



Influence of Economic Recession on the Cost of Learning Materials in Public Secondary Schools in Jos Metropolis of Plateau State, Nigeria

Augustine Sambo Azi¹ & Peter John Mangut

Department of Social Science Education,
Faculty of Education,
University of Jos,
Nigeria.

Abstract

The purpose of this study is to examine the influence of economic recession on the cost of learning materials in public secondary schools in Jos metropolis of Plateau state, Nigeria. The research design was survey research design. Samples of 238 students were selected through simple random sampling technique from a population of 1580 students in Jos metropolis' public secondary schools. One questionnaire was administered to each student with a four Likert scale. The questionnaire responses were analyzed using SPSS version 23.0 to inferentially determine the results using chi-square at 5 percent level of significance. From the data analysis, it was found out that, economic recession has impacted negatively on the cost of learning materials in public secondary schools in Jos metropolis where students have resorted to buying only essential materials for their studies in order to reduce the high cost of education. Based on the findings, it was recommended among others, that the government should make efforts to put macroeconomic measures that will stabilize the economy and teachers, parents and relevant stakeholders in the educational sector should play a bigger role in the provision of instructional materials and facilities that will reduce the pressure on institutions and secondary school students.

Keywords: Economic Recession, Learning Materials, Secondary Schools

JEL Classification: A21, I20, I21, I22

Contribution/Originality:

The paper's primary contribution is finding that there is significant relationship between economic recession and cost of learning materials in public secondary schools in Jos metropolis which have contributed in public policy discourse.

1.0 Introduction

Education is generally regarded as the total process of developing human ability and behaviours. It is the catalyst that drives the economic and social development of any nation. That means, for any economy to thrive successfully, funding of its educational sector must be her top priority. Secondary education in Nigeria is the intermediary level of education between primary and tertiary education.

Economic recession which is seen as a significant decline in the economic activity of an economy, lasting more than a few months, normally characterized by a substantial decline in real Gross Domestic Product (RGDP), high unemployment, low industrial production, and wholesale-retail sales, generally affects the cost of education at all levels including secondary education. The International Monetary Fund (IMF), as well as the Central Bank of Nigeria, both agreed that the Nigerian economy has entered a recession and asserted that the economy may not regain stability too soon going by the low growth rate of 1.5 percent as at 2016 (Babalola, 2017).

An economic recession is associated with high unemployment, slowing gross domestic product, and high inflation rate. Recessions generally occur when there is a widespread drop in spending. They are always accompanied by an increase in bankruptcies among financial institutions and higher cost of

¹ Corresponding Author's E-mail and Phone: aziaustin@yahoo.com; +234 (0) 803 7005 897.

secondary education, which affects the cost of learning materials in secondary schools. In the mist of global recession, government's contribution to private cost borne by secondary school students is less.

According to Mitchell, Palacios & Leachman (2014), per-student spending in the United States of America in 2013 was down by more than 40 percent since the start of the recession in the U.S.A. Many schools had to cut down their expenditure with minimal impact on students by deferring maintenance cost and construction projects, laying off central office staff, and eliminating non-essential travels in order to meet up with the provision of learning materials due to the high cost of goods and services.

Nigeria, like other countries of the world is having its own share of economic recession and this to some extent is affecting its secondary educational sector in the areas of the cost of learning materials. Economic recession which started in Nigeria in 2015, is posing a problem and challenge to Nigeria's education sector as a result of rising cost of education. Students, teachers, proprietors, clerks and the private sector all have their share in the recession (David, 2017), because all incur costs in rendering services. David further asserted that the provision of books, school equipment and materials to secondary schools are declining during recession.

Educational cost can be seen as the value of what is forgone to be educated. It represents the opportunity cost or sacrifice and the expenditure outlay or money cost of an individual to see that he is educated. Opportunity cost represents the value of the real sacrifice that have to be made in the process of receiving education and the money cost is the amount of money directly spent on educational inputs or resources (Babalola, 2017). Secondary school Students bear these costs which are private cost and are borne by both the parents and the individual student through expenditure on tuition fees, books, accommodation, uniforms, transportation fares, earning forgone and other consumables.

