

E-O

LIJOMASS

**LAPAI INTERNATIONAL JOURNAL OF MANAGEMENT
AND SOCIAL SCIENCES**



ISSN: 2006-6473

**A Journal of the Faculty of Management & Social Sciences
Ibrahim Badamasi Babangida University, Lapai - Niger State**

**Volume 7, Numbers 2
December, 2014**

© Faculty of Management & Social Sciences
Ibrahim Badamasi Babangida University, Lapai

Vol. 7 (2), December 2014

ISSN: 2006-6473

EDITORIAL BOARD

Prof. V.A. Kolawole
Editor in Chief

Prof. M.N. Maiturare
Member

Dr. Bilyaminu I. Kadandani
Associate Editor

Prof. May Nwoye
Member

Dr. Victor Egwemi
Managing Editor

Dr. Katuka Yaki
Member

Dr. Mohammed A. Mawoli
Business Editor & Secretary

Dr. C. Okwuwa
Member

Prof. Eddiefloyd Igbo
Member

Dr. James Obilikwu
Member

Dr. Salihu A.A
Member

EDITORIAL BOARD

- | | |
|---------------------------------|--|
| Prof. A.P. Sorka | Department of Political Science, Benue State University, Makurdi. |
| Prof. O. Soyombo | Department of Sociology, University of Lagos, Lagos. |
| Prof. Olubadeowo | Department of Education, Bayero University, Kano. |
| Prof. Sheik Abdullahi | Department of Business Administration, Ahmadu Bello University, Zaria. |
| Prof. Steven M. Jubwe | Department of Sociology, University of Liberia, Monrovia. |
| Prof. Graham Chapman | Department of Geography, University of Lancaster, UK. |
| Prof. (Mrs) P.S. Aku | Department of Economics, Ahmadu Bello University, Zaria. |
| Prof. M. Kwanashie | Department of Economics, Ahmadu Bello University, Zaria. |
| Dr. A.S. Jegede | Department of Sociology, University of Ibadan, Ibadan. |
| Prof. (Mrs) S.L. Adeyemi | Department of Business Administration, University of Ilorin, Ilorin. |

CALL FOR PAPERS [LIJOMASS]



A PUBLICATION OF FACULTY OF MANAGEMENT & SOCIAL SCIENCES, IBB UNIVERSITY, LAPAI

GOAL

The Lapai International Journal of Management and Social Sciences [LIJOMASS] is a print journal which aims to foster socio-economic and educational development through publications of original research articles in fields of Management, Social Sciences and Humanities in Nigeria, Africa and world at large.

THE JOURNAL

The maiden edition of the LIJOMASS was published in December 2008. The journal has remained vibrant since then, publishing twice – June and December - annually.

ARTICLES AND COPY RIGHT

- Article should be original in nature.
- Article should make significant contribution to knowledge.
- Article submitted for publication in LIJOMASS is not under consideration for publication elsewhere.
- Article submitted to LIJOMASS has not been published previously.
- Article should conform to LIJOMASS submission guidelines.

Acceptance letter for successful articles will be accompanied with copyright form, which must be filled and signed by the author(s).

Copy right to articles published in the journal is vested in Faculty of Management and Social Sciences, IBBUL.

EDITORIAL REVIEW

- Upon receipt of an article and the assessment fee, the paper is registered and subjected to peer-review using double blind review method.
- The reviewed paper as well as assessment report form is returned to the author for necessary corrections (where the paper is considered publishable).
- Upon receipt of the corrected version of the article, the Editorial Board scrutinizes the paper for final acceptance or rejection.
- For the successful papers, acceptance letter is issued to the author(s) and directives for payment of pagination or publication fee are given.
- Single and multiple authors are entitled to one print copy of the journal. Authors requiring additional copies have to purchase it from the publishers.

SUBMISSION OF MANUSCRIPTS

Articles can be submitted either in hard copy or soft copy to following email & postal address:

- ❖ Email: lijomasig@yahoo.com
- ❖ Postal address:
The Editor in Chief,
Lapai International Journal of Mgt. & Social sciences,
Faculty of Mgt. & Social Sciences,
IBB University,
PMB 11,
Lapai, Niger State, Nigeria.

File

The entire article (including figures and tables) should be supplied as a single file.

Format of Typescripts

First page: The first page should also serve as the cover page and should be reserved exclusively for (i) The title of the paper (ii) the name(s) of the author(s) (iii) GSM number and e-mail address of the corresponding author (iv) institutional affiliation of the author(s) and (v) abstract.

The body: (i) Main/section headings should be in title case (e.g. capital letters) (ii) Sub-headings should be in upper case (iii) all sub-heading should be left justified (iv) tables, figures, maps and other illustrations which must be camera-ready should each be numbered and given a title which must be centered (v) all pages should be numbered.

Manuscripts are to be prepared and submitted in word document (.doc) or rich text format. Only manuscript prepared by MS word 1997-2007 will be accepted for assessment.

Font style: Times New Roman

Font size: 12

Line spacing: double

Abstract and key words

- All articles must have an abstract, which should not exceed 250 words. The abstract should contain the research problem, objectives, methodology, findings and recommendations.
- Five key words should be supplied below the abstract in alphabetical order.

