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## TREND ANALYSIS IN THE FUNDING OF UNIVERSITY RESEARCH IN NIGERIA: IMPLICATIONS FOR SOCIAL AND ECONOMIC DEVELOPMENT IN AN EMERGING ECONOMY

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*Adequate financing of university's research is often believed to be one of the strong catalysts for successful economic development. However, in Nigeria, the problem of financing university's research in particular and education in general is acute. This study, therefore, examined the trends in the financing of research in Nigeria's publicly-owned federal universities. Secondary data obtained from various national statistical bulletins and other individual sources were used to answer the four research questions raised in the study. The results showed that research funding in Nigerian universities continuously witnessed a downward trend given the real Naira value over the years. Specifically, the study discovered that for a period of twenty years (1990-2009), the average research funds available to Nigeria's federal universities was a dismal 1.3% of the total universities' actual spending. Similarly, only 0.3% of the nation's total GNP was spent on research in Nigeria as against 2.0% in South Korea; 3.0% in Japan and Germany; and 3.4% in the United States of America. The low investment in university-based research in Nigeria could have serious negative implication on the social and economic wellbeing of the country. In view of the imponderable benefits of university research, the study recommended that solid and deliberate effort be made by government towards improving financial investment in university research in the country.*

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### INTRODUCTION

The scope and pace of change in the society have become increasingly knowledge-based, so that university education and research now act as important stimulants for advancing and sustaining social and economic development. For many years, universities have unarguably proved their viability and ability to induce change and progress in the society through useful research outcomes and other social services. However, the conduct of effective and successful research activities is contingent upon the availability and mobilization of sufficient funds. The tripartite objectives of the universities; viz teaching, research and community service may not be realized without adequate provision of funds. Thus, a strong culture for research and knowledge generation is an important instrument for increasing the socio-economic wellbeing of a nation. The far-reaching social benefit of research on a nation's development is therefore a major reason why governments at both

local and international levels should support universities for these vital developmental responsibilities of knowledge generation and distribution (Babalola, 2011). Hence, Onuka & Emunemu (2010) opined that research should be given priority funding attention, and researchers rewarded adequately in order to motivate them for better productivity. Also, according to Onuka & Emunemu (2008), higher education, and by extension, research, can achieve their purposes only when adequately funded and encouraged to pursue the goals for which they were established.

However, in Nigeria, the problem of financing education generally is acute. The national budgets on social services (under which education falls) have consistently suffered from poor budgetary allocation when compared with the other sectors of the economy (Education Sector Analysis – ESA, 2007). For instance, in 2005 and 2006, the total recurrent expenditure on general administration was N248,

730.30 and 284,616.96 billion representing 28.5 and 22.0% of the total recurrent expenditure respectively while it was 82,797.10 and 119,018.00 billion naira for education representing 6.76 and 9.22% respectively. In the same vein, the capital expenditure for general administration in 2005 and 2006 stood at 25.5 and 27.7% respectively, while capital expenditure for education during these periods were 6.14 and 5.92 % respectively (National Bureau of Statistics, NBS, 2007 and Central Bank of Nigeria, CBN, 2007). Olaniyan and Adedeji (2007) equally observed a persistent increase in military expenditure over education expenditure between the periods 1970-1996. Although, this could be due mainly to the dominance of the military in the political landscape of the country during the period, the situation had not improved neither. Available statistics showed that the percentage of funds allocated to education from the national budget during the beginning of the democratic era in 1999 was 12.6%. This amount further decreased to 12.2% in 2001 and then 7.5% in 2002 (ESA, 2007). Ironically, the net revenue income from oil increased from N336.1 billion in 1999 to N903.4 billion during the same periods (CBN, 2007). Babalola, Jaiyeoba, Ayeni and Ojelabi (2006) lamented that Nigeria as a petroleum producing country, and by all standards, could afford to give leadership in the area of cutting-edge research in Africa.

