

THEORY OF CONSUMER CHOICE ON ANNUITY MARKET AND ANNUITY DECISIONS IN NIGERIA

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Abstract

The objective of this study is to empirically assess annuity market and decisions surrounding the consumer choice on his/her retirement funds. The paper discusses Antiquity of Annuities, Annuity Market, industry analysis of the decumulative (payout) phase under annuity in Nigeria, Theory of Consumer Choice on Annuity Decisions, life cycle theory and proffered recommendations. The paper is an initial theoretical attempt to a virgin area which needs to be brought to the fore for the Nigerian populace. The paper suggests further indebt empirical analyses be under taken on the industry as it pays out more funds to its annuitants. The pattern of consumer choice can also study as data accumulates in the area.

Keywords: Consumer choice, Annuity market, Annuity decisions

Introduction

The theory of consumer choices and annuity market development fall in the decumulative (payout) phase of the pension scheme. The paper discusses the fundamentals of annuities and also highlights the payout option in the theory of consumer choice for the retiree. Several changes in the area are discussed.

Antiquity of Annuities

Several financial contracts similar to annuities have a long history around the world. An ambiquitous source of risk is the uncertainty about the length of life of any individual. Therefore, the history of annuities dates back to the 15th Century in Rome. According to Poterba (1997) who reported that ancient Roman contracts known as *annua* promised an individual a stream of payment for a fixed term, or possibly for life, in return for an upfront payment. Speculators who dealt in marine and other lines of insurance offered such contracts. A Roman, *Domitius Ulpianus*, compiled the first recorded life tables to compute the estate

values of annuities that a decedent might have purchased on the life of his survivors (Dellinger, 2006).

Annuities have been offered by insurance companies which pool the mortality risk across many individuals and thereby achieve a more predictable cash flow than if they offered an annuity to only one person. This centuries-old vehicle protects the individual against the risk of not only overspending but outliving his/her resources, as it offers a financial cushion for survivors in the event of premature death.

Furthermore, annuities solve the problem of planning consumption in a world with uncertain lifetimes in return for an initial capital payment. An annuitant is assured of receiving a constant income stream for the remainder of his life. The annuity provider can pool mortality risk across similar individuals and by so doing can use the principal left behind by those who died sooner than expected to ensure those who live unexpectedly long (Dellinger, 2006). As a result, the annuitant's payout from the annuity contract can, in theory, exceed the income he could earn if he invested his annuity premium in a financial asset such as a bond.

According to Brown and Poterba (2000), the annuity payout rate depends on both the annuitant's perspective mortality risk and on the return that the annuity provider can earn on invested assets. For instance, younger individuals, because they are expected to receive payments for a longer time; receive lower annuity payout than older annuitants for a given amount of capital invested. A higher rate of return generates greater income per dollar of capital for the insurance company and therefore permits higher payout rates for the annuitants. Poterba, Mark, and Warshawsky, (1999) and Walker (2006) argued that annuities are sometimes referred to as "reserve life insurance." With life insurance; the

policyholder pays the insurer each year until he/she dies after which the insurance company pays a lump sum to the insured's beneficiaries. With annuities, the lump sum payment is from the annuities to the insurance company before the annuity payment begins and the annuitant receives regular payouts from the insurance until death.

Most annuity contracts have an accumulation phase and a liquidation phase. During the accumulation phase, capital builds up; and this capital is dispersed during the liquidation phase. In the case of the single premium immediate annuity, there is no accumulation phase. Annuitants make lump sum payments that they wish to draw down to the annuity provider (Brown, 2001).

During the liquidation phase, the annuitants receive payouts contingent upon their survival or in accord with other terms specified as a guaranteed minimum, with the opportunity for dividing if mortality experience or rate of return on insurance companies' investments prove better than expected. Many annuity products exhibit long accumulation phases, so they operate in part as saving vehicles. Although annuities are unique in their provisions of income streams contingent on remaining alive, they compete with other financial products as a means for asset accumulation (Bodie, 1990; Ajemunighohun, Noah and Kamal 2019).