Acknowledgement

The source of financial grants and other funding must be acknowledged. The contribution of colleagues and institutions should also be acknowledged. Footnotes can serve this purpose.

REFERENCES

The APA style of referencing should be used.

Books:

- Asika, N. (2006), *Research Methodology in the Behavioral Sciences*. Lagos: Longman Printing Ltd.
Cooper, D.R. and Schindler, P.S. (2003), *Business Research Methods* (8th ed.), New-York: McGraw-Hill.

Chapter in Edited Books:

- Obilokwu, J. (2012), *Obasanjo Administration's Banking Sector Reform: A Critical Assessment*. In Wuam, I., Olali, S.T. and Obilokwu, J. (ed.), *Obasanjo Second Era (1999-2007)*, P. 254-271. Makurdi: Aboki Publishers.

Journal:

- Sule, E.I.K. (1989), *Small Scale Industries in Nigeria: Concepts, Appraisal of Government Policies and Suggested Solutions to Identified Problems*, CBN Economic and Financial Review, Vol. 24, No. 4.

E-Journal:

- Abdulsalam, D. and Mawoli, M.A. (2012), *Motivation and Job Performance of Academic Staff of State Universities in Nigeria: The Case of Ibrahim Badamasi Babangida University, Lapai*. Niger Sate, *International Journal of Business and Management*, Vol. 7 No. 14, P. 142-148. Web-site: <http://dx.doi.org/10.5539/ijbm.v7n14p142> (12/01/2013)

Thesis/dissertation

- Yunusa, M.H. (2012), *Executive-Legislature Relations and Democratization in Nigeria (1999-2009)*, An Unpublished PhD Thesis in the Department of Political Science, Ahmadu Bello University, Zaria.

ASSESSMENT FEE: N5000

PAGINATION FEE: N15000

ACCOUNT NAME: IBBU FACULTY OF MGT. & SOCIAL SCIENCES

BANK: UBA, LAPAI BRANCH

ACCOUNT NO: 101 1675 890

Effect of Working Capital Management on Profitability: Evidence from Conglomerate Firms In Nigeria	
Prof. I. Abiola, T.S. Ajagbe and A.A. Ariyo - - - -	1-10
Impact of Rural–Urban Migrants' Remittances on Economic Development of the Rural Areas: A Case Study of Selected Villages around Kontagora Metropolis	
M.Bala and Dr B.D. Sarkin-Daji - - - -	11-24
Determinants of Annuity Market Development in Nigeria: A Review	
J.S. Adeyele and E.O. Imouokhome - - - -	25-37
Barriers of Returning Home Among Ex-Prisoners: A Conceptual Discourse on the Life Outside Prison	
A.M. Ahmed - - - -	38-49
Effect of Socio Cultural Factors on Accessibility to Growth Capital Among Indigenous Women Entrepreneurs in Sokoto Metropolis	
Dr (Mrs) M.A. Koko and A.S. Bala - - - -	50-63
Ethics in Nigerian Public Service: Compliance and Sanctions in Service Delivery	
Dr H.T. Hassan - - - -	64-74
Financial Development, Income Inequality and Poverty Reduction in Nigeria	
O.G. Yinusa and O.Y. Alimi - - - -	75-92
Evaluation of the Recruitment Practices in the Federal Capital Territory Area Councils' Service Commission, Abuja	
S.S. Wogan - - - -	93-107
Misappropriation of Public Funds by the Military and Democratic Regimes in Nigeria: Causes and Preventive Measures	
L.A. Oke, O.M. Tijani and O. Ojulari - - - -	108-127
Influence of Cultural Factors on the Practice of Accounting in Nigeria	
Dr A. Olagunju - - - -	128-142

Business Cycle Management and Student Satisfaction for Quality Improvement and Job Creation: A Study Of Tertiary Institutions in Sokoto Metropolis (2005-2013)	
Dr M.S. Umar and Dr (Mrs) M. Abdullahi - - -	143-156
Public Perception on the Effects of Boko Haram Activities on the Socio-Economic Development in Suleja Community of Niger State	
A.B. Mohammed and A.S. Williams - - -	157-170
Effectiveness of E-Recruitment on Staff Recruitment Process: Study of University of Ilorin, Ilorin, Nigeria	
Dr S.B. Isiaka and Dr A. Salman - - -	171-183
Review of Financial Management Practices in Small and Medium Enterprises	
O.J. Akinyomi - - -	184-193
The Roles and Militating Factors against Anti-Corruption Organisations to Curb Corruption in Nigeria	
Dr O.O Onoja - - -	194-204
Analysis of Urban Decay and Environmental Degradation in Angwua Sarki Area in Bosso, Minna	
Dr. I.S. Shaibu and O.O Idowu - - -	205-223
Long Working Hours and Work Life Balance: Implications on Workers' Performance	
Dr. I Abdulraheem - - -	224-234
Poverty-Health Nexus in Nigeria	
Dr. B.I. Kadandani, O.M. Salihu and W. Osague - - -	235-246