In the United States of America and other developed countries, universities have long been recognized as important actors in technological change and economic development as well as a source of basic knowledge, technical solution and skilled workforce for the industries (Rosenberg and Nelson, 1994). The importance attached to university research by these countries is visible in the amount of research expenditure invested in them. Table 1 shows the research expenditure in some selected world leading universities.

The below Table showed that research funding had significant effect on universities' ranking. This is visibly reflected in the enviable positions most American universities occupied among other world universities. Ironically, however in the University of Ibadan, Nigeria for instance (the country's oldest university), the total amount spent by government on research in 2007 was 4,964.0 million naira. In the current exchange rate of about N150 to a dollar, this amount represents about 33,000 dollars (see University of Ibadan Statistical Breakdown, 2008). Although data on Nigeria's total spending on university's research for the year in question was

**Table 1**  
**Education Research Revenue/Endowment**  
**Funds to Some Top Universities in the World**

Sl. No.	Name of University	World Ranking	Country	Amount in US dollars
1.	Harvard	1	United States	36.6 billion
2.	Stanford	3	United States	17.2 billion
3.	Columbia	7	United States	17.5 billion
4.	Princeton	8	United States	15.8 billion
5.	Chicago	9	United States	6.5 billion
6.	Oxford	10	UK	5.0 billion
7.	Yale	11	United States	22.5 billion
8.	Cornell	12	United States	5.5 billion
9.	Pennsylvania	15	United States	6.78 billion

Source: Peretomode (2008) in Akpochafo (2009). Revitalizing Research in Nigerian Universities for National Development.

unavailable, the succeeding year's figure showed that the country spent 74.4 billion naira, that is, about US 0.496 billion dollars in 2003 (Babalola, 2010).

The dwindling financial allocation to education has implication for research output and consequently for social and economic development. Most African countries exhibit very low research outputs among other countries in the world. This explains the reason for the declining number of researchers among most countries in Africa including Nigeria (Okecha, 1998). As put forward by Okebukola (2008), no nation in the world can make successful progress without improving its educational infrastructure (Okebukola, 2008). Thus, for a knowledge-driven global economy, a systematic decline and collapse of research due to financial constraints poses serious threat to economic development. If political tension is to be eased, and the chances of economic and social development are to be improved in the country, education and university research should be adequately funded and given the necessary attention.

Researches in universities are often seen as one of the very important conditions for achieving successful local and national economic development (Miner, Essley, Davaughn & Rura-Polley, 2001). The whole concept of research as an academic activity is to generate knowledge that will be useful for economic development.

Owing to its economic importance, developed countries invest heavily on it. According to Okecha (1998), it is the huge expenditure of developed countries such as the United States and Europe on

Research and Development (R & D) that explains their enhanced and enviable level of industrialization and self-reliance. Similarly, the huge expenditure some emerging world economies such as China, India, South Korea, Taiwan, Brazil, Hong Kong and Singapore expend on R & D explains their current level of industrialization and self-reliance. This is consequent upon the countries' adequate funding of their universities to enhance reflective research. In 2003 and 2004 for instance, the government of the United States provided research fund worth \$365 million and \$492 million respectively to Duke University, thereby making the university become the leader among all the universities in North Carolina (Babalola, Jaiyeoba, Ayeni and Ojelabi, 2006). Similarly, according to Babalola, *et al* (2006), in 2002/2003 and 2003/2004 periods, the United Kingdom established a joint infrastructure funds (JIF) worth €600 million in support of 110 research projects and another €1 billion investment fund in science infrastructure in order to maintain its leadership in the area of scientific research. Moreover, the German government, through the German Research Foundation (DFG) and the German Science Council proposed 1.9 billion Euros between 2006 and 2011 for the funding of graduate schools in order to promote top level university research and encourage young researchers (Babalola *et al*, 2006). In 2003, the University of Connecticut committed the sum \$188.3 billion of external funds to research in the university and its health centre. This fund, through multiplier effect, created more than 5,113 jobs, and \$397m in new Gross State Products (GSP) and \$283m in new personal income each year in the long run (<http://ceea.uconn.edu>).