Moreover, Bamigboye & Ede (2016) asserted that in Nigeria, the educational system is almost completely dependent on government budgetary allocation and with the economic recession, the sector will no doubt witness its fair share of budget cuts which will affect the cost of learning materials in secondary schools.

Many researchers (Agri, Mailafia, & Umejiaku, (2017); Babalola, (2016); Bamigboye, & Ede, (2016) have carried out studies on the influence of the global economic crisis on the cost of tertiary education per-student, how recession is affecting education in Nigeria, but little have been researched on the influence of economic recession on the cost of learning materials in secondary schools. It is against this background that this study sought to find out the influence of economic recession on the cost of learning materials in secondary schools among secondary school students in Jos metropolis of Plateau State, Nigeria.

The objective of this study is to examine the influence of economic recession on the cost of learning materials in secondary schools in Jos metropolis of Plateau State, Nigeria. The research hypothesis of the study is: There is no significant difference between the influence of economic recession and the cost of learning materials in public secondary schools in Jos Metropolis of Plateau state, Nigeria.

The study covered the following areas: Introduction, Review of related literature, Methodology, which comprised of research design, population and sample, sampling techniques, Instruments for data collection and method of data analysis. The study also has results and discussion, conclusion and recommendations, references and appendices.

2.0 Review of Related Literature

Learning materials have borne several nomenclatures from the colonial concepts of apparatus to teaching aids, teaching aid to educational media, educational media to instructional technology, instructional technology to curriculum materials, curriculum materials to its modern nomenclature-instructional materials. Each of these conception stages depicts the scope of its usage and application in the classroom. According to Eya (2005), the general acceptable nomenclature by professionals of education is the term “Instructional materials.” These are learning materials which help in instructional strategy and help in the academic performance of students.

Learning materials include scientific scholarly references, methodological teaching aids, textbooks, exercise books, books for recording scientific observations, laboratory manuals and manuals for production, training and programmed textbooks (Farlex, 2017). They are materials or resources that help the student to perform academically excellent in his/her studies when properly used and made available by either parents or the school authority.

Furthermore, Farlex (2017) asserted that learning materials are educational resources used to improved students’ knowledge, abilities and skills to monitor their assimilation of information, and to contribute to their overall development and upbringing. Learning materials are generally referred to as the guided tools for instructional delivery. These tools help to facilitate and enhance better understanding of ideas and concepts presented by the teacher during learning.

Alliance for Excellent Education (2011) discovered that in the U.S.A, more than one in three families are experiencing material deprivation, which is a huge rise over the last decade. One in nine children now lives in consistent poverty. These figures demonstrate how hard things have gone for families because of economic recession. Cuts to social welfare rates, such as the halving of the Back to School Clothing and Footwear Allowance, have hit families hard and mean they must tighten their budget elsewhere to be able to afford basic school necessities (Alliance for Excellent Education, 2011). Parents reduced their household bills or cut down daily expenses to afford their children’s school costs. Parents with children already at school do all they can to keep them there, even if it hurts financially (Sobowale, 2016). This is because education is fundamental to human development both in the area of improved standard of living and the development of one’s potentials and the economy in general.

At the child and household level, educated parents, better nutrition, high daily attendance, enrolment in private tutoring classes, exercise books and electric lighting and children’s books at home all increase learning. Private Cost is borne by the students or his/her parents/guardians; it includes tuition fees, examination fees, expenditure on books, stationery, board and lodging, transport and other incidental expenses (Singh, 2000). All these form part of learning materials that a student needs in his/her academics. Textbooks as a learning material have been shown to influence the sequence of learning, teaching strategies employed by teachers are often viewed as the definitive knowledge source in many classrooms. As such, the textbook often becomes the curriculum (Chiappetta & Koballa, 2002).

