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## THE OPERATION OF MICROECONOMIC CHOICE IN COMPETITIVE MARKET FOR UNIVERSITY EDUCATION IN NIGERIA

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### ABSTRACT

In recent time in Nigeria, there has been continuous expansion of the University and a change in market structure from monopolistic control by federal government to a competitive one involving private individuals and religious organisations as well as state government. This provides a wide range of choices for the students. The study therefore looks at the factors determining choice of consumers in university options and the importance of such choice in a competitive market for education which is one of the basic rights of the students. It uses a model comprising the various components of microeconomic choice namely: consumer (parent), producer (government and firms) and the market place (students) and was based on the bounded rationality theory.

The study shows that consumer's choice of university is based on availability of suitable course in the area of interest, employment rates of graduates from the particular university, parents' education and income, physical appearance of the campus buildings and the impression they have of the university. Other important factors in most university advertisement like: quality of teaching, use of information technology etc do not have meaning to applicants due to inadequate information for applicants. It is however recommended that consumers should give recognition to class size, skill outcome, career possibilities etc among others. The paper also identified the importance of choice as: reducing waste, enhancing efficiency in decision making, ensuring failure of the weak and success of the strong and finally, bringing about innovation. Recommendations are therefore given for efficient choice making.

Keywords: Opportunity Cost, Scarcity, Rationality, Information Overload, Innovation Overload

### INTRODUCTION

By definition, Economics deals with the allocation of scarce resources among alternative uses to satisfy human wants (Salvatore, 2003). From the microeconomic point of view, Brickley and Zammerman, (2001) submit that, "economics provides a theory to explain the way individuals make choices". Microeconomics is a branch of economics that studies how individuals, households and firms take decisions on allocation of limited resources typically in markets for goods and services. It examines how these decisions and behaviours affect the supply and demand for goods and services, which determine prices and how prices in turn, determine supply and demand.

Scarcity occurs because human wants exceed the limits of available resources. Economics deals with the basic fact that scarcity exists in our everyday lives and in our economy. Given the presence of scarcity, choices must be made as to how resources are allocated. Choice means selecting from the alternatives. Our lives are filled with a wide range of choices regarding the use of limited personal funds. In microeconomics, choice is described in terms of individual's or firm's decision. These individuals and firms take

private decisions in a competitive market (Salvatore, 2003). Choices are not limited to shops and homes but are now extended to telecommunication, energy and schools (Nelson, 2002).

Responsibility for the provision of university education has always varied over years. At independence in Nigeria, the provision of university education was the sole responsibility of the federal government. However, by 1999, there has been private ownership of universities in conjunction with federal and state government's ownership. The dwindling fund of federal government and the increasing population indicated that it could not effectively fund university education in Nigeria (Muzali, 2004). It therefore allowed states, private individuals and religious groups/missionaries to partake in the provision of higher education (especially university education) to yearning citizens.

Before 1960, there was only one university in Nigeria, but there have been expansion over years due to economic, social and some political factors. Thus, it has grown to 13 in 1979, 22 in 1983, 84 in 2007 and 104 in 2009. State governments were allowed to invest in university education in 1978 and there was only one state university up till 1979, 11 in 1992 but increased to 36 by 2009. The religious groups and private individuals were allowed into the system in 1999 so that by August 2001 when Nigeria had 45 universities, 25 were federal, 16 were state and 4 were private universities while by the end of 2009 the number has increased to 104 with 27 federal, 36 state and 41 private universities (NUC,2010) (Table 4).

This has introduced competitiveness into the market for university education. In the light of this, choice is therefore a factor in the evolution of many private universities creating alternative options to public universities. How then has choice come to play a role in this phenomenon? The increasing number of universities means that the parents and students have so many alternatives to choose from. Students and parents now find it difficult to know which university to select. At the same time the private firms engage in business for profit maximisation this indicates that parents have to pay more for the education of their children under private universities. This implies that private cost of education will increase while the private returns will reduce. Although, this paper is not to analyse the cost and return to education, it will have certain implications on the public universities: as more people will prefer the public universities because of the reduction in cost of education under such system. The problem now arises on how the consumers will make rational decision in the selection of the appropriate university.

