

---

## COLLECTIVE RISK MITIGATION OF PENSION CRISIS IN NIGERIA: TOWARDS ORGANISATION'S STABILITY AND OLD AGE SECURITY

---

**<sup>1</sup>Joshua Solomon Adeyele, PhD. & <sup>2</sup>Imoseme M. Izedomi**

<sup>1</sup>Department of Actuarial Science, University of Jos, Jos Plateau-Nigeria

<sup>2</sup>Department of Insurance, University of Benin, Benin City, Nigeria.

---

### Abstract

*The adoption of Defined Contribution (DC) from Pension Reform Act 2004 (the Act) is expected to give a permanent solution to pension crisis in Nigeria. Contrary to this, pensioners have continued to witness nonpayment of their pension arrears emanating from employers' failure to abide by the provision of the Act (amended 2014). This has forced some employees to look elsewhere for new jobs despite the increasing layoffs in the current economic downturn. A purposive random sampling technique was used to source data from 1,200 employees in formal sector to determine factors influencing their job attraction and retention. To bring about stable workforce, and in order to ensure that pension scheme is designed to meet the needs of employees and employers, Two Sided View (TSV) was employed while Three Staged Decision (TSD) was used to arrive at two combinations of organisation's incentives most appealing to employees out of fifteen made available to them. The results showed that funded pension and job security are most sought after in employment while rapid promotion and career development are least sought after, and these choices of employees is strongly associated with level of satisfaction. Based on these findings, a number of recommendations were made including proposal for Employee's Pension Retention Scheme to replace the current DC in order to ensure retiring employees have access to pension scheme as and when due.*

---

***Keywords:*** *Defined benefit, Defined contribution, pension reform, and employees*

---

### INTRODUCTION

One of the major issues to be resolved when a pension scheme is set up is the method of funding the scheme (Iyer, 1999). In other words, the system governing the amount and timing of the contributions to the scheme must be defined from the onset. Non compliance to this rule has been one of the major causes of pension crisis in developing countries, especially in Nigeria (Adeyele, 2011). While reforms are carried out in other countries based on identified problems, the policymakers in Nigeria most often do not pay attention to peculiar problems affecting their economy before embarking on such reform agenda. For example, in 2004, Nigeria followed the pattern in which pension reform programmes in other countries, e.g. Chile, are being carried out. The Chilean social reform of 1981 gave rise to defined contribution (Iyer, 1999), which is referred to as mandatory retirement savings scheme and this model has been copied by many countries including Nigeria.

Prior to implementation of Defined Contribution (DC) in 2004, the switch from old scheme was applauded by both the employers and employees as a sure way to end the pension crisis in the country. However, many Nigerians are yet to understand that contributory scheme does not thrive in an environment where there is no respect for the rule of law. Some issues which particularly pointed out reasons while defined contribution cannot survive in environment like Nigeria has been undertaken (Adeyele, 2012; Adeyele & Maiturare, 2012). In government scheme for instance, Adeyele (2011) clearly identified the dual role of Pension Commission (PenCom) as one of the obstacles to regulator's role. This dual role has been one of the major setbacks to PenCom because it is not possible for government set up body as regulator to penalize the government for failing to remit pension contributions as and when due to employees' retirement saving accounts.

With 12 years of the current reform programme in existence, one major question many employees are now asking is: what happens to funds deducted from their salaries but not remitted to individuals Retirement Saving Accounts (RSAs) by their respective employers? With respect to the present pension reform, a body of rules to make it sustainable is contained in Section 11 (5) of Pension Reform Act 2004(as amended in 2014) but has been breached by many employers.

Lessons from the past pensions failures such as failure of employers to remit employees' contributions to designated accounts similar to the present scheme are of essence. In the 1970s, the Old Pay-As-You-Go (PAYG) in public schemes under the supervision of National Provident Fund run to M2billions deficit due to the fact that employees' contributions were regularly and duly deducted by the employers at source but were not regularly paid in to employees' retirement saving accounts (Adeyele, 2015). Instead of the policymakers and regulators to impose sanction on the defaulting employers and pension managers who embezzled the contributed funds, the schemes were wound up for the public servants and converted to National Social Insurance Trust Fund (NSITF) as loss protection for employees in the private sectors. Unfortunately, NSITF which was in operation before the present reform also left the scheme to MTObillion deficit (Adeyele, 2015). By 2004, the public scheme incurred over 142trillion liabilities (Adeyele, 2004). This of course served as impetus to the present pension reform which is now having a profound impact on retirement system in Nigeria.