Similarly, Shobayo, Adurokiya, Oshodi, Olukoya, Gbadamosi & Okoli (2016) discovered that, parents also complained about the hike in the prices of textbooks and exercise books in Eastern part of Nigeria. Findings in Plateau State, Nigeria, revealed that most private schools in the state have increased their fees along with other learning materials on the premise that the cost of books, among others have gone up as a result of economic recession (Shobayo *et al*, 2016). This has affected their purchases by parents who only buy essential materials for their children learning requirements. The cost of school books is usually the biggest expense for parents especially those with children entering

senior classes. Unofficial charges for books and other learning materials can amount to about ₦8,000 a term. Many parents are so poor that they can't even afford to buy their children biros (Global Campaign for Education, 2010). Most schools lump-sum the cost of books, writing materials and other charges into their school fees which makes it difficult for parents to pay at the same time.

In another view, Leghara & Mbah (2010) reported that due to global economic recession, the high prices of teaching equipment and materials make them out of reach to most schools in view of the high rate of foreign exchange brought about by unfavorable economic situations. Most of the materials even if available are either pirated or of low quality and very expensive. Thus, learning materials have a significant role to play in classrooms, which has implications for their selection and use (Ford, 2004). Economic recession has led to increased prices of these items and leading to low quality production of the materials in order to maximize profit.

Prices of books, laboratory sets, mathematical sets, uniforms, shoes, and transport increased when the Nigerian currency was officially devalued in 2016 during the long vacation. Prices of all those indispensable accessories to education went up by 70 to 150 per cent (Sobowale, 2016). Fees in the form of charges for textbooks can also impede learning even for those who can stay in school (Kattan & Burnett, 2004). The increase in costs is due to economic recession where the cost of production has gone up leading to higher prices of these commodities. This has a negative effect on the cost of learning materials for secondary school students in Nigeria.

Most of the literature reviewed highlighted the effect of economic recession on some specific learning materials in primary, secondary (private) and tertiary schools. In addition, the literature was mostly taken from developed countries. This study filled this gap by analyzing the influence of economic recession on the cost of public secondary schools in Jos metropolis of Plateau state, Nigeria. In addition, this study empirically brought out the relationship between economic recession and the cost of learning materials.

3.0 Methodology

Research Design

The research design adopted for this study was the descriptive survey research design. Descriptive survey research was adopted because it is capable of obtaining information from large sample of the population. This study examined the influence of economic recession on the cost of learning materials in public secondary schools. The descriptive survey research was used by Babalola (2016), who examined economic recession; hawking and students drop out in schools in the five Eastern States of Nigeria. This is similar to the present study in the area of the influence of economic recession on the cost of learning materials in secondary schools in Jos metropolis of Plateau State, Nigeria.

Population and Sample

The population for the study was made up of students from public Senior Secondary Schools in Jos metropolis of Plateau State which comprised of 1,580 students in the senior classes. The choice of the Senior Secondary Classes was done with the idea that the students were not new into the school system and came from different economic backgrounds.

The researchers used a sample of 238 students out of the total population of 1,580 Senior Secondary School students which represents 15 percent of the population in senior secondary schools in Jos metropolis. This was aimed at meeting the target sample of 238 elements for adequacy, which served as the basis for generalization. The result was however used to generalize to cover the entire population under study as far as the research was conducted with valid and reliable procedure and materials.

Sampling Techniques

The researchers adopted systematic random sampling in selecting the elements that were proposed. The essence was that all elements that are identified with the population have equal chance of being selected into the research sample (Eguzoikpe, 2008). The aim of systematic random sampling was to reduce the potential for human bias in the selection case to be included in the sample. As a result, the systematic random sample provided the researchers with a sample that is highly representative of the population being studied.

According to Muthoni (2015), for a descriptive research, the corresponding general guideline is to sample 10 to 20 percent of the total population. Therefore, a sample of 15 percent of the total population of Senior Secondary School students was used which were 238 students. The sample size was determined using 5 percent confidence interval and 95 percent confidence level for sample sizes calculated.