Researchers have investigated into the application of microeconomic theory and principles to education. For instance, Udechukwu (2004) looked at the mechanics of microeconomic choice in school option with reference to primary school education in United States of America. He used a 'proposed' model of Consumer-Producer Choice Impact Diagram to study the school option of K -12 pupils based on bounded rationality. Also, Jere et al (1998) looked at empirical analysis of how wage rate could be determined by the quality of education and career choice. Sweetland (2002) considered the theory of free markets and public schooling. All the previous writers have been concentrating on public schools and primary education in United States of America using longitudinal data. This paper is to help students and parents in understanding what to consider in their choice of university

through the examination of the workings of the adapted model of microeconomic choice by Udechukwu (2004) in Nigeria.

The study will help in rational and efficient decision in choice of university as it concentrates on the delivery of university education services in a competitive market. This paper analyses the role of choice in University options and identifies the determinants of such options of the consumer in a competitive market for university education in Nigeria. The rest of the paper is divided into following sections: section two is the literature review and theoretical framework, section three analyses the various components of choice in school option and their determinants, while section four examines the roles of choice and finally, section five provides the summary, conclusion and recommendations.

### **LITERATURE REVIEW AND THEORETICAL FRAMEWORK**

The choice in education is made up of three components; consumers (parents), market (students) and producers (government and firms) (Udechukwu, 2004). Four groups of people benefit from services delivered by education system. They are: the students; parents; the owners of the school (government and firms) and society at large which is the external environment in which the other components operate (Macbeth, 1989). The choice of the consumers (parents) is affected by four major factors namely: scarcity, wants, available alternatives and preferences (Udechukwu, 2004).

Maloney, et al. (1996) submit that consumers must establish that a product or service is needed or wanted, look for the available alternatives or options and select from among the options. Campbell and Stanley (1986) also affirm three major basic elements which determine choice making as: first, relative scarcity of time, personal income and societal resources. Secondly, purposeful behaviour or opportunity cost – Scarcity leads to choice and every choice made had corresponding alternatives that are sacrificed or foregone called opportunity cost (thus, choice must be purposeful or rational rather than random) and thirdly, adaptability. Purposeful choices are based on costs and benefits. Individual component in the choice making is assumed to adapt, adjust or alter their behaviours in response to changes in expected costs and expected gains. On the side of the producer, Salvatore (2003) submits that producer's response to consumer's needs is driven by how to produce, for whom to produce, how to provide for the growth of the system and rationing a given quantity of the system.

Choices from consumer and producer are unlikely to exist or act in a vacuum, but must act on a medium or entity (Udechukwu, 2004). Choice is directional and possesses the propensity to impact on a known entity or market place (the students) and directed to a particular object which is education services. The consequence of the forces of choice by the consumer (parents) and producer (government and firms) on the market place (students) is the generation of market performance measures. The market place (students) is a necessity in a free enterprise system. Market is an institutional arrangement under which buyers and sellers exchange some quantity of a good or service at a mutually agreeable price (Salvatore, 2003).

The service of exchange here is education which is not a tangible good that could be assessed except by looking at the tangible elements associated with it. These elements

include examination results from administered tests, performance on the job and assessment of each institution by the educational authorities. Assessment and evaluation of efficiency and effectiveness are done through job performance of the market (students) and several other screening tests by employers. The choice of producer and consumer has impact on the market and influences educational services (Ruston and Carson, 1985).

Opportunity cost is one way to measure the cost of actions although it is hard to quantify, its effect is universal and very real at the individual level. It is a principle which is applicable to all decisions not just economic ones. The forgone profit of the next best alternative is the opportunity cost of the original choice. For example the opportunity cost of attending university is the lost wages a student could have earned in the workforce, rather than the money cost of attendance (cost of tuition, books, and other requisite items). Note that opportunity cost is the benefit of the other best alternatives forgone. The problem is how to assess the benefit of the foregone alternatives (Kaplan, 2002).