In view of default rates observed among the employers in remitting funds as and when due to employees' RSAs, this study focuses on collective risk mitigation by reducing pension risks for the parties involved, i.e. employees and employers. It is an attempt to consider pension risks from both employees' and employers' point of views to profit both parties by examining employees' choice of welfare package in relation to their level of satisfaction. By so doing, it is hope that that the employers will be motivated to make prompt remittances without pressure from regulator (PenCom) to do so thereby leading to job stability and protection of employees' old age.

## LITERATURE REVIEW

Pension reforms are carried out with the hope of improving the future welfare of the current employees at retirement and must be in agreement with the generally accepted objectives of a pension system. According to Asher and Vasudevan (2008), these objectives include (a) to prevent a steep decline in earnings after retirement by facilitating consumption smoothing over the lifetime of an individual - the consumption smoothing objective; (b) to ensure that individuals have adequate means to satisfy their basic needs in retirement - the income adequacy objective; and (c) to ensure that consumption in old age never falls below a minimum level - the poverty prevention objective. They noted that an efficient pension system should provide adequate security against longevity and inflation risks. However, Knox (2011) noted that these objectives raise a number of important social, philosophical and economic questions such as who bears the risks of longevity and inflation which lead us to the issue of how much flexibility afforded the individual retirees in managing their own financial affairs during payout phase of retirement. The earlier pension scheme, Pay-As-You-Go (PAYG), enabled retirees to receive pension income for as long as possible and they do not have to bother about how the funds were managed during active years of service. This type of pension scheme based on qualifying rules for the scheme membership leads to old age security and, hence, employees do not need to change employers. Many employees in Nigeria who are currently in government pay jobs are yet to know that this assumption of old age protection associated with former PAYG is largely a thing of the past (Brown, 2004). While many employers have stopped remitting funds deducted from employees' monthly salaries to their RSAs (Adeyele, 2015). A survey of many Federal Universities in Nigeria shows that while some employees received regular alerts into their retirement saving accounts, great majority of them are yet to receive including employee's and the employer's contributions (Adeyele, 2015). Unfortunately, some Academic Staff Union of the Federal Universities have directed their members not to submit their RSAs to university authority pending when they get their own PFAs registered thereby failing to see risk of losing the investment returns if they have complied ab initio. Many still believe that since they are civil servants, their retirement is guaranteed and do not feel any concerns provided their monthly salaries are paid regularly. They are yet to understand that only funds remitted to their RSAs will determine their old age income. This study reviews some relevant problems that led to collapse of the former PAYG which prevent the generally accepted objectives from being achieved.

**Valuation Approaches by Financial Economists and Pension Actuaries** - At global level, one of the major factors that had technically contributed to huge liabilities of Defined Benefit (DB) pension that led to adoption of DC by many countries is the valuation approaches employed by the financial economists and actuaries. Financial economists have blamed actuaries on the efficacy of discount value used to determine pension liabilities and the investment of pension assets which in turn makes pension liabilities look more expensive than it really is (Adeyele & Adedokun, 2010). Economists also contend that pension benefits are bond-like and should be valued by reference to a matching bond portfolio (Morriarty, 2005). Actuaries believe that stocks and bonds should be traded openly in markets, which

makes it easy to determine their current value. However, pension payments are concerned with the future and do not trade openly which make their value difficult to be determined. The major challenge this posed to actuaries is how present value of the expected cash flow from a pension plan is to be determined. Pension actuaries do this differently from the way in which capital markets value similar cash flows (Morriarty, 2005). When this happens, financial economists ask why? The possible answer is that actuaries often concerned with the future values more than current values. Consequently, actuarial models which contain mortality rate, interest and inflation rates tend to underestimate or ignore the information contained in current values. When the actuarial approach is used in pension valuation for the sponsors, they result in surpluses which make the schemes look more expensive than they really are. On the other hand, the valuation approach by the financial economists brings about deficit, which makes the schemes look cheaper than in reality due to the fact that interest rate, mortality rates and inflation rate are not included in their assumptions. These two approaches have been identified to have contributed to crisis of defined benefit globally (Day, 2004; Whelan, 2006; Moriarty, 2006).