Instruments for Data Collection

The instruments used for data collection were a four point structured questionnaire drawn up by the researchers. One set of questionnaire was developed which is: Questionnaire for Students. The instrument had 25 questions each and contained items on influence of economic recession on the cost of learning materials in public secondary schools in Jos metropolis. The response options to the items were a four point Likert scale: Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD) (see appendix 1).

The questionnaires included structured questions. Respondents were asked to tick on the different options from the questions. This was used to determine the influence of economic recession on the cost of public secondary school education in Jos metropolis. The reliability of the instruments was established using the Cronbach's Alpha reliability coefficient through the use of SPSS with a reliability coefficient of 0.79, which was seen to be reliable at 79 percent (see appendix 2). The data were coded and analysed using chi square statistics.

Method of Data Analysis

This refers to the examination of coded data critically and making inferences (Kombo and Tromp, 2006). In this study, inferential statistics was used. The Inferential statistics used was the Chi –square which was computed at 5 percent level of significance.

Chi-square was used to analyze the hypothesis. The items on the questionnaires were summed up and calculated to arrive at the calculated value in order to determine whether the hypothesis will be rejected or accepted.

The formula adopted is:

Chi-square

$$X^2 = \sum (fo-fe)^2/fe$$

Where:

X^2 = Chi-square statistic

Σ = Sum of

fo = Observed frequencies

fe = Expected frequencies

4.0 Results and Discussion

Hypothesis: There is no significant difference between the influence of economic recession and the cost of learning materials in public secondary schools in Jos Metropolis. Table 1 shows the result of test of hypothesis using chi-square statistics.

Table 1: Summary of Results showing the test of hypothesis using chi-square statistics

Cell	Fo	Fe	df	Calculated x ² value	Critical x ² value ($\alpha=0.05$)
1	229	221.57	3	3.72	7.82
2	362	369.43			
3	173	179.20			
4	305	298.80			
5	66	60.36			
6	95	100.64			
7	28	34.87			
8	65	58.13			

Sources: Authors' computation

Results in Table 1 showed that the calculated x² (3.72) is less than the critical x² (7.82) for df = 3 and $\alpha = 0.05$ level of significance (see appendix 3). The null hypothesis (Ho) is therefore rejected and it is concluded that, there is significant relationship between the influence of economic recession and the cost of learning materials in public secondary schools in Jos metropolis.

Discussion of Findings

Results from the test of hypothesis revealed that there is a significant relationship between the influence of economic recession and the cost of learning materials in public secondary schools in Jos metropolis of Plateau State, Nigeria. This is in agreement with the views of Leghara & Mbah (2010) who reported that due to global economic crisis, the high prices of teaching equipment and materials make them out of reach to most schools and students due to the high rate of foreign exchange brought about by unfavourable economic situations. The finding is also in agreement with Agri, Mailafia, & Umejiaku (2017).

Who similarly reported that students and parents attested that their purchasing power has dropped and as a result, it has affected the purchases educational materials. Thus, it may be concluded that, there is significant relationship between the influence of economic recession and cost of learning materials in public secondary schools in Jos metropolis. Apart from the similarities of this study findings with those of Leghara & Mbah (2010) and Agri, Mailafia, & Umejiaku (2017), this study empirically revealed the relationship between economic recession and the cost of learning materials in public secondary schools, which is an area not covered by the afro mentioned studies.

5.0 Conclusion and Recommendations

The central issue in this study was the influence of economic recession on the cost of learning materials in public secondary schools in Jos metropolis of Plateau State. From the findings of the study, it can be concluded that economic recession influences the cost of learning materials. Implying that, students are not able to purchase the required learning materials needed for their studies as a result of a downturn in the economy occasioned by economic recession in Nigeria. Based on these findings therefore, the following policy recommendations are made:

1. The Federal Government of Nigeria should formulate a policy of Medium and long term National Investment plans to promote productive activities in sectors favouring economic growth and employment, including education. This will force down the prices of goods and services (including learning materials) in the country.
2. The Nigerian Government, through the Federal Ministry of Education should make it a policy by ensuring that education is totally free to all children. This is because even after the introduction of free primary education, poor parents are still experiencing problems while catering for additional costs which could be examination fees, tuition fees and cost of uniform. The government should therefore explore means of alleviating these costs to reduce unnecessary charges by school authorities and sanctioning administrators who collect illegal fees apart from the approved fees by the federal ministry of education.
3. The Nigerian Government should make it a policy to increase its spending on education, supporting students, families and education providers generally. This will enhance productivity and efficiency in the educational sector.