Significance of Annuities

The complexities of long-term financial planning are made easier as it protects the individual from overspending of his/her resources and Annuity contracts are frequently designed to allow individuals to exercise self-control of their money as they are easy strategies for building long-term saving are some significance of annuity planning The literature is very rich with arguments as to what constitutes the basic types of annuity products (Poterba, 2001; Scott, 2007; Sambo, 2012). Generally speaking, annuities can be classified based on the nature of interest payable or the expected return on investment. Under this classification, we have fixed, variable and indexed annuities (Soares & Warshawsky, 2004; Walker, 2006). Annuity products can also be classified by the length of time that it takes the annuitant to start receiving regular payments from the annuity (Blake & Hudson, 2000; Rusconi, 2008). This classification gives rise to immediate and deferred annuities. The basic types of annuities are discussed below:

Annuity Markets for Retirement Products

The development of the market for retirement products in Nigeria has its origins in the pension reform that was implemented in 2004 where developed and emerging economies devoted substantial effort to discovering what inspires individual asset accumulation patterns. It is during the accumulation phases that society seeks to build up resources adequate to finance retirement. These resulted in reforms by these economies to ensure financial stability to influence retirement security. Economies migrated to the newly contributory scheme in different periods in order to take care of their aging population. Nigeria in 2004 joined this terrain by adequately transferring the pension problems to the individual who is not properly equipped to make financial decisions concerning his/her long-term pension fund PenCom, (2004). As a result, these long-term funds need financial instruments that will not allow inflation or other factors to dilapidate the resources. Considering the significant implications of the decumulation of the retirement accounts.

Annuity Market

An important consideration for policymakers when attempting to develop or promote the annuity market is the entities that should provide these products. The providers of annuities are principally insurance companies and alternative providers such as pension funds, separate financial institutions, and state annuity funds. Insurance companies are the primary participants in annuity markets. Indeed, the number of insurance companies selling annuities has fallen dramatically in recent years, notably in mature and developed annuity markets (Doyle, 2006). The reasons for this are not farfetched. The business of life annuities can be unprofitable as a result of low investment sections, increasing longevity risk, and high reserve requirements. Life insurance companies face high solvency requirements and are required to use mortality tables that may be too conservative and do not account for future improvement in life expectancy. This notwithstanding, however, the business of annuities has become very important and essential to economies in promoting savings and managing sustainable pension plans (Brown, 2003; Rusconi, 2008; Antolin, 2008).

According to Giacinto, Federico, Gozzi, and Vigna (2008), annuitization protects individuals from longevity risk, but longevity risk does not go

away; instead, annuity providers bear the risk. They argued further that the accumulated asset during an individual's working years and how the retiree attains optimal financial security or retirement income and good standard of living during retirement years is in the ability to hedge future uncertainty regarding the adequacy of one's accumulated assets to sustain him or her for the whole life. This retirement security improves as one's knowledge of the tools and options available to help cope with this risk grows.

Annuity Products and Annuity Providers

In any annuity market, two things are of utmost importance; annuity products and annuity providers. The availability of various annuity products that would pool investment risk, mortality risk, and inflation to satisfy the market needs of retirees is of immense importance to the growth and survival of the annuity market. Hence, varieties of annuity products in the market would offer retiring individual's different options on how best to hedge against longevity risk (Doyle, 2006). Since products are designed to suit the expectations of retiring individuals, annuity products vary from country to country. Doyle et

al. (2001), Wadsworth, Findlater and Boardman (2001), Mitchell (2001), and Dellinger (2006) argued that annuity products should be adequate in the annuity market to provide variety in the products and create competition in the annuities rates.