DETERMINANTS OF ANNUITY MARKET DEVELOPMENT IN NIGERIA: A REVIEW

¹Joshua Solomon Adeyele

adesolojosh@yahoo.co.uk

and

²Ebun Omoniyi Imouokhome

omolebun@yahoo.co.uk

¹Department of Actuarial Science, University of Benin, Benin City, Nigeria

²Department of Marketing, University of Ilorin, Nigeria

Abstract

Annuity market takes up in Nigeria and its development depends mainly on employees' decision to annuitize their accumulated pension funds at payout phase. Under the Defined Contribution where the retirement risks have been shifted completely to retirees in Nigeria, each employee is automatically responsible for the investment risk and longevity risk, and these risks are believed to be easily insured using life annuity through organised annuity markets instead of phased withdrawal provided by the Pension Fund Administrators. Although, life annuity which is expected to play an important role in insurance and pension industries appears to be strange to many retirees in Nigeria because there had never been organised markets for its operation in the country. While the need for life annuity is obvious, it remains unmet. In attempt to understand the lack of demand and lack of supply of the product (life annuity), this study provides answers to why retirees do not annuitize; and why providers fail to create and develop suitable products either. It was learned that the non-availability of products to hedge the long-term liabilities and uncertainty surrounding mortality risk has made providers reluctant to promote life annuity as a retirement benefit option. Other factors against the annuity takes up such as actuarial unfairness, adverse selection were also identified. The study revealed that compulsory purchase of annuities avoids the problem of adverse selection but still leaves open the problem of fair pricing to reflect relative actuarial fairness. The study concludes that there is need for government intervention on regulation of the market by providing an enabling environment for the survival of defined contribution in Nigeria.

Keyword: Mortality Risks, Adverse Selection, Actuarial Unfairness, Annuity Market and Life Annuities

1.0 INTRODUCTION

Annuities are the mainstay of pension throughout the world and marketed by life insurance companies. In exchange for an initial premium, these companies commit themselves to paying certain periodic amounts until the death of the policyholder, thereby taking on the annuitant's longevity risk (Vidal-Melia & Lejarraga-Garcia; 2005). Longevity risk is the risk of needing more financial resources due to living longer than expected. Where annuities are not available, retirees could reduce their annual consumption in response to the uncertainty surrounding their date of death. However, they would then run the risk of dying before they had consumed all their available wealth, and this represents a cost of missed opportunity for consumption. This cost will be less if the individuals value the wealth that remains at the time of their death as a bequest (Vidal-Melia & Lejarraga-Garcia; 2005).

In spite of the above, annuity market takes up and its development in Nigeria depends mainly on employees' decision to annuitize their accumulated pension funds at payout phase. Under the Defined Contribution (DC) where the retirement risks have been shifted completely to retirees in Nigeria, each retiring employees is automatically responsible for the investment risk and longevity risk, and these risks are believed to be easily insured using life annuity through organised annuity markets instead of phased withdrawal provided by the Pension Fund Administrators. Although, annuity market which is expected to play important role in insurance and pension industries appears to be strange to many retirees in Nigeria because there had never been organised markets for it take-ups in Nigeria. While the need for life annuities is obvious, it remains unmet (Evans & Sherris, 2009).

In attempt to understand the lack of demand and lack of supply of annuities, annuity market analysts have sought answers to why retirees do not annuitize; and why providers fail to create and develop suitable product either. In fact, the annuities providers have encountered problems in pricing annuities – largely due to the difficulties of forecasting mortality. Purcal (2006) cited in Bateman and Piggott (2010) noted that the non-availability of products to hedge the long-term liabilities and uncertainty surrounding mortality risk has made providers reluctant to promote life annuities as a retirement benefit option. Other reasons similar to this include but not limited to: constraint on supply; lack of consumer awareness of the risk of not annuitizing (Ganegoda & Bateman, 2008) and bequest motives when consumers decides to annuitize their retirement wealth (Purcal & Piggott, 2008).

While reasons for low demand for lifetime annuities has been well established in the literature, and are reasonably well understood, it is not clear on what ought to be done about it (Rusconi, 2008). Black and Skipper (2000) revealed that the growth of life annuity market is limited because life insurers charge annuitants on unrealistic model and has led many who intend to purchase life annuity go for other financial options such as phased withdrawal. On

the forgoing, this study reviews factors affecting annuity market development with the hope of assisting the policy makers to come up with a policy framework that will lead to annuity market development in Nigeria.