In the same vein, making choice about university education involves opportunity cost (like number of years used in school, quality of education received, etc.) which can be very high because it could not be measured immediately until later when the students might have passed out of the institution. Microeconomic choice is effective when the costs of making wrong choices are lower such as for commodities which can easily be returned, replaced or discarded. When the potential costs of wrong choice are high like this for individuals, government intervention in conditioning the market may be necessary to assist and protect the community (Barr, 1998). Such is the case for National University Commission (NUC) in Nigeria which is concerned with coordination of universities and the selective admission based on aptitude test by Joint Admission and Matriculation Board (JAMB).

The bounded rationality theory is used in this paper. In a free enterprise system, microeconomic choice as noted above involves individuals and firms making private decisions. Decisions or choice could be divided into rational and irrational forms. Therefore, the microeconomic choice of school option in this paper is based on rational form and even bounded rationality which implies deliberate and collective sense of purpose by consumers whose aim is to satisfy their needs and producers who in turn, respond to those needs (Simon, 1957). Models of rational choice although diverse, all assume that individuals choose the best action according to stable preference functions and constraints facing them. Meanwhile, they have assumptions but the basic idea of rational choice theory is that pattern of behaviour in societies reflect the choices made by individuals as they try to maximize their benefits and minimize their costs.

Since people want to get the most useful products at the lowest price, they will judge the benefits of certain object (for example, how useful or how attractive is it) compare to similar objects. Then, they will compare prices and choose the object that provides the greatest reward at the lowest cost. Rational decision making entails choosing an action given ones preferences and expectations about the outcomes of those actions. Actions are often expressed as a set, e.g. a set of 'n' exhaustive and exclusive actions:

$$A = \{a, a_1 \dots a_n\}$$

Rational theory makes two assumptions about individuals' preferences for actions:

- Completeness – All actions can be ranked in an order of preference (indifference between two or more is possible)
- Transitivity – If action  $a_1$  is preferred to  $a_2$  and action  $a_2$  is preferred to  $a_3$  then  $a_1$  is preferred to  $a_3$ . That is,  $a_1 > a_2$ ;  $a_2 > a_3$ ;  $a_1 > a_3$

These assumptions form the result that, given a set of exhaustive and exclusive action to choose from, an individual can rank them in terms of her preferences which are assumed consistent. Preferences could also take the various other forms like: Strict preference (occurs when an individual prefers  $a_1$  to  $a_2$  but not  $a_2$  to  $a_1$ .); Weak preference (in some models in which individual has a preference for at least  $a_n$ , similar to the mathematical operator  $<$ ) or even indifference.

To simplify education and facilitate testing, some assumptions are made including: first that, an individual has full or perfect information about what will occur under any choice made. Probability could be used in some cases to describe outcomes. Secondly, Individual has cognitive ability and time to weigh every choice against every other choice. One limitation of this theory is that rationality cannot be directly empirically tested (limited empirical output) but used rather as an assumption of the behaviour of individuals in microeconomic model.

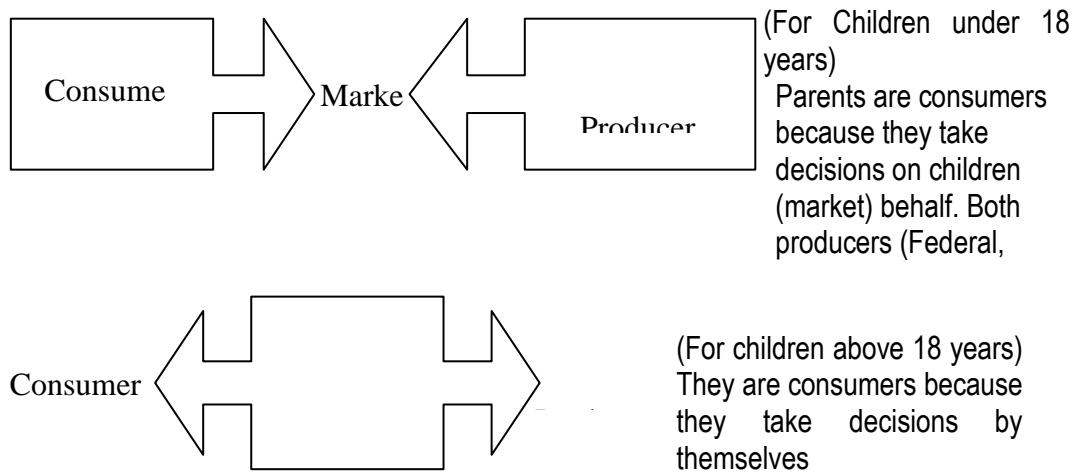
## **THE MODEL**

The target population for this paper is the secondary school students entering the university and has to decide on university options as well as the 100 level students who are just entering the University (or pre-degree students). They are somehow around age 18 who the parents are legally obliged to make major education decisions on their behalf hence, the parents are referred to as consumers. However, where they are older than 18 years, they could decide on their own, although the parent may have to be consulted later on major issues.