Regulation on Annuity Business in Nigeria

In developing an annuity market there must be proper regulation by the policymaker of that country. In Nigeria, both the National Insurance Commission (NICOM) and National Pension Commission (PENCOM) are the regulator of the annuity market. Section 4 subsection 1 of the Pension Reform Act, 2004 is the regulation of annuity in Nigeria and the primary role of NICOM is to regulate the annuity market in Nigeria while PENCOM's statutory role is to ensure retiree receive a retirement benefit as and when due. By the Act, any retiree that has 50% of his money purchasing an annuity is allowed a lump sum. Similarly, retirees are not mandated nor forced to choose between a programmed withdrawal or a life annuity but voluntarily select the retirement option they prefer after which they are not allowed by the laws to switch.

Table 3: An industry analysis of the decumulative (payout) phase under annuity (2013 to 2019).

Year	Total retirees	Monthly annuity (Million)	Lumpsum (Million)	Premium (Million)	Payment of death benefit (Million)
2016	34,876	1,1748.40	47,090.82	170,570.96	111,217.64
2017	13,663	778.74	13,201.88	71,051.45	27,684.51
2018	13,113	732.52	16,482.97	87,253.42	28,682.14
2019	13,153	817.62	24,923.21	78,438.12	27,217.53

Source: PenCom Annual report, 2016 to 2019.

From table 3 above reveals the total retirement who were also paid 21,540.70 million and then 34,876 retirees in 2016 where paid 111,217.64 million. By the end of 2019, the number decreased to 13,153 and they were paid 27,217.53 million. This evidences the fact that retirement naturally or by death remains uncertain and this makes withdrawals from funds a difficult thing to predict. The premium injected into the insurance industry was 170,570.96 million as of 2016 while in 2019 it reduced to 78,438.12 million. Similarly, monthly annuity was 1,1748.40 million as of 2016 which also reduced to 817.62 million due to the decrease in the number of retirees within that period.

Noteworthy, as of March 31, 2019, the National Pension Commission (PenCom) revealed that total pension assets in Nigeria rose to N9.030 trillion, up from the N7.44 trillion as of January 31, 2019. The fund has been cautiously invested in 24 major asset classes to generate greater returns on investment such that benefits to the contributors are achieved. Furthermore, this fund gets injected into either the insurance industry or remains in the pension industry where the retiree selects life annuity or programmed withdrawals. Under section 7(1) (C) of the Act, monthly pension payment under the Life Annuity Scheme averaged N1.7 billion as of March 2017, and as of the first quarter of 2019 total premiums amounted to 353,685.64 million and annuity amounted to

3,517.02 million. Moreover, the total premium paid to Insurance Companies for the Group Life under section 4(5) of the Act was N170.57 billion as of March 2017. This has significantly assisted the growth of the insurance industry. Notwithstanding these accomplishments and the positive effect of the fund on the economy, there has been the need to further grow a robust annuity market in Nigeria to cater to the retirement needs of the pensioner.

Theory of Consumer Choice on Annuity Decisions

The Act compels the individual to participate in the financial decision on his/her retirement income. This means that the choice as to either place the fund with the PFAs and collect programmed withdrawal until the fund is exhausted or select a certain type of annuity with insurers providers and continue to receive retirement income until he/she dies thereby annuity hedges against longevity risk it left at the whims of the individual. In this discussion, the life cycle theory will be adopted as it suits consumer annuity decision. Although Prospect theory and Generalized Expected Utility Theory are closely linked to individual decision alternatives, the life cycle theory (LCH) best suits the economic alternatives of saving and consumption of the pensioner.

Life Cycle Theory (LCH)

This theory was propounded by Franco Modigliani in 1963 and his student Richard Brumberg. It is a model that tries to explain the consumption pattern of individuals. It is also an economic theory that relates to the consumption and saving behaviors of individuals over the sequence of an era or lifetime. LCH presumes that individuals plan their spending over their lifetimes, taking into account their future income. Consequently, they take on debt when they are young, presumptuous that future income will help pay the debt off and during middle age, they sustain their level of consumption when they retire. This results in a "hump-shaped" pattern in which wealth accumulation is low during youth and old age and high during middle age.