2.0 CONCEPTUAL CLARIFICATION

Different types of annuities exist. Annuities are series of payment made to the annuitant which may be contingent on death (for life annuity) or for a fixed period (not contingent on death). The two annuities discussed in this study reflect those provided under the Defined Contribution scheme, namely, annuity certain and life annuity. In the broadest sense, however, annuity is simply a series of periodic payments. An annuity contract, then, is an insurance policy that promises to make a series of payments for a fixed period or over a person's lifetime. The person who receives the periodic payment under an annuity is called the annuitant. As used in this study, a life annuity, also called a pure life annuity, is an annuity whose payments are contingent upon the continued existence of one or more lives. In contrast, an annuity certain (or phased withdrawal programme) is an annuity whose payments are not necessarily contingent on the annuitant being alive and is subject to inflation erosion. Where word annuity is mentioned in this study, it means either life annuity or whole life annuity which is a life annuity payable for the whole of the annuitant's life. Most annuities are also accumulation instruments, but this is the mechanism for developing the fund to be liquidated. From a legal viewpoint, therefore, a whole life annuity may be defined as a contract whereby for a consideration (the premium), one party (the insurer) agrees to pay the other (the annuitant) a stipulated amount (the annuity) periodically throughout the annuitant's life. Whenever annuity is mentioned, in this study, we simply referred to either whole life annuity or life annuity. To avoid confusion with other types of annuity, annuity certain was used to refer to phased withdrawal or programmed withdrawal that is subject to inflation erosion. On the other hand, the type of life annuity referred to in this study is the one which is inflation indexed. It does not concern annuities that are vulnerable to inflation (see for instance, Antolin, 2009).

2.1 Factors Affecting Annuity Market Development

Annuities have been developed over more than two millennia, stretching back through the development of financial markets and new mathematical theories in the 17th Century all the way to Roman times. But the modern era arguably began with the Finance Act of 1956 which first introduced pensions that required members to annuitize the fund at retirement (Lowe, 2013). The global demographic transition underpins a renewed interest in annuity markets (Mitchell & Piggott, 2011). Thus, the fundamental question facing policy makers in many countries in the new emerging landscape of DC according to Rocha, Vitas and Rudolph (2011), is whether product innovation will respond to the preferences and constraints of prospective annuitants without policy support or whether the development of annuity markets will require supportive policy measures, such as tax incentives, restrictions on

payout options, and even compulsory annuitization. Black and Skipper (2000) observed that in public retirement systems, already burdened by rising life expectancy and a trend towards earlier retirement will experience a sharp rise in its retired population and the retirees – employee's ratio when the “baby boom” generation begins to retire. Maiturare and Adeyele (2010) referred to the term “baby boom generation” or “baby boomers” as employees whose date of birth fall within the year 1946 to 1964 and had retired or expected to retire before 2020. We discussed below the detailed factors affecting annuity market development.

i. Adverse selection

Many studies on role of annuities (Hurnard, 2007; Rashbrooke, 2006; St John, 2003, 2006), as part of a payout strategy have identified the problems of annuity markets. Mercer (2009) have also recently discussed the nature of annuities as part of possible ways of creating “a viable and efficient market in retirement income products.” In a voluntary insurance market, insurers are faced with the risk of adverse selection. In a risk pool where there is substantial heterogeneity (Evans & Sherris, 2009), this will result in those with a higher expected longevity purchasing life annuities and those with lower longevity not purchasing annuities. Philipson (1999) reported in Cutler and Zeckhauser (2003) documents that prices decrease with additional purchases, where adverse selections would imply the reverse. Rosconi (2008) agreed with Cutler and Zeckhauser (2003) that adverse selection plays a part in explaining under purchase of life annuities among some families, but other factors are likely to come first in explaining the behaviour. Black and Skipper (2000) noted that adverse selection exists with life annuities and those with higher than average probabilities of having claims would like to enter the risk pool at an average premium rate. They noted that:

For individuals with high mortality risk aversion, even high-priced annuities may be attractive. As a practical matter, however, the market for individually purchased life annuities seems thin. One of the hypotheses for this result is the presence of substantial adverse selection. Individuals whose life expectancies are quite high would seek annuities, using their superior knowledge of longevity to secure good deals for themselves. As insurer's annuity pricing schemes are not as defined as their insurance pricing, adverse selection problems would be more prominent with annuities than with life insurance. Markets for annuities, therefore, would be even more perfect.

The insurance market generally does not offer lower-priced annuities to individuals with lower survival probabilities. Such persons, therefore, would be expected to shun annuities in favour of holding optimizing behaviour implicit in the life cycle model. Therefore, the individual is not able to maximize lifetime utility because fairly priced annuities were unavailable to him or her.

However, “higher than average” in the context of annuities translate into people being healthier than average, whereas with life and health insurance, this translate into people being less healthy. In this sense, adverse selection with life annuities means that those in superior standard physical conditions will be more likely to purchase them. To avoid this, the insurer must undertake a risk assessment, to differentiate between those with different life expectancies, in order to charge fair premiums (Evans & Sherris, 2009). Black and Skipper (2000) also revealed that insurance companies as well as annuities providers are aware of this phenomenon and, historically, have priced annuities on the assumption that those who purchase them, as a group, will exhibit mortality superior to that found under life insurance policies. This approach has led to impaired life annuities and postcode underwriting for life annuities in the United Kingdom (Evans & Sherris, 2009). Experience confirms this tendency, for annuity mortality has been far superior to that under life policies. An effect of this automatic pricing for adverse selection (i.e. excessive longevity) is that those who believe that their life expectancies will not be “superior” tend to avoid purchasing life annuities; just as those in good health would tend to avoid purchasing life insurance policies that had been priced for adverse selection –excessive mortality. Black and Skipper (2003) argued that by failing to price to risk, life insurers deprived themselves of many potential life annuity customers and have deprived many potential customers of the opportunity to purchase “fairly” priced life annuities. This fact also accounts for under development of annuities markets and would very much likely make many Retirement Saving Account (RSA) holders in Nigeria to convert their retirement funds into programmed withdrawals instead of buying life annuities from insurance companies.