The producer is taken to be any level of government (federal or state) involved in the administration of scarce resources required as inputs in the public school as well as, Private firms involved in the administration of private scarce resources in private schools both for individuals and religious organizations. The government is responsible for the implementation of education legislation generally and funding of their own schools (federal and state schools).

Data collected are from the National University Commission (NUC) which is major accreditation and regulatory body that enforce uniform standard and sets admissions capacity of every university in Nigeria as well as National Bureau of Statistics and Joint Admission and Matriculation Board. Focus on statistical significance was not central to this paper which is primarily to describe the operation of microeconomic choice in a competitive market for education. Insufficient data makes prediction of consumer's preferences difficult here, but may be worthy of further or future research. Thus, the proposed model of consumer, market and producer will be applicable here as adapted from Udechukwu (2004).

**Figure 1: Microeconomic Choice**



**Adapted from Udechukwu (2004): Mechanics of Microeconomic Choice: School option**

In this model, Consumers are the parents of students under age 18 or students themselves if above age 18 (because the students can make their education decisions independently or in conjunction with their parents or guardian); market is the students on which the choice must have an impact; Producers are the school systems or the governments and private firms while Education is the service for delivery to customers.

**IMPORTANCE OF CHOICE**

Why are choice and its components important in school options between public and private university system? It is simply because resources are inevitably limited leading to scarcity which is a fundamental factor of every society (Salvatore, 2003). Human wants, especially those of the consumers, are insatiable and remain unlimited. Salvatore (2003) categorises wants as goods, services and conditions of life that individual’s desire. The resources here could be seen in terms of university space available while wants are the inexhaustible lists of applicants to ‘JAMB’ in Nigeria. Consequently, there are difficulties in satisfying such consumer wants considering the limited resources available in the university system. This encourages consumers to seek a variety of alternatives supplied by the producer in satisfying their needs.

However, it must be noted that in the school option perspective, consumers seek alternatives, indulge in preferences, while the producers supply alternatives. This shows the relationship between the consumer and the producer in the school option perspective as in the model. Individuals assign priorities to their wants and choose their most preferred from among the available alternatives taking to be the 104 universities options we have in Nigeria (Brickley and Zammerman, 2001). According to the rationality theory the preference could follow from ranking or any of the a priori actions (for further studies).

Choice impacts the market(students) by creating an explosion in the array of competing goods(universities), fragmentation of the products and markets as well as increase in

consumer spending that is, leading to the increase in the cost of education over years (Nelson, 2002). The growth of the average number of universities over years from 45 in 2001 to 76 in 2005 and 104 in 2010 (Table 4) is in line with Nelson (2002). According to him, choice is an integral part of western societies and serves as a fundamental difference between developed and less developed societies. Thus, the development in Nigeria university system is in line with the vision 2020. If truly Nigeria will become one of the developed countries in the world, then the education industry must witness such innovations so as to taken care of the child's right to education.

### ANALYSIS OF THE COMPONENTS OF CHOICE

The components of choice in a market for education according to the model are:

- a. The Consumer:** In line with the theory, the consumers have various alternatives of about 104 preferences they can select from. They are however driven by the microeconomic factors of scarcity, wants, alternatives and preferences which translate into several other parameters (Udechukwu, 2004). An interview is conducted on 100 students in first year (hundred level) in university and those preparing to enter a university. Questions were asked to determine the factors influencing their choice of university. The result is presented on table1.