The role of research in advancing the course of development was quite understood by the Organization of Africa Unity (OAU) now referred to as the African Union (AU), when in the Lagos Plan of Action in 1980, urged its member states to "improve existing and create new funding mechanisms to provide for the development of their research; that is, their scientific and technological capabilities". The plan of action therefore recommended an annual expenditure of at least one percent (1%) of its total expenditure of GNP to the advancement of research and development by the year 1990 (Bako, 2005). However, while other countries of the world had committed substantial amount of funds to research and development projects, available statistics still showed a disinvestment in this regard among many

developing countries, including Nigeria (Akpochofa, 2009).

According to Sant *et al* 2003 in Okecha (2008), Nigeria spent far less than 1% of GNP recommended by the OAU on research and development. Whereas in 1996, for instance, the Organization of Economic Cooperation and Development (OECD) countries accounted for 85% of the total R & D investment. China, India, Brazil and East Asia represented 11% while the rest of the world (including African countries) accounted for only 4% of investment in R & D (Akpochofa, 2009). Consequently, while the advanced economies are reaping the benefits of investment in research, most developing countries including Nigeria are yet to fully appreciate its benefits as they prefer spending more money on sports, cultural festivals, military and political socialization while leaving insignificant amount for research (Akpochofa, 2009; Olaniyan & Adedeji, 2006; Okecha, 1998). Despite decades of efforts to implant science and knowledge in the developing world, figures show that research and development funds, scientists, doctoral degrees, scientific publications, and patents had continue to be concentrated within the OECD area to the detriment of the developing countries (Vessuri, 2008).

The lack of interest in research is reflected in the level of research funding among most developing countries when compared with the colossal amount expended on university research by most developed countries. Consequently, the lopsided preference for research funding and non-profitable activities manifests in the low economic profile of most developing countries including Nigeria.

Investment in research and development obviously has its positive multiplier effect on the economy. Most of the world's leading universities had been so ranked owing to their heavy investment in research and development which had led to unprecedented breakthroughs in various fields of human endeavours. For instance, research at the University of Rhodes Island (URI) made major impact on issues that affect the regions, the nation and the world at large. It was estimated that the 69 million dollars in federal funds to the URI in 2009 fiscal year generated an additional 135 million dollars in local economic impact. This then generated additional jobs and increased local and state tax revenue other than the resultant economic impact that would accrue from the commercialization of the URI inventions (<http://www.uwcc.edu/impact/html>).

Studies have shown that adequate funding of research has the potential to generate the knowledge and innovation that is capable of driving up the country's economy. According to El-Rufai (2006), adequate knowledge and knowledge production among nations have been able to make such countries excel, generate health and ensure better standard of living, greater and enhanced access to life changing opportunities. If given adequate attention through sufficient funding, knowledge generation through university research can frog-leap nations from poverty to prosperity (Akpochafo, 2009). Countries such as India and China are investing increasingly in skills and research, and as a result are attracting globally more R & D investment. If higher education and research are to bring about collective wellbeing and equity in the society, (thereby improving the living conditions of most people), adequate attention needs to be given to research funding. Thus, a prospecting economy such as Nigeria needs to learn from these countries in order to pathway a high value economic development.

### STATEMENT OF THE PROBLEM

The problem of funding university research in particular and education in general in Nigeria is quite severe. In spite of the increases in petrol dollar income and Gross Domestic Product from N4462.9 billion in 2007 to N5396.0 billion in 2010 (purchasing power parity – PPP) for the country, the flow of research funds and grants to universities had not improved both in real figure and as a proportion of overall education budget. While there is a growing importance of knowledge generation as an engine of growth globally, there is a little attention and under investment in university research in Nigeria. The implication of inadequate funding is that the country risks the opportunity for advancing itself in knowledge generation and utilization that had become a vital tool for promoting social and economic wellbeing. In view of this, the study investigated the trends in research funding of federal government universities in Nigeria and its implication on social and economic development. This is to provide the needed empirical result and Nigeria's situation in today's research and knowledge-oriented societies. In view of presenting the rationale for increasing research funds to Nigerian universities, this study sought to provide answers to the following research questions:

1. To what extent are Nigerian universities funded?

2. What is the trend in research funding of Nigerian Universities?
3. What is the status of research funding in Nigeria from the global perspective?
4. Is there any nexus between adequate research funding and the level of economic development?