***Underfunding of the Schemes*** - In the former defined benefit scheme operated as Pay-As-You-Go in the public sector in Nigeria, there was no funding arrangement put in place to pay the retiring employees. The scheme was either funded by taxing the current generation of employees to pay the retired employees or from the budgetary allocation of fund from the excess crude oil in the case of federal parastatals (Ibiwoye, 2014). Since the schemes were not contributory, the insurance companies were employed to guarantee the mortality aspect of the schemes. That is, if mortality experience changes from the initial projection (or improves) insurance will pay the shortfall in addition to the surviving retirees' income at retirement. This system of funding arrangement could not be sustained because most often governments failed to make funds available to the insurance companies to guarantee the scheme (Ibiwoye, 2008). For instance, if the actuarial valuation revealed that 143,000.000 should be set aside to fund the scheme, the government may manage to pay N300,000. Thus, when claims arise, it became difficult for insurance companies to pay. In the present reform, all employers are mandated to purchase life insurance for all their employees. Unfortunately, many employers especially those in the states and private establishments have not complied with this statutory provision of Pension Reform Act 2014. Another reason for the collapse of DB is that, tax payers have steadily moved against its continuation due to the fact that the active employees are excessively charged to pay the retired employees. As a result, the former President Olusegun Obasanjo during his second tenure in office proposed contributory scheme as an alternative means of funding pension scheme in Nigeria (Adeyele, 2011). Consequently, the shift from DB to DC seems to be justifiable means of ending the pension crisis from the perspective of employees and employers in the world over. However, the non-remittance of pension contribution by the employers in Nigeria is a major challenge to DC survival.

***Non-Uniformity of Schemes*** - The lack of uniformity between public and state pension schemes has been identified as another cause of pension crisis in Nigeria. This gave rise to the need to harmonize the schemes in the country. Previously, only few employers in the

private sector have pension for their employees (Adeyele, 2015). At the state level, each state had its own schemes differently administered from that of the federal government. While, operating different schemes do not in themselves portends any danger to the continuation of the DB, the complexity of reconciling benefits of transferred years of service from the state to federal and vice-versa convinced the policymakers to harmonise the schemes (Ibiwoye, 2008). In spite of this harmonisation, many states have not complied with the current pension reform law and some are threatening to pull out. The academic staff union of the universities is also strategizing for their own schemes to be administered differently from the other employees. The question that many observers are now asking in respect of non-compliance to Pension Reform Act (2014) is what happens to unremitted contributions? Many retirees have lost huge pension funds to their employers due to the fact that at retirement, employers simply paid in the statutory contributions to their RSAs. These funds would have being invested by their Pension Fund Administrators (PFAs) to earn high returns during active years of service but they feel unconcerned when in active employment.

***Corruption among the Pension Officers*** - Corruption is another major cause of pension crisis in Nigeria. In the previous schemes, it was realised that number of pensioners were increasing annually due to introduction of ghost workers into payroll by the public officers and the continuation to treat such ghost workers as pensioners at retirement had strained government budget which led to government admitting that it could no longer fund retirement benefits alone. Also, most time the pension officers do not bring to the notice of government names of the deceased pensioners. When the deceased pensioner income is paid, the pension officers simply diverted such funds to their personal accounts. Additionally, government at different levels had not been transparent in the appointment of pension officers but rather based it on political ground. When they want to seek for re-election, they simply source funds from pension officers. Most times the funds were not repaid and through this, many surviving pensioners were denied their entitlements. All of these identified causes left the public schemes to a deficit of M2 trillion in June 2004 (Adeyele, 2004).