References

- Agri, E. M. Mailafia, D. & Umejiaku, R. I. (2017). Impact of Economic Recession on Macroeconomic Stability and Sustainable Development in Nigeria. *Science Journal of Economics*, 20(17), 130 – 142.
- Alliance for Excellent Education (2011). *The High Cost of High School Dropouts: What the Nation Pays For Inadequate High Schools*. Retrieved on 7th December, 2017 from <http://www.all4ed.org/files/HighCost.pdf>.
- Babalola, A. (2017). Nigeria and economic recession: Way out. *Vanguard Newspaper*. 18th September, 2017, p.18.
- Babalola, J. B. (2016). *Educational costs and financial analysis* (3rd ed.). Ibadan: University of Ibadan Press.
- Bamigboye, G. & Ede, A. (2016). *Impact of economic crisis on education: A case study of Southwest Nigeria*. Proceedings of INTED 2016, 7th – 9th March. Valencia, Spain.
- Chiappetta, E. L. & Koballa, T. (2002). *Science Instruction in the Middle and Secondary Schools* (2nd ed.). Upper Saddle River: Merrill Prentice Hall.
- David, C. (2017). *How recession is affecting education in Nigeria and solution*. Retrieved on 12th December, 2017 from <http://www.schoolsoftware.com.ng/school-in-nigeria>.
- Eguzoikpe, E. E. (2008). *Research methodology: A Practical Treatise for Students* (4th ed.). Jos: Quality Functions Publishers.
- Eya, P. E. (2005). Instructional material, production in a challenging educational system. *Journal of Curriculum and Media Technology Research*, 1(1): 146 -154.
- Farlex, O. (2017). *The free Economist*. Retrieved on 12th January, 2018 from <http://www.getjar.com>reference>dict>.
- Ford, D. J. (2004). Scaffolding pre-service teachers' evaluation of children's science literature: Attention to science-focused genres and use. *Journal of Science Teacher Education*, 1(5), 133–153.
- Global Campaign for Education Report (2010). *Back to school?* (2nd ed.). South Africa: Saxonword Press.
- Leghara, B. N. & Mbah C. N. (2010). Sourcing and cost effective use of fund for science and technology education in Economic crisis situation. *Science Teachers Association of Nigeria Journal*. 2(4): 63-69.
- Mitchel, M. Palacios V. & Leachman, M. (2014). *State are still funding higher education below Pre-Recession Levels* (5th ed.). Washington DC: Center on Budget and Policy Priorities Press.
- Muthoni, M. T (2015). *Determinants of wastage in public primary school in Starere district, Nairobi County, Kenya*. An M.Ed Research Project submitted to the School of Education, Kenyatta University, Kenya.
- Kattan, R. B. & Burnett, N. (2004). *User fees in primary education, the World Bank*. Washington D.C: World Bank. 2(1): 12-21.
- Kombo, D. L & Tromp A. (2007). *Proposal and thesis writing. An introduction* (6th ed.). Nairobi: Pauline's publication press.
- Singh, U. (2000). *Cost of education to students: Private Cost*. Retrieved on 30th November, 2017 from shodhganga.inflibnet.ac.in>bitstre.

- Shobayo, I. Adurokiya, E. Oshodi, A. Olukoya, Y. O. Gbadamoi, H. & Okoli, N. (2016). Resumption in recession: How parents, schools hope to cope. *Tribune Newspaper of 8th September, 2016. Page 12-13.*
- Sobowale, D. (2016). *Recession hits education sector*. Retrieved on 2nd December, 2017 from www.vanguardngr.com/2016/09.