### METHODOLOGY

The study examined the trend in federally-funded (public) university research in Nigeria. The aim was to provide an insight into the social and economic implications of adequate or inadequate financing of university research in Nigeria. The sample for the study was purposively chosen to cover the periods 1999-2009 which were the beginning of real democracy in Nigeria. This was to enable us examine the extent to which the country had responded to critical development instrument such as research in the country. The study relied mainly on secondary data obtained from national statistical data banks such as the National Bureau of Statistics (NBS), the Central Bank Statistical Bulletin and other relevant data sources. The use of secondary data was due mainly to the relevance of such data to the present study as well as the availability of such data. The descriptive method of analysis was used to analyze the various data collected for the study.

### RESULTS

#### Research Question 1: To what extent are Nigerian universities funded?

Table 2 revealed the extent to which the federal government of Nigeria responded to demand for university funding between 1990-2009.

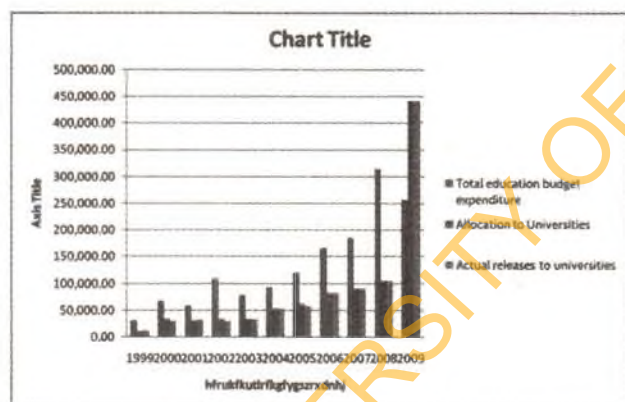
Table 2 showed that there was an increasing release of funds to universities from the available education budget. The percentage of actual releases to universities from the 1999 education expenditure was 34.4%. This increased in the succeeding years 2000 and 2001 to 44.6% and 54.6% respectively. However in 2002, the fund released to universities fell from 34.246.4 million naira to 30,355.48 million in 2003, signifying a decrease of 7.0% during the period. Nevertheless, the relative percentage released to universities from the education budget increased from 40% in 2003 to 57% in 2004 and latter declined to about 49 % in 2005. The annual growth in fund released to universities in the country revealed that they were inconsistent.



**Table 2**  
**Extent of University Funding in Nigeria as a Proportion of Total Education Expenditure (1990-2010)**

Year	Total education budget expenditure	Allocation to Universities	Actual releases to universities	Percentage of actual to total
1999	31,590.80	10,507.38	11,831.93	37.4
2000	67,568.10	33,778.94	30,143.00	44.6
2001	59,745.20	31,844.32	32,646.41	54.6
2002	109,445.20	33,778.45	30,351.48	27.7
2003	79,436.10	34,411.31	34,203.05	40.0
2004	93,777.90	53,024.55	53,466.28	57.0
2005	120,035.50	62,215.63	58,275.96	48.5
2006	166,213.70	82,376.68	82,376.68	50.0
2007	185,771.77	90,565.26	90,565.26	48.7
2008	314,700.00	105,751.67	105,751.67	33.6
2009	257,207.80	441,232.90	441,232.90	171.5

Source: Bamiro & Adedeji (2010). Central Bank of Nigeria (CBN) Statistical Bulletin, 2007, Vol. 18.



**Figure 1: Trend in University Funding in Nigeria**

Note: 2008 and 2009 figures included capital outlay for all social and community services to which education belongs

The year 2004 had the highest relative share to university funding (57%), while it was lowest in 2002 (27.7%).