Pension schemes in the past were deficit because the sponsors most time had not been committed to their financial obligation to retirees and perhaps the absence of strong legal protection for the beneficiaries. As part of the measures to solve the looming pension crisis in Nigeria, a defined contribution scheme had been adopted (Adeyele, 2011). However, this raises the question of whether this really address pension crisis in the country. In fact, it has been revealed that many employers that embraced defined contribution had not complied with the provision of the scheme (Adeyele and Maiturare, 2012). In spite of this revelation, many of the affected contributors and the regulatory body seem not to know what ought to be done. Indeed, a study by Adeyele and Maiturare (2012) showed that many affected contributors have blamed the regulatory body for not being able to come to their rescue. While this is arguably true, it must be understood that the regulatory body is somehow incapacitated to perform its statutory role in that the policymakers that set up the regulatory body have also breached some of the provisions of

pension reform Act too. For instance, both at the state and federal levels, some employees reported that their employers only remit the amount contributed by them why the amount due to the employers have not been remitted as when due to employees' RSAs (Adeyele and Maiturare, 2012). The experience is worse in some private companies, both employees' and employers' contributions are not often remitted. This non-compliance to the pension law in government schemes may not be unconnected with reasons why the regulatory body had not been able to take measures against the defaulting employers in private sector.

### CONCEPTUAL FRAMEWORK

***Basic needs of employees and Two Sided View (TSV) to pension design*** - Pension scheme is one of the vital parts of employees' welfare package designed to meet the employees' old age needs. To meet the three cardinal objectives of pension, employers must comply with the numerous rules and stringent adherence to regulations that govern pension plan (Baker, Logue and Rader, 2005). Due to significant role of pension to employees' old age and the socioeconomic role they play to government as well as to companies and individuals, pension plans are regulated. A central element of pension regulation is that decision makers have fiduciary responsibilities to behave prudently. Prudent behaviour is expected to reduce the risk that promised benefits will not materialize or to protect the value of pension asset pools (Baker et al, 2005). Thus, it can be said that pension is one of the two major reasons employees will work for a very long period in a particular organisation. Basically, employees entered into employment for two major financial incentives:

- to meet immediate/present need
- to cater for the old age need

The immediate need is sought for basically to maintain oneself while in active employment and this represents increase in salary and other fringe benefits. The future need is sought for to protect oneself at old age when employee is no longer active in employment. What really keep employees in particular organisation depends on which package is readily available between the immediate and future needs. If employees give priority to the immediate need than the future need, and such need is available in the current job, the rate of workforce stability may be high, and vice versa.

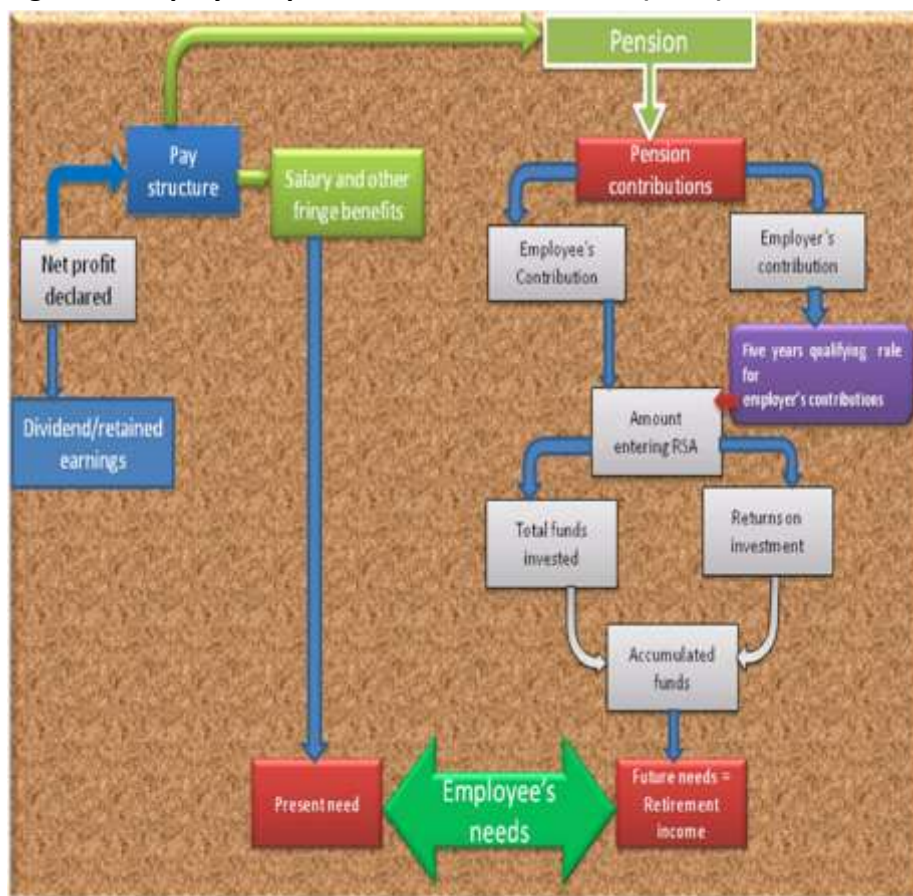
Generally, at the point of entry into employment, attractive salary and the need to protect it has become paramount to employees. During the active years of employment, it is expected that employee saves for old age if he/she really want to continue earning income at retirement. However, economic theory suggests that only very few individuals can exercise a level of discipline to save for old age without being forced to do so by ways of deduction from the source. One of the reasons why most employees find it difficult to save for themselves is that, at entry point, they struggle to survive economic hardship that forced them to spend most of their salaries. At other time, they may even needs to borrow on monthly basis to offset debts. This economic challenge does not allow young employees (especially the married ones) to consider pension income very important at early stage of employment. As employee moves closer to retirement, they are faced with the reality to