ii. Actuarial Unfairness

Another dimension of life cycle hypothesis as discussed in the literature relates to the use of life annuities. Of course, life annuities offer insurance against the risk of outliving one's resources. Researchers have established that the purchase of actuarially fair annuities is welfare enhancing for risk-averse individuals. The more information known about client, the more accurately the risk can be priced, resulting in fairer rates for the providers (Lowe, 2013). Because of this information failure, some have suggested that government-mandated life annuities, such as through social insurance, are justified. Stewart (2007) revealed that the lack of annuities products can be found on the supply side of the market – with insurance companies increasing unwillingness to offer these products (or to offer them at attractive prices) and few reinsurance companies prepared to take on their risks. Brown and Warshawsky (2001) account for two reasons for price derivations from their actuarially fair level. The first is that insurance companies selling annuities need to cover administrative and marketing expenses and earn a competitive accounting profit. The second reason is the extent that individuals who choose to annuitize have longer life expectancies than the general population, insurance companies need to adjust their prices to reflect this fact. Friedman and

Warshawsky (1998, 1990) cited in Brown and Warshawsky (2001) used the first reason to document the extent to which private market annuity prices deviate from an actuarially fair level by calculating money's worth ratio using both population and annuity mortality tables. The money's worth ratio is a measure of the expected discounted present value of future annuity payments per naira of premium that an individual can expect to receive if they were to participate in the individual annuity market. The challenge of forecasting mortality by insurance companies in pricing annuities partly explains low annuitization (Stewart, 2007). It has also been observed that large number of countries lack the demographic data that are necessary to construct accurate mortality projections, and in practice use life tables of another country (Stewart, 2007). In addition, insurers have been faced with the problem of life expectancy of the general population rising faster than anticipated in recent years, and no model has yet been developed that gives accurate predictions of the rate of this longevity increase. Consequently, annuity providers remained exposed to the risk that mortality rates of pensioners will have problems distinguishing between different segments of the populations and their own annuity pool to overcome problem of adverse selection. Given that annuities are relatively 'low margin' financial products, Stewart (2007) observed that if incorrect mortality assumptions are used, they can prove unprofitable for providers (market participants, for example, claim to lose money on annuities). Some of insurance companies in Nigeria seems to have carefully considered the risk involved and may even start to rethink their exposure to longevity risk through annuities, whilst the appetite of reinsurers for longevity also account for low annuities markets development.

iii. *Bequest motives and Social Networks*

Interest in mortality risk aversion has increased because some empirical studies suggest that the elderly do not seem to spend as the life cycle hypothesis would predict (Dansiger et al, 1982, cited in Black & Skipper, 2000). Such findings have led to further interest in the nature of bequests. For a variety of reasons, the public has not embraced payout annuities as a financial solution to bridging the gap between accumulating wealth and guaranteeing retirement income payments (Raham & DesRocher, 2012). Industry studies point to 'consumers' reluctance to relinquish complete control over their assets by making such purchase. This issue is of importance to our understanding of life insurance purchases because the demand for life insurance is positively related to motive for bequests. Of course, bequests are consistent with the life cycle hypothesis because, with uncertainty about the date of death, individuals could die without having exhausted their assets, thus providing their heirs with what are termed *accidental bequests*. Some researchers have suggested that the magnitude of inherited wealth, however, is too large to be explained solely by accidental bequests (Kotlikoff & Summers, 1989, cited in Black & Skipper, 2000). At least a portion of bequests must, therefore, be intended - a thesis consistent with altruistic motivation or the desire to help dependents have more wealth so that they would be able to enjoy more leisure time throughout life.

Strong bequest motive is expected to account for low annuity purchase. However, Cutler and Zechauster (2003) argued that annuities would be one way to insure the size of the bequest. The literature has not explored the degree or nature of bequest motivation that could explain the results but rather speculates more about 'behavioural' explanations for the low rate of annuitization. Brown and Warshawsky (2001) noted that "large number of economic literature on the subject of bequest and transfer behaviour that has failed to come to a consensus on whether bequest motives have an important effect on household asset allocation and consumption decisions". Brown and Poterba (2001) revealed that antecedent evidence also accounts for why elderly are not aware of or understand annuities, and many fewer have priced them. Hurd (1987) cited in Brown and Warshawsky (2001) shows that couples with children do not document their retirement assets any faster than couples without children, and interprets this as evidence against bequest motives. A recent re-examination of this approach, however, suggests that this is unlikely to be the case. With respect to the context of systematic plans motives seem not to affect household decisions about whether or not to annuitize systematic plans. Even if bequests to one's children are not important determinants of annuitization behaviour it may be the case that married couples engage in a form of mortality risk-sharing between themselves. In Nigeria, the wrong perception about insurance companies could partly explain why most retirees do not use life annuity option of retirement. Along the latter lines is the seemingly inexplicable preference some people have for annuities that guarantee a payment for a certain number of years, even if the annuitant dies before that time.