From interview conducted on the randomly selected students, the following are some factors influencing their choice: the number of physical public and private schools which are the limited or scarce resources (Table 4); available course of interest; population size and enrolment at public and private schools (unlimited wants depicted (proxy) by application to JAMB for admission on table 2). The enrolment in university is increasing with the increase in population (table 3). This leads to excess demand for university education which called for increase in number of universities. Others are Parent's education (encourage alternatives), Parent's income (encourage alternatives), poor people prefer Federal universities (with less fees) to private ones. Others are; information technology (encourage alternatives), recognition of prior learning or exemptions based on JAMB test and courses that are shorter than the norm or timetables that better accommodate part time work. Also, physical appearance of campus buildings and grounds and single major impression they have of the institutions. Most times, students have no information about the institution but decide to select such because the proposed course of study is present. The response of the students is presented in percentage in table 1.

**Table 1: Factors Influencing Choice of University**

<b>S/N</b>	<b>OPTIONS</b>	<b>FREQUENCY OF RESPONSE</b>
<b>1</b>	Number of universities	60
<b>2</b>	Population	55
<b>3</b>	The use of information technology	10
<b>4</b>	Schools that accommodate part time	15
<b>5</b>	Physical appearance of the campus and building	70
<b>6</b>	Impression about the Institution	75
<b>7</b>	Parents education	60

<b>8</b>	Parent’s Income	80
<b>9</b>	Teachers’, parents’ and friends’ advise	65
<b>10</b>	Quality of teaching	40
<b>11</b>	Availability of a suitable course in the area of interest	85
<b>12</b>	Employment rates of graduates from the particular university	35

**Source: Prepared from Response to Interview**

**Table 2: Average Distribution of Admissions and Applications for the Period**

<b>Year</b>	<b>Applicants (Demand)</b>	<b>Admission (Supply)</b>	<b>Percentage Admitted</b>
1980-1984	182303	24508	13
1985-1989	212526	37956	18
1990- 1994	270945	52387	19
1995-1999	344157	65906	19
2000-2005	809756	73546	9
2006-2010	868,000	148,000	17.05

**Source: Prepared from data collected from National Bureau of Statistics and Joint Admission and Matriculation Board**

The demand for university education has continuously been on the increase with increasing population combined with limited supply of university spaces. This necessitated the continuous increase in the number of universities in the country.

**TABLE 3: Population Trend**

YEAR	1963 census	1979	1991census	1993	1994	1995	1996	1997	2006 census
POPULATION (in million)	55.6	80.5	88.99	94.10	96.76	99.50	102.32	105.21	144

**Source: National Population Commission/National Bureau of Statistics**

Consumers (parents) seek a variety of alternatives because of the rate of growth of demand for university education and rate of population increase indicating which shows that the number of universities could not meet up with needed requirement; this explains. Many even result to pre-degree programme of most universities or ‘pre-varsity’ programme of various groups which are just preparatory classes for universities hoping for immediate admission after completion. The application compared with the available space determines the cut off mark of JAMB for example, out of the whole applicants for 2008 only 20% could be accommodated by the 92 Universities in Nigeria then. In essence, consumers have to seek other school options.

The educational level of parents affects the consumers’ rational decision to seek other alternatives. The difference between number of applicants and available spaces cause



those students whose parents are not educated to go into extra-moral lessons in preparation and readiness for another JAMB examination. Meanwhile, the parents with higher education were more likely to seek out different educational choices for their children as supported by Noval, Brimhall and West (1997). From the interview conducted, educated parents with bachelors or graduate degrees had a higher enrolment in private and mission universities. The educational level therefore has impact on consumers seeking variety of alternatives.

Education being a normal good, since it has long been established as necessity and not luxury; consumers/parents with higher income seek various university alternatives (Sweetland, 2002). According to Brickley and Zammerman, (2001) there is evidence to suggest that as incomes rise there are subsequent increases or decreases in demand for certain goods or services. When there is increase in demand as income increases, in microeconomics such goods or services are considered normal goods or necessities. In Nigeria, despite the high school fees in private institutions and high cost of pre-degree courses, consumers still seek these alternatives.

School fees in universities have strong direct effects on the quality of educational institution selected for those who attend private universities. Accessibility to information and technology, especially the internet, has led to economic transformations which have positive effect on provision of information. The most widely used and influential information sources are material distributed by career teachers, the guides to tertiary admissions by JAMB, and university open day. Teachers, parents and friends advice are sought in the final stages prior to offer and at the time of offer. At times applicants explanations of the reasoning behind their decisions often demonstrate that their decision making are not always a logical, informed process.