The Life Cycle Hypothesis replaced an earlier hypothesis developed by economist John Maynard Keynes known as the Keynesian theory. It was advocated in 1930 to explain the great depression. He tried to explain total spending as it affects output, employment, and inflation but it

implied that as a nation's incomes rose, a savings glut would result, and aggregate demand and economic output would stagnate. Successive research has generally supported the Life-Cycle Hypothesis (Modigliani, 1963). The life-cycle hypothesis has been utilized extensively to examine the savings and retirement behavior of older persons. This theory is most appropriate in explaining consumer choice on annuity because it will help the workers on the verge of retirement to be aware of the life after work, as in his/her middle age is when the pension fund is accumulated and this would subsequently be used to manage their lives at retirement.

Policy Recommendations

In Nigeria where the need for an annuity market has been established as the PRA (2014) states the insurance industry as early providers of annuity products to continue with the business. Policymakers should not ignore the need for annuity regulations that would guide the annuity market in Nigeria. Similarly, annuitization of small accumulations and the attention of the public concerning longevity risk need to be brought to the fore. This is because the institutional framework differs from one country to another. According to Rocha and Rudolph (2010) and Stewart (2007), the following policy suggestions were proffered.

1. Product innovation: This should be a continuous procedure to meet and satisfy the ever-changing needs of the pensioner.
2. Mortality and forecasting tables; Nigeria as a country needs to pay attention to the forecasting and mortality tables that would be used in the Nigerian annuity market. Therefore, a committee of academics, consulting actuaries, and insurers need to be constituted to provide indigenous mortality data.
3. Government regulations: The regulation should be relaxed to allow the providers make a profit and also to introduce policies that can reduce alleviate the supply problem
4. Annuity pricing: This should be with caution to enable a tradeoff of profit to the providers and return on investment for the annuitants.
5. Tax incentives: This should be tranquilized to encourage the insurers to participate more in the annuity business.

According to Asher and Vasudevan (2009), the huge potential demand for annuity-type products in India needs to be matched by appropriate

supply responses from the industry of annuity providers. They argued that developing a market for annuities will require disaggregated morbidity and mortality databases at the national level for better price discovery; supply of a variety of financial assets for better matching of assets and long-term liabilities; innovations in annuity products and distribution channels; greater financial literacy, and more robust regulation.

The focus on generating actuarial data and demographic data, innovation in the marketing of annuities through the implementation of new supply networks and technological advances, competences in investment management and introduction of appropriate annuity products that are adequate to suit the nature of risk Nigerians hold, and increase in overall financial literacy to facilitate greater spread of annuities is the best alternative for the future of annuity market development in Nigeria.

Conclusion

Undeniably, the most significant debate concerns the choice between important changes and narrowly engrossed strategies for increasing National saving in Nigeria. Pension funds accounts for a huge portion of national saving in the country being a device for storing long term funds available for investment, annuities have a growing benefit in the stabilization of cash flows as well as the growth of the private pension system in Nigeria.

The importance of annuities the world over is on the increase and several countries such as Chile, France, the US, Japan, and the UK have since established an annuity market Rocha and Thorburn, (2008). Nigeria with its population and longevity differences sort needs to also improve on the development of this market. As a result, the retirees need to place their pension fund on worthwhile options that would not dilapidate the retirement income. The pension fund has impacted positively on other sub-sectors of the financial sector of the economy. As the fund press for improvements in allocative instruments, which includes investment, risk management, better accounting, auditing, brokerage, and information disclosure; Insurance management and administration for Group Life Insurance and annuity, new securities and rating agencies have developed. The fund has developed an Equity market, which has shown to improve growth in the scheme. Finally, both the equity and annuity

market will alert policymakers and stakeholders on how to improve current measures and provide a way to overcome the demerits negatively affecting the Nigerian Pension Scheme such that overall economic development is achieved in Nigeria.

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