iv. Low Literacy on Annuity Products

Information failure include underestimating the probability of extended life expectancy; ignorance; mistrust of insurance companies; flexibility of products and their variability; and suspicion about the financial standing and viability of the insurance provider over what could be a lengthy retirement (St John, 2009). In spite of the annuity products exist to address some of the restrictions and could overcome some of the dislikes which consumers have for annuities, their flaws are often perceived rather than their benefits (Stewart, 2007). If poor understanding of the risks the annuities cover and the conditional returns that they provide is also one of the reasons for low take-ups, perhaps attention to this problem would improve the demand for annuities and hence the effectiveness of the market (Rosconi, 2008). Evidence of this position is mixed, both from the perspective of the current level of understanding and the impact that consumer education can have on behaviour. Studies commissioned by *Association of British insurers* have come to different conclusions about the level of understanding by prospective annuity purchasers. Consumer perceptions raises considerable concerns both about the level of understanding of annuity products and extent to which working age individuals close to retirement planning for their post-retire years (Rosconi, 2008). It has been noted also that the financial advisors' framing of annuity

discussion have a significant impact on a person's ultimate decision to purchase life annuity or self-annuitization. A study by Angnew, Anderson, Gerlach and Szykman (2008) examined the impact of financial advisor's negative description of an annuity can have on a client's decision to purchase an annuity. The outcome of the study revealed that people were less likely to choose an annuity after a "pro – investment" presentation and more likely to choose it after a "pro - annuity" presentation. Richardson and Spence (2010) have therefore emphasized the need for financial advisors (such as Pension Fund Administrators, [PFA]) to provide a balance explanation when presenting retirement options to their clients and for financial companies to ensure their advisors adhere to this standard. Presently in Nigeria, the high level of ignorance on efficacy of annuity products is forcing many retirees to self-annuitized. For instance, it has been speculated among employees that the regulatory body has fixed age 70 as the maximum age for any retiring employee to access pension income – that is, anybody above this age limit will not be allowed to access retirement income (Personal Communication, 2014). If this speculation were to be true, what of those university lecturers that will be retiring at age 70? Does that imply that they will be denied access to their contributed funds? It must be remembered that any conclusion reached by the regulatory body which does not favour the retiring employees would always lead to defeat of pension reform's purpose. Taking arbitrary decision signifies that the body is confused and lacking in expertise to confront the issues and challenges before them.

In addition to the factors identified as limiting the demand for annuities, there are other factors that can also be responsible – some of which may be genuine problems with the products and another more related to a lack of understanding on the part of consumers. Stewart (2007) worries that surveys across countries consistently, and somewhat surprisingly, reveal the unpopularity of annuities products despite academic research pooling the value of annuities and combinations they can make to secure retirement incomes. The attractiveness of annuities can be reduced by the risk of inflation avoiding fixed annuity payouts, their illiquidity, administrative costs, adverse selection, and lack of transparency in their pricing and often inappropriate advice provided by financial intermediaries (Stewart, 2007). Other potential problem limiting the demand for annuities suggested by Cutler and Zechauser (2003) is that consumers often fear paying money to an insurance company only to die shortly thereafter without much return. Under the regulation of annuity market in Nigeria, any one taking life annuity is guaranteed for ten years of regular payments. A further difficulty facing consumers purchasing annuities is lack of understanding of different types of annuity products and problem relating to deciding what types of risk they do or do not wish to take on (Stewart, 2007). Individuals need to decide between more protection vs. high flexibility and chance for a higher profit. The annuity approved for insurance companies is life which only protect against longevity risk. The only one that shield annuitants against both longevity and investment risks (level of annuities paying out constant amount over the life of the annuity with escalating annuities paying a rising or decreasing amounts) is fixed income annuities.

v. ***Lack of Inflation protection in commercially available Annuities***

The discussions so far have assumed that individuals are able to obtain annuities that are not subject to inflation risk. Brown and Warshawsky (2001) revealed that there is very few opportunities to purchase annuities that are protected from inflation uncertainty in the absent of social security system which essentially provides real annuities by indexing benefits to the consumer protection inflation (CPI). Stewart (2007) noted that real annuities protect against inflation, whilst impair life and enhanced return over ordinary annuities due to low life-expectancy (from medical problems) or special characteristics (smokers, geographic, etc). As revealed by Brown et al (1999) reported in Brown and Warshawsky (2001), inflation has two undesirable effects on fixed nominal annuity streams. First, even modest rates of inflation will erode the real value of the income stream over time. The erosion form a constant and expected rate' of inflation, however, is easily remedied through use of graded or escalating annuity products that increase the nominal payout by a fixed percentage each year. The second effect, however, arises from understanding about inflation. If inflation varies from year to year, then this will index variance in the real income available to retirees, even in escalating products. When Brown et al (1999) extend the annuity valuation model to account for persistent inflation; they find large differences between the valuations of real versus fixed nominal annuities. St John (2009) observed that if government provides information-indexed along bonds, indexation of annuities becomes possible, but, in this case, the government carries the cost of uncertainty.