- b. THE MARKETPLACE:** From the proposed model, the consumer and producer act on the market place. This is shown by its performance or quality based on the choice of consumer. The quality of education is important in school choices and the consumers have to pay close attention to this when making their choices (Murray and Wallace, 1997). Those may be difficult to measure until the students get to their various institutions of choice. However, this could be measured in Nigeria from the assessment of universities by NUC.
  
- c. The Producer:** Basically the producer decides on how to produce, for whom to produce, how to provide for the growth of the system and rationing a given quantity of the system (through JAMB). These are done by increasing the number of universities (school options), increasing the number of lecturers (increasing teacher-student ratio or class size) The teacher/student ratio has been increasing (table 5) this is due to increase in population (table 3) coupled with increasing demand for University education (table 2). Also, increasing funds to federal universities by increasing education share as percentage of government total expenditure (table 6) and ensuring standard by regulation and coordination by NUC

## **SCHOOL OPTIONS**

Immediately after independence in Nigeria, University options were limited to federal universities. The choices available today now include federal, state and private universities

and pre-degree programme of each institution. As consumers experience scarcity of resources in relation to the insatiable wants, the rational behaviour is to seek variety of alternative school options and consequently allow or indulge their preferences while the producers make the various alternatives available. The equilibrium is maintained by both parties with information on the market performance.

**Federal Universities** are those financed from the tax income and other forms of revenue of the nation. In Nigeria there is greater degree of autonomy and freedom. They include both the old and the new ones financed by the federal government of Nigeria. There are 27 of them.

**State Universities** are owned by state governments to provide education for their citizens. There are 36 of them despite the fact that not all 36 states could establish their own universities because of the financial requirements. Each state however charges school fees which in some cases are lower than some private schools. They were established by state governments when the federal universities could not meet up with the educational needs of the citizens of the various states or for political reasons so that electorates could see them doing something. They were first established in states with more 'eligible rejects' (those who were qualified but could not secure admission) (Oladeji, 1991).

**Private Universities** are owned by individuals, corporate bodies and religious bodies given licence to establish universities in Nigeria. They are profit oriented and therefore charge high school fees. There are about 41 of them which are likely to increase further in future. The available number and the trend in university development are shown on table

The budgetary increases in public education can be partly attributed to the consistent rise in the cost of education (table 6). Generally speaking, the expenditure on education as a percentage of total expenditure of the federal government has always been on the increase except in 2002 when there was an upsurge and later fall again only to increase gradually.

**TABLE 4: Quantitative Development of University System in Nigeria: 1980-2009**

<b>YEAR</b>	<b>FEDERAL</b>	<b>STATE</b>	<b>PRIVATE</b>	<b>TOTAL</b>
1980	14	2	-	16
1981	15	4	-	19
1982	16	5	-	21
1983	16	6	-	22
1984	16	6	-	22
1985	17	6	-	23
1986	17	6	-	23
1987	17	6	-	23
1988	22	7	-	29
1989	22	7	-	29
1990	22	8	-	30
1991	23	8	-	31
1992	25	11	-	36
1993	25	11	-	36
1994	25	11	-	36
1995	25	11	-	36
1996	25	11	-	36
1997	25	11	-	36
1998	25	11	-	36
1999	25	13	3	41
2000	25	17	3	45
2001	25	17	4	46
2002	26	20	7	53
2003	26	20	8	54
2004	26	22	8	56
2005	26	26	24	76
2006	27	30	32	89
2007	27	30	32	89
2008	27	31	34	92
2009	27	36	41	104

**Source: Prepared from data collected from National Universities Commission**

**TABLE 5: Teacher/Student Ratio**

<b>UNIVERSITY</b>	2000/2001	2001/2002	2002/2003	2003/2004	2004/2005	2005/2006	2006/2007
No of Teachers	18,426	19,700	22,046	23,871	27,482	41,910	27,394
No of Students in Fed univ	281,800	325,707	349,502	419,253	450,377	393,386	412,588
No of Students Teachers -	368,866	444,949	606,104	727,408	654,856	689,981	1,096,312
Student Ratio	1:20	1:23	1:28	1:30	1:30	1:40	1:40

