indifferent	40	19.5
	Disagreed	73	35.6
	strongly disagreed	92	44.9
	<b>Total</b>	<b>205</b>	<b>100.0</b>

Source: Authors Field Survey, (2020).





**Fig.2:-Flexibility of bus operation**  
Source: Authors Field Survey, (2020)

## SUMMARY, CONCLUSION AND RECOMMENDATIONS

This work examined the impact of private bus operations on SMEs productivity in Ibadan metropolis of Oyo State, Nigeria. Precisely, it examined impact of bus operations on SMEs productivity and appraised flexibility of bus operations in the study area. It was carried out in Ibadan. Random sampling technique was employed, two hundred and five (205) SMEs outfits were randomly selected from three local governments randomly chosen out of the 5 local government areas in Ibadan. Regression analysis and percentage frequency were adopted. Findings revealed that majority of the sampled respondents had daily revenue range between 30,001 – 50,000 naira. Furthermore, with  $R^2 = 0.779$ , extent to which; private bus operation is cheaper than other transport means (Q1), private bus operations is readily available (Q2) and private bus operation covers city haulage (Q3), explained daily revenue was 77.9 percent. Also, with  $F = 236.177$  and  $p = 0.000$  lower than 0.05 significant level. Bus operations had both statistical and significant impact on SMEs. Similarly, private bus operators do not ply all routes

and it is slow in service, nevertheless, there services is chatter able. Conclusively, bus operations had impact on SMEs productivity in Ibadan while private bus operations flexibility was considerably poor. Hence it became pertinent to recommend that, private bus operators need to expand their operational route and working hours in the study area.

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