vi. ***Health Uncertainty and the Irreversibility of Annuitisation***

The annuitisation decision is largely irreversible. For example, sub section 2 of the regulation of annuity market in Nigeria jointly issued by National Insurance Commission (NAICOM) and the Pension Commission (PENCOM) does not allow any retiree who has purchase life annuity to change to programmed withdrawal. This suggests that insurance companies are empowered not to allow individuals to cancel an annuity agreement once it is in place, otherwise, adverse selection would obviously occur as individuals acquire additional information about their expected longevity. Furthermore, annuitisation imposes a liquidity constraint on individuals meaning that in each period they have access only to that period's annuity income (and any unconsumed previous payments). Thus, if individuals face significant uncertainty about future expenditure needs, Brown and Warshawsky (2001) noted that such individual may be reluctant to fully annuitize.

vii. ***Administrative Costs and Lack of Transparency of the Market***

Administrative loads and lack of transparency used by life insurance companies in their pricing and often inappropriate advice provided by financial intermediaries are other factors that make retirees reluctant to purchase life annuity. As earlier mentioned, irreversibility of annuity decision advocated by the NAICOM and PenCom is going to cause a major setback

on development of annuity market in Nigeria. In a survey across countries individuals complain about the lack of ability to vary income levels and the timing when they must be purchased, to the inability to bequest assets survivors (Stewart, 2007). Administrative load in annuities provides a partial explanation. Mitchell et al (1999) reported in (Cutler & Warshawsky, 2001) estimate that the load on annuities is about 15 to 20 percent. About half of that is a result of adverse selection; the remainder is marketing costs, processing costs and insurer profit. However, administrative costs do not seem to explain the low rate of annuitisation. First, the investment returns on annuities are strongly tax favoured and second, risk spreading concerns make annuities worthwhile. In a utility based simulation model of annuitisation decision, Mitchell et al (1999) in Cutler and Warshawsky (2001) estimate that people should be willing to pay an administrative fee of 25 percent to annuitize their assets.

2.2 Discussions

This study has revealed that building annuities into pensioners' retirement funds appears to be one of the best backup plans, because they assure a relatively high level of withdrawals with no risk of depletion. However, a number of factors that serve as impediment to the market takes up globally and locally have been identified including the risks associated with the issuing of lifetime annuities and the lack of markets to hedge these risks. Among them is their finality: once cash is handed over to the insurance company, the annuitants are locked in for life. The category of persons with this perception believe that conventional stock and bond investments, by contrast, provide growth potential and the flexibility to tap their for a lump sum if needed. They are also of the opinion that if leaving money to their heirs is a top priority, annuities preclude that option because the payments end after death. However, with present recommended retiree's life annuity in Nigeria, the product has the feature that protects annuitant for a period of at least 10 years.

Another reason is the actuarial unfairness, and Brown and Warshawsky (2001) accounted two reasons for this. The first is that insurance companies selling annuities need to cover administrative and marketing expenses and earn a competitive accounting profit. The second reason is the extent that individuals who choose to annuitize have longer life expectancies than the general population, insurance companies need to adjust their prices to reflect this fact. Evans and Sherris (2009) argue that this will result in those with a higher expected longevity purchasing life annuities and those with lower longevity not purchasing annuities. However, "higher than average" in the context of annuities translate into people being healthier than average, whereas with life and health insurance, this translate into people being less healthy. In this sense, adverse selection with life annuities means that those in superior standard physical conditions will be more likely to purchase them. To avoid this, the insurer must undertake a risk assessment, to differentiate between those with different life expectancies, in order to charge fair premiums (Evans & Sherris, 2009).

Insurers are faced with problem of life expectancy of the general population rising faster than anticipated in recent years, and no model has yet been developed to give accurate predictions of the rate of longevity increase. As a result, incorrect mortality assumptions are sometimes used by life insurance companies which make annuity providers as well as annuitants become exposed to mortality risk if the rate is underestimated, and overcharged the annuitants if the rate is overestimated. This has lead to issue of adverse selection against the insurance companies. Insurance realises that annuities generally are not purchased by individuals in poor health; and another important reason is that the constant improvement in mortality rate provides a generally increasing margin of safety for life insurance but has the opposite result for annuities. For this reason, insurance tends to load the annuity cost thereby leading to actuarial unfairness especially for those with deteriorating health issues.

3. CONCLUSIONS AND RECOMMENDATIONS

The above issues require government intervention and a clear role to ensure the market is constantly regulated to provide enabling environment for the survival of defined contribution. Also, in a voluntary insurance market, the risk of adverse selection serves as a threat to insurers. That is why St John believes that in a risk pool where there is substantial heterogeneity, this will result in those with a higher expected longevity purchasing life annuities and those with lower longevity not purchasing annuities. To avoid this, the insurer must undertake a risk assessment, to differentiate between those with different life expectancies, in order to charge fair premiums.

Compulsory purchase of annuities avoids the problem of adverse selection but still leaves open the problem of fair pricing to reflect relative risks in a heterogeneous pool. It is believe in the long run that the law of large numbers could be relied on to reduce mortality variations to a manageable levels and capital is required to be held against the residual risk. This in turn will encourage many retirees to annuitize their pension funds in Nigeria.