**Source: NUC and National Bureau of Statistics**

**TABLE 6: Federal Government Budget Expenditure on Education**

<b>YEAR</b>	<b>EXPENDITURE ON EDUCATION</b>			<b>Expenditure as % of</b>
	Recurrent(₦ Bil)	Capital(₦ Bil)	TOTAL	<b>Total Expenditure</b>
<b>1994</b>	7.38	2.05	9.43	7.82
<b>1995</b>	9.75	2.43	12.18	7.42
<b>1996</b>	11.670	3.22	14.88	12.32
<b>1997</b>	12.98	38.08	51.06	3.29
<b>1998</b>	14.04	12.79	26.83	10.27
<b>1999</b>	23.05	8.52	31.56	6.21
<b>2000</b>	39.03	23.34	62.38	11.12
<b>2001</b>	39.88	19.85	59.73	5.63
<b>2002</b>	100.24	9.22	109.46	9.15
<b>2003</b>	64.76	14.68	79.44	6.48
<b>2004</b>	76.53	9.05	85.58	5.85
<b>2005</b>	82.80	12.55	953.43	6.23
<b>2006</b>	119.1	32.70	151.70	7.78
<b>2007</b>	136.90	68.30	205.20	7.61

**Source: National Bureau of Statistics**

In Nigeria, the NUC serves as the regulatory body to see to the quality of education provided and putting in place policies towards achieving all the measures stated above. The producers also advertise university education using the opportunities for flexible study, the use of information technology in teaching and the quality of teaching; which may not be so important or are not often considered by the consumer. However, reasons for neglecting these may not be so clear whether due to inadequate information and/or lack of perceived relevance. One thing that is clear from the investigation is that information levels are often low. Most consumers collect information through materials distributed by guides of tertiary admission centres, career teachers and university options.

## **ROLES OF CHOICE**

From the analysis above, the following roles of choice could be identified: First, choice reduces the incidence of waste of human efforts since resources that could have hitherto been wasted are directed into productive investment in education. Secondly, choice enhances efficient distribution/allocation of resources thereby leading to improvement in production efficiencies. In public-choice theory, improvement in public sector performance could be possible by subjecting government agencies to competition by allowing private firms participation in production of services. This ensures optimal use of scarce resources (Salvatore, 2003). The decentralisation and competition bring about efficiency. Thirdly, choice ensures the failure of the weak and the success of the strong in a relative sense rather than absolute sense (Brickley and Zimmerman, 2001). The Adam Smith's concept of "invisible hand" of market will direct resources to their most productive use and societal wealth will be maximised.

Pang and Linda (2005) reveal that if employers do not hire the graduates of any particular university or degree program or if the salaries they offer are too low, students will shift their demand (and tuition revenues) to other universities and courses whose graduates are better rewarded in the job market. These supply and demand alternatives do not always take place instantaneously or smoothly, but the market functions well on the whole. The effect of choice reinforced the concept of competition so that where an alternative school option could not impact positively on the market such alternative may collapse and extinct from the system.

Furthermore, choice brings about innovation into the system because the increase in demand would encourage producers to look for new things in order to capture the market. This has led to introduction of varieties of information technology and reduction in class sizes by most producers. However, Herbig and Kramer (1994) warn against high risk or constraints to innovation like information and innovation overload as they may lead to wrong choices. Information overload is a phenomenon where consumers are bombarded with excessive information leading to adverse judgemental decision making and inhibit consumer decision making abilities. While innovation overload is seen as a consequence of users response to increasing pace of information knowledge and innovations which may be attributed to the rapid evolution and multiplication of alternatives making comparison of available choices difficult for the consumer (Herbig and Kramer, 1994).