APPENDIXES

APPENDIX 1

QUESTIONNAIRE FOR STUDENTS

Department of Social Science Education,
Faculty of Education,
University of Jos.
9th December, 2017.

Dear Respondent,

REQUEST FOR ASSISTANCE TO FILL QUESTIONNAIRE

We are academic staff of the above named institution and currently carrying out a study on the topic “Influence of Economic Recession on the Cost of Learning materials in Public Secondary Schools in Jos metropolis of Plateau State, Nigeria”.

We humbly request your assistance in filling the questionnaire. Your information is highly needed to enable us complete the research work. Kindly answer the following questions honestly and all information provided will be treated confidentially and shall be used only for this study.

Thank you

Yours faithfully

Augustine Sambo Azi and Peter John Mangut

PART A: PERSONAL DATA

1. Name of school.....
2. ClassGender: Male () Female ()

PART B: Please tick (✓) SA for Strongly Agreed, A for Agreed, D for Disagreed and SD for Strongly Disagreed.

S/NO	ITEMS	SA	A	D	SD
Part One	Economic recession and cost of learning materials				
1	I purchase all my learning materials before resuming to school.				
2	I spent more on buying these learning materials now than before.				
3	Currently, I have all the necessary learning materials for my studies.				
4	I have complete complementary learning materials like mathematical set, biros, pencil etc.				
5	I spent more now to purchase complementary learning materials like mathematical set, biros, etc				
Part Two	Economic recession and the activities of PTA				
6	There is an increase in our PTA levy				
7	PTA projects in the school are ongoing without problem.				
8	Every term, at least one PTA teacher leaves the school.				
9	We have enough teachers in all compulsory subjects.				
10	There are some PTA projects that are kick starting in our school				
Part Three	Economic recession and students dropout				
11	Every term at least one student leaves school in my class.				
12	At least one among my classmate has left school to learn trade and other hand work in a term.				
13	I am aware of my neighbour who left school for hand-work.				

14	My parents are considering removing me from school to learn trade.				
15	At least one of my female classmates has gotten married because of her parent's inability to continue paying her school fees.				
Part Four	Economic recession and payment of school fees				
16	I missed my exams due to nonpayment of school fees.				
17	I find it difficult to pay my school fees.				
18	I experienced delay in the payment of my school fees now than before.				
19	I missed my test due to inability to pay my school fees.				
20	My parents are considering changing my school because of difficulty in settling the school charges.				
Part Five	Economic recession and cost of secondary school uniforms				
21	I have the proper school uniforms (shirts, trouser/skirt, shoe, bags etc).				
22	I find it difficult to change my school uniforms as I used to do before.				
23	I wish I can change my school uniforms but my parents cannot afford it.				
24	I have changed my school bag to a better one that I wanted.				
25	I have at least two pairs of school shoes, and I am comfortable with them.				

APPENDIX 2

SUMMARY OF RELIABILITY COEFFICIENT

Reliability Statistics			
Cronbach's Alpha		N of Items	
.790		25	
Case Processing Summary			
		N	%
Cases	Valid	278	100.0
	Excluded ^a	0	.0
	Total	278	100.0

a. Listwise deletion based on all variables in the procedure

APPENDIX 3

Summary of Contingency Table For Chi-Square Result

Cell	f_0	f_e	$f_0 - f_e$	$(f_0 - f_e)^2$	$\frac{(f_0 - f_e)^2}{f_e}$
1	229	221.57	7.43	55.21	0.21
2	362	369.43	-7.43	55.21	0.15
3	173	179.20	-6.2	38.44	0.22
4	305	298.80	6.2	38.44	0.13
5	66	60.36	5.64	31.81	0.53
6	95	100.64	-5.64	31.81	0.32
7	28	34.87	-6.87	47.20	1.35
8	65	58.13	6.87	47.20	0.81
					<u>3.72</u>