### Research Question 2: What is the Trend in Research Funding in Nigerian Universities?

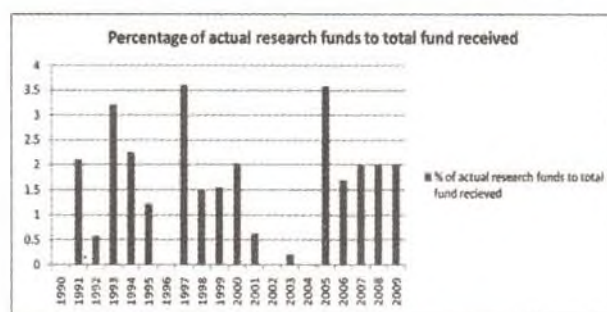
Table 3 shows the trend in research funding to Nigerian universities between the periods 1999 to 2009. It showed the relative weight (in percentage) of research funding to actual university funding in Nigeria.

**Table 3**  
**Trend in University Research Funding in Nigeria between 1990-2009**

Year	Actual funds received by University (N billion)	Actual % of actual research released (N million)	Actual % of actual research funds to total fund received
1990	734,720,950.00	-	-
1991	783,816,895.00	16,465,034.00	2.10
1992	2,985,237,346.00	17,472,972.00	0.58
1993	3,801,529,278.00	122,182,102.00	3.21
1994	4,370,880,770.00	98,557,255.00	2.25
1995	6,056,784,806.00	78,973,806.00	1.22
1996	7,535,594,529.00	1,376,970.00	0.01
1997	5,348,173,942.00	193,963,732.00	3.60
1998	9,789,397,523.00	149,993,549.00	1.50
1999	11,831,930,271.98	183,501,468.00	1.55
2000	30,143,004,497.91	612,666,910.00	2.03
2001	32,646,410,861.00	206,410,619.00	0.63
2002	30,351,483,193.00	N.A	N.A
2003	34,203,050,936.33	74,435,618.72	0.21
2004	53,466,287,486.01	N.A	N.A
2005	58,275,967,608.72	2,026,000,000.00	3.57
2006	82,376,684,290.00	1,320,652,321.00	1.70
2007	90,565,259,337.00	1,806,600,000.00	2.00
2008	105,751,671,988.00	2,204,877,312.00	2.00
2009	441,232,892,459.00	8,472,961,865.00	2.00

Sources: Bamiro & Adedeji (2010); The Nation, Monday, June 21, (2010) pp. 44-48; Babalola, *et al* (2006), Bako (2005), and NUC Research Bulletins (1993-1998).

Note: Research fund release figures from 2005-2009 included grants for teaching and research equipment.



**Figure 2: Percentage of Actual Research Fund to Total Fund Received in Nigerian Universities (1990-2009)**

Table 3 showed the trend in funding of research in federal universities in Nigeria. The average research funds released to federal universities was 1.32% of the total funds released to universities during the twenty-year period under consideration. The higher relative period when research fund was released was in 1997 (3.60%). However, teaching and

research equipment was 3.57% of the total university funds in 2005. The 1996 figure of 0.01% was elite mainly to the non-allocation of capital grants to four major universities namely Ibadan, Nsukka, Ahmadu Bello and Maiduguri in 1996. Consequently, both teaching and research equipment grants were not provided. Research fund dropped from 2.10% in 1991 to 0.58% in 1992 before it peaked at 3.21% in 1993.

#### Research Question 4: Is there any Nexus between Research Funding and the Level of Economic Growth?

Table 4 showed the connection between research funding and the level of economic development in selected countries.

**Table 4**  
**Research Funding and Economic Growth in Selected Countries**

Sl. No.	Countries	% of GNP spent on R & D	GDP Economic worth in US dollar	Position among top 20 economies in the world
1.	Nigeria	0.3	296.8 billion	NL
2.	South Korea	2.0	1,206 trillion	14
3.	Japan	3.0	4,305 trillion	3
4.	Germany	3.0	2,897 trillion	5
5.	United States of America	3.4	13,860 trillion	1

Source: Okecha (2008) in Akpochafo (2009) and Zenith *Economic Quarterly*, Vol. 3, No. 1.