A market for university education, where consumers invest considerably could only function effectively if students are provided with adequate information in order to select the appropriate institutions. Competition and consumer sovereignty in markets produce useful outcomes when consumer's information can be of high quality, provided cheaply and effectively and easily understood by the consumers (Barr, 1998). Consumer sovereignty is most effective when the cost of choosing wrongly is lower. Where they are high for individuals, government intervention in conditioning the market may be necessary to assist and protect the community. In most cases a large number of students were not adequately informed and do not attach much importance to being informed. Many were pushed into decision that have little to do with the quantity and quality of information available (a priori expectation) most decisions of applicants preferences were based on field of study preferences.

There should be a shift in community interest towards the non-discipline specific characteristics and benefits provided by universities. University consumers should therefore be encouraged to invest considerable efforts in collecting and comparing information on the institution of interest to them because it is one of life major decisions.

Furthermore, looking at the importance of information in choice making, National University Commission must actively advise applicants on what they ought to consider important in their decision making. The advertising and information dissemination need to take educative dimension since this may be very difficult for (producers) universities in a competitive context to balance between accurately informing, advising and recruiting enough students.

Moreover, consumers (prospective students and parents) should be strongly encouraged to investigate and get information in three areas. First is the, nature of the teaching and learning experience that is offered including such matters as class sizes, extent of use of learning technologies and practicum or job placement opportunities. Next is the anticipated knowledge and skills outcome and finally, the career possibilities and likely prospects. University education is an interactive enterprise and the impact on market (students) depends on joint efforts of the producers and commitment of students. If consumers (students and parents) are under informed, and wrong choices are made, it could only be understood during or after the education. The producer has the information and education, which the consumers want and consumers cannot judge quality until they have experienced it (called by market economist as asymmetric information).

So, choosing an institution means there is faith in the capacity of the producer to offer quality and relevant programme. Written information can be generated and disseminated by the universities themselves, commercial enterprises, and government as this is better than hear say because it will provide comprehensive information to consumers and at the same time serve as a way of persuading them. At any rate, in a competitive market the emphasis of producers will be on recruitment of students to their institutions and so information that will not portray the institution in the best height may not be provided. Therefore, the information from NUC and commonwealth for their comparison will be better if presented in away that highlight differences. Quantitative measures of characteristics and quality into percentages where possible, will help people to make sense out of them since rating may exaggerate differences and preventing students from making appropriate decisions.

In a competitive system, the government must promote access and equity for students as well as promoting quality by monitoring the nature and availability of information on universities. This could be done through having monitoring mechanism for ensuring accuracy of the information available to students or parents and community and providing supplementary information to drive further competitiveness within the system. This provides information for intending university students or educate for taking 'informed decisions' about universities.

Study conducted in Nigeria, on applicants' final choice of a preferred university reveals that consideration is given to availability of a suitable predetermined course in their area of interest. This is followed by the economic factors like: parents' income, employment rates for graduates from the particular university and in most cases easy mobility from campus to home. Others are psychological factors like: physical appearance of campus buildings and grounds as well as the single major impression about the institutions. Many considerations that might be expected to be influential found in most university advertisements do not have much meaning to applicants like flexible study, use of information technology in teaching and the quality of overall teaching. Most decisions are based on limited, subjective information because consumers have limited knowledge of important choice features.

## **CONCLUSION**

From the study it is concluded that choice is not peculiar to shops again but is now present in education. There has been the removal of sole ownership of the universities by the federal government to a competitive market. The study found that the choice of the consumer according to literatures is determined by scarcity, wants, alternatives, and preferences translating into other factors like population size, application to JAMB (demand for university education), parent education, parent's income, use of information technology, employment rates of graduates from the particular university, impression about the institution and the physical appearance of campus buildings. The study further discovered that most students' final choice of preferred university is only based on the availability of a suitable course in their area of interest. However, all the factors considered by producers in advertisements are not so important to consumers due to inadequate information.

This paper reveals that choice enhances efficiency, ensures the failure of the weak and the success of the strong which eventually brings about innovation. Right choice making is important in education as it involves life long decision which may mar or mend one's life. Thus, government must provide necessary assistance in the regulation of this market and ascertain that adequate information is provided for the students for making right choices as the mistakes committed could not be detected until they get to the institution or also in later years. For efficient choice making therefore, consumers should be provided with adequate information on the institution of interest and invest in collecting and comparing information on those institutions. Nigeria University Commission should advise applicants on what they ought to consider important in their decision making.

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