REFERENCES

- Angnew, J.R, Anderson, R.A, Gerlach, J.R, & Szykman, L.R.(2008). "The Annuity Puzzle and Negative Framing." CRR Issue Brief No. 8-10. Center for Retirement Research at Boston College.
- Antolin, P. (2009). Private Pensions and the Financial Crisis: How to Ensure Adequate Retirement income from DC Pension Plan. *OECD Journal: Financial Market Trends*, 2(1)
- Bateman, H. & Piggott, J. (2010). "To Much Risk to Insure? The Australian (non-) Market for Annuities." Discussion Paper No. 01/10. Centre for Pensions and Superannuation
- Black, K. & Skipper, H.D. (2000). *Life and Health Insurance*, Pearson Education, Inc.

- Brown, J.R. & Porterba, J.M. (2000). Joint Life Annuities and Annuity Demand by Married Couples, *Journal of Risk and Insurance*, 67(4), 527-53
- Brown, J.R & Warshawsky, M.J. (2001). "Longevity-insured Retirement Distributions from Pension Plans: Market and Regulatory Issues". NBER Working Paper No 8064
- Cutler, D.M & Zeckhauser, R. (2003). *Extending the Theory to Meet the Practice of Insurance*. Harvard University and NBER
- Evans, J. & Sherris, M. (2009). The Development of a Life Annuity Market in Australia: An analysis of Supplier Risks and their Mitigation. *The Financial Journal of Applied Finance*, 11-15.
- Friedman, B.M., & Warshawsky, M.J. (1990). The Cost of Annuities: Implications for Saving Behaviour and Bequests, *Quarterly Journal of Economics*, 105(1):135-154.
- Frinkestein, A & Poterba, J. (2004). Adverse Selection in Insurance Markets: Policyholders' Evidence from U.K. Annuity Markets. *Journal of Political Economy*. 112(1):83-203.
- Ganegoda, A. & Bateman, H. 2008, *Australia's Disappearing Market for Life Annuities*, Discussion Paper, Centre for Pensions and Superannuation, 01/08.
- Hurnard, R. (2007). *Managing Assets and Income in Retirement. An Issues Paper Prepared for the Retirement Commission*. Wellington: Retirement Commission.
- Lowe, S. (2013). Back to the future. *The Actuary: the Magazine of Actuarial Profession*. available on: <http://www.moneysense.ca/retire/annuities/everything-you-need-to-know-about-annuities>
- Maiturare, M.N. & Adeyele, J.S. (2010). Pension Benefits and Longevity Risks of the Nigerian Baby Boomers. *Journal of Emerging Trends in Economics and Management Sciences*. 1(2): 81-89.
- Mercer. (2009). *Securing Retirement Incomes in New Zealand. Time to act*. Wellington: Mercer LLC.
- Mitchell, O. S & Piggott, J. (2011). Turning Wealth into Lifetime Income: The Challenge Ahead. In: Mitchell, O. S, Piggott, J. and Takayama, M.(2011) ed. Oxford University press: United States, New York
- Purcal, S. & Piggott, J. 2008, Explaining Low Annuity Demand: An Optimal Portfolio Application to Japan, *The Journal of Risk and Insurance*, 75(2): 493-516.
- Raham, C. & DesRochosers, C. (2012). Contingent Annuities: an Ideal Annuity Product? In *the annuities landscape: five trends to watch for in 2012 & 2013* (pp. 10-11). Ernst & Young.
- Rashbrooke, J. (2006). *Asset Decumulation: Optimising Income Needs for Retirement*. Thesis in Partial Fulfillment of the Requirements for the Degree of Master of Commerce and Administration in Public Policy, Victoria University of Wellington, Wellington.
- Richardson, P.D & Spence, C.S (2010). Increased Longevity and the Annuity Solution: How Retirement Benefit Can Reduce Longevity Risk. TIAA-CREF Institute, Policy Brief

- Rocha, R., Vittas, D. & Rudolph, H.P. (2011). Annuities and other Retirement Products: Designing the Payout Phase. The International Bank for Reconstruction and Development / The World Bank
- Rusconi, R. (2008). "National Annuity Markets: Features and Implications", *OECD Working Paper*
- Sheshinski, E. (2002). "Equilibrium and Optimality in Annuity Markets." Four Lectures Given at the Stockholm School of Economics, February.
Available on: <http://www.hhs.se/secs/MiniCourses/RefListSheshinski.doc>
- Stewart, F. (2007). Policy Issues for Developing Annuities Markets. *OECD Working Papers on Insurance and Private Pensions* 1(2), 10.
- St John, S. (2003). The role of annuities in the New Zealand Retirement Incomes Policy Mix. Paper Prepared for the Periodic Report Group 2003. from
<http://www.treasury.govt.nz/prg/background.asp>
- St John, S. (2009). *The Policy Implications of Decumulation in Retirement in New Zealand. A Background Paper Prepared for the Retirement Commission*. Wellington: Retirement Commission.
- Vidal-Melia, C. & Lejarraga-García, A. (2005). Demand For Life Annuities From Married Couples with a Bequest Motive