Note: NL = Not listed among the top 20 economies but was listed 3<sup>rd</sup> among top-10 Africa economies after South Africa and Egypt respectively.

Table 4 showed the percentage GNP spending on research and development in some selected countries and the respective GDP growth. The United States of America spent about 3.3% to 4% of her total GNP on research and development while Nigeria's total spending on research and development from its GNP stood at 0.3% during the period under review. Consequently, her position in world economic rating was visibly not listed among the top-20 economies in the world.

### DISCUSSION

This study examined the trend in the funding of university research in federal universities in Nigeria. University research has far reaching socio-economic benefits on countries. However, results from available data showed that there was apparent lack of interest in research as manifested in the

gross inadequate funding of university research in Nigeria. These are in agreement with Babalola (2010) and Akpochafo (2009). Both authors had lamented at different times the lack of interest in knowledge generation and innovation reflected in the insignificant funding of university research in Nigeria and the total number of researches that are conducted in the country. In fact, according to Akpochafo (2009), the country has greater preference for sports, cultural festivals and other social activities than investing in research. This lack of or insufficient supply of funds for university research has negative consequence not only for the ranking of Nigerian universities, but more importantly on the socio-economic wellbeing of the country. Adequate funding of university research can help to improve wellbeing and reduce social tension. In Table 1 for instance, it became very glaring that adequate research fund was an important factor for enhancing the global status of a university. Thus, most American universities assumed their leadership status in world universities' ranking manifested in the question of research funds made available to these universities. These funds have enabled these universities to generate knowledge ideas and innovation which had positively sharpened the wellbeing of their environment and the world at large.

The trend in the funding of university research in Nigeria showed that only an average of 1.32% of the available total fund was expended on research for the years under consideration. This will certainly make little or no meaningful impact on the social and economic wellbeing of the country. Findings from the available data revealed that Nigeria falls grossly below other countries in research funding. A situation where much less than 1% of GDP is spent on research in the country when compared with other countries which spent about 3.0% of their GDP on research calls for a re-orientation and re-direction towards an improvement on research activities in order to reap its benefits. Scientific, technological and medical organizations engage in research through which they discover new designs which are usually commercialized to bring in financial rewards. It is important therefore for the country to invest in research and development if she is to compete favourably with other emerging economies.

Inadequate research funding can slow down economic growth and development, and keep the nation in perpetual economic slavery. This underscores why universities should be adequately

funded in order to effectively perform their educational research and compete favourably and effectively with the dynamics of globalization (Isuku, 2007). The stringent financial support for university research has implications for economic development of nations. It is evident that there is a connection between adequate research funding and economic development. While Nigeria's expenditure on R & D as a percentage of GNP was 0.36 and a corresponding economic progress of USD 296.8 billion, South Korea and Germany's investments in R & D was 2.0% and 3.0% respectively with corresponding economies worth of 1.206 and 2.897 trillion US dollars respectively as shown in Table 4.

Although there seems to be a relatively high percentage of total spending on university education, the actual (real money value) given the prevailing prices of goods and services become insignificant. For instance, the real money value received by the universities in 1995 at 1998 constant prices was N5,690,229.77 as against the N73,973,806.00 while the real money value received in 2000 and 2005 at 1998 constant prices were N4,398,264 and 2,564,305.38 respectively. It is important to note that university's relevance is related to its contribution to economic growth, development, prosperity and the empowerment of the citizenry (Bako, 2005). The low investment in university-based research in the country therefore has serious economic consequences. This calls for a collaborative effort towards financing university research in the country. The provision of quality higher education programmes and research requires a lot of money from both the public and private sources (Babalola, 2011).

### CONCLUSION

The economic value of university research is difficult to assess. The funds that flow into the process of research benefit directly those who are engaged in it in the form of wages and salaries. Research activities usually require purchases of intermediate products and services, and thus indirectly benefit businesses outside the universities. For instance, due to research activities, computers and other software are acquired, there are lodgments in hotels, data are collected, surveys and other many socio-economic activities are undertaken. People pay to attend research conferences and seminars; the measurable benefits being the payments made for these activities. The new role of university as an engine of local economic development (Feller, 1990) or beanstalk of invention and research (Miner,

Essley, Davaughn & Rura-Polley, 2001), places new demand on universities and raise questions about the role of research in the advancement of economies. Thus, the benefits of research are enormous and as such call for adequate local and national priority financial consideration (Stan, 2005).

While recognizing the benefits of university research, this study focused on the segment of funding university research in Nigeria. Adequate funding of university research provides a conservative estimate of its economic value. Moreover, the fact that the very nature of research means that its benefits potentially flow far beyond the borders of the state (that is, having high positive externality effect), it therefore requires that adequate commitment be made towards funding research in Nigerian universities. This, therefore, explained why the study investigated the status of funding of university research in Nigeria with the aim of convincing the relevant authorities and institutions on the need to adequately improve the funding of university research in the country.

However, in spite of the wide-range benefits of research, the study showed that the Nigerian government spent an insignificant amount (far less than 1 % of its GDP) on research generally and an average of about 2% of total university expenditure on research during the period under consideration. There is a widespread gap between Nigeria research funding when compared with that of most other countries. This is a manifestation of the country's low priority for research; and this consequently has serious implications for economic development. The relatively declining funding of university research in particular and education generally in the country, at a time when knowledge generation and utilization have become strong tools for economic and social advancement, is nonetheless unacceptable.

### RECOMMENDATIONS

This study investigated the extent to which research activities in Nigerian public universities are being funded. It was very glaring that the country still lags behind in terms of adequate funding of university's research. This is evident in the financial amount that was made available to the public university system during the period under consideration.

This study therefore conclude by recommending that if the country must be free from economic slavery in the nearest future, she must make concerted effort to deliberately invest heavily in

university research considering the imponderable benefits of university research to the wellbeing of the society.

Also, there should be conscious effort to encourage private sector involvement in the funding of university's research in the country. Funds should be mobilised through available sources to support the growth of university research. Public and private collaboration towards effective research funding should be pursued. This can be achieved through deliberate formulation of policy framework that will enhance effective research funding in the country.

Similarly, as in most advanced countries, research support foundations should be established to support research institutions such as the universities. In this case, certain amount of money could be earmarked specifically for the purpose of improving and encouraging research in the country. This will not only serve as catalyst to researchers, but also provide the potential avenue needed for economic growth and development.

### References

- Akpochafo, W.P. (2009), Revitalizing Research in Nigerian Universities for National Development. *Education Research and Review*, Vol. 4, 5, 247-251.
- Babalola, J.B. (2011), Global Transformations in Today's World. Implications for Financing Higher Education in Developing Economies. Being a Paper Delivered at an International Conference on Contemporary Scenario in Higher Education: Employability, Values, Opportunities and Challenges' 28-29 Jana art, Mumbai, India.
- Babalola, J.B., Jaiyeoba A.O., Ayeni, A.O. & Ojelabi, A.O. (2006), Funding University Research and Nigeria's Prospect in Global Scholarly and Scientific Market. *Journal of Sociology and Education in Africa*, Vol. 5, 1, 123-142.
- Babalola, J.B. & Isuku, E.J. (2008), Reading Poverty Incidence in Nigeria. The Interplay of Educational Attainment and Effective Social Support. *Nigerian Journal of Educational Administration and Planning*, Vol. 8, 1, 215-230.
- Babalola, J.B. (2010), Economics of Transforming Higher Education in Africa. Trust Africa Higher Education Experts and Policymakers Dialogue on Trends, Themes, Challenges and Opportunities for Higher Education in Africa. University of Botswana, Gaborone, Botswana, 27-28, September.
- Bamiro, O.A. & Adedeji, S.O. (2010), *Sustainable Financing of Higher Education in Nigeria, A Conceptual Framework*. Ibadan, Nigeria. Ibadan University pres.
- Bako, S. (2005), Universities, Research and Development in Nigeria: Time for Paradigmatic Shift-Paper prepared for 11<sup>th</sup> General Assembly of CODESRIA on Rethinking African Development; Beyond Impasse: Towards Alternatives, Maputo, Mozambique.
- Central Bank of Nigeria Statistical Bulletin 2007, Vol. 18.
- Education Sector Analysis ESA 2007. Nigeria Education Sector Diagnosis. A platform for Re-Engineering the Education Sector. *A Synthesis Report*, Federal Ministry of Education, Abuja.
- EL-Rufai, N. (2006), Higher Learning and the Challenges of Reforms in Nigeria. *The Guardian* of 20<sup>th</sup> March pp. 10-11.
- Feller, I. (1990), Universities as Engines of Economic Growth. They Think they can *Research Policy*, 1914, pp. 235-248.
- Increasing the Economic Impact of Research Councils. Advice to the Director General of Science and Innovation, DTI from the 2006 Research Council economic impact group, Jul <http://www.uwcc.edu/impact/html> retrieved August, 2010.
- Isuku, E.J. (2007), Providing an Enabling Framework for increasing access to higher education in Nigeria. In J.B. Babalola, G.O. Akpa, A.O. Ayeni & S.O. Adedeji (eds) *Access, Equity and Quality in Higher Education*. Nigerian Association of Educational Administration and Planning.
- Miner A.S., Essley, D.T. Devaughn, M & Rura-Polley, T. (2001), The Magic beanstalk Vision; Commercializing University inventions and research. In Claudia Bird Schronhoven and Elaine Romanlehi (Eds). *The Entrepreneurial Dynamics*. Stanford CA. Stanford University Press.
- Muo, I.K. (2008), Fighting Poverty in Nigeria. *Zenith Economic Quarterly*, Vol. 3 No. 1.
- National Bureau of Statistics (NBS) (2007), *Annual Abstract of Statistics*, Federal Republic of Nigeria.
- National Universities Commission (NUC) *Research Bulletin*, 1993-1998.
- Okebukola, P. (2008), Strategies for Stimulating Researchers and Development in Nigerian Universities, *Nigerian Universities Chronicles*, Vol. 12, 2, 17-18.
- Okecha S.A. (1998), *Science in Africa*. Lagos: Stirling-Horden Publishers Ltd.
- Okecha, S.A. (2008), *The Nigerian University: An Ivory Tower with Neither Ivory nor Tower*. Owerri: Edu-Edy Publishers.
- Olaniyan, O. & Adedeji, S. O. (2006), Is there any Trade-off between Military Burden and Public Education Expenditures? Evidence from Nigeria. *Journal of Sociology and Education in Africa*, Vol. 5, 1, 87-103.
- Onuka, A.O.U. and Emunemu, B. (2008), The Role of University Education in Leadership Preparation in Nigeria. *Journal of Educational Review*, 1 (1) 19-25.

- Onuka, A.O.U & Emunemu, B.O. (2010), The Role of Research and Higher Education in Sustainable Development in Nigeria. *Journal of Educational Review*, Vol. 3, No. 4, Oct-Dec., 509-516.
- Peretomode, V. F. (2008), *What is Higher in Higher Education?* (16<sup>th</sup> Inaugural lecture, Delta State University, Abraka), Abraka: Delta State University.
- Rosenberg, N. & Nelson R. (1994), American Universities and Technical Advance in Industries. *Research Policy*, 23, 325-348.
- Stan, M. (2005), The Economic Impact of Research at the University of Connecticut and University Health Centre. *Connecticut Centre for Economic Analysis* <http://ccea Uconn. Edu>. Retrieved August, 2010.
- The Nation's Newspaper, Monday June 21, 2010 pp. 44-48.
- University of Ibadan Statistical Bulletin 2008. *University of Ibadan Digest of Statistics*, 4(1).

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