save for old age and those who have not done so are apprehensive of retirement which turns retirement as death sentence.

For many years, pension design has always taken the view of employees with little or no consideration from the point of employer. The present study takes two sided view (TSV) of employees and employer to consider the best approach to pension design. The TSV is a kind of approach whereby the interest of parties involved in welfare package such as pension design are taken into consideration so that they will all benefit from the outcome of the scheme. Consequently, TSV takes into account the income generation and distribution between employee and employer as well as compensation to regulators.

**Income generation and Distribution** - Figure 1 shows the income generation and distribution pattern of a well established organisation. The figure attempts to explain how salary should be structured to include pension benefit. This type of pension as we suggest in recommendation is termed *employees' pension retention scheme* (EPRS) which serves as incentive for employers to remit employees monthly contributions as and when due, and that of employer's when employees meet up with the companies' criteria before qualifying for 100% of employers' contributions.

**Figure 1: Employees' pension retention scheme (EPRS)**



Source: Authors' Framework

Organisation setting provides a formal mechanism for generating incomes (gross profits) which are distributed among the following stakeholders: employees (salary structure), employer (dividends) and government (tax). The employees are compensated

for their skills in the form of salary, and pension - these benefits can be integrated into a single employment package which the employer uses to attract the type of employees he/she wants in his/her organisation. Basically, employees join organisations for different reasons in order to meet the present and future needs (see Figure 3.2.1). For those who value immediate need highly, attractive salary can be used to bring them into the organisation while those who value the future needs i.e. pension, can be attracted to organisation through better pension benefits.

Government as a regulator of corporate affairs is compensated by taxing both the employees and employers. A fixed percentage of employees' gross salary is taxed (if the pension scheme is DB) while the gross income of the organisation is taxed deductive - the remaining balance, that is, the net profit goes to employers as compensation for making funds available to run the organization's affairs. Because one of the major responsibilities of government is the provision of social security for the aged, such responsibility is indirectly transferred to employers by motivating them to set funds aside for their aged employees. Such funds are tax deductible. That is, the portion of profit before tax is tax allowed. If the employer agrees to carry the entire burden, in form of DB, such amount is allowed to be deducted as expenses from organisations' gross earning. In a situation where an employee and the employer agreed to share the burden as the case in DC, the portion of the employee's contributions to the pension fund is tax deferred.

Whether the scheme is contributory or not, the success of the scheme therefore depends on the collective risk mitigation between employees and the government (which in most case happen to be the largest employer of any country). This is because it is the jurisdiction of the employer to decide what to pay as salary and what to pay as pension, while at the same time; the government ensures that such packages meet best practice. Where agreement on pension scheme has been formalized, it is the responsibility of government to ensure that what is agreed on for pension is paid by the employer. Figure 3.1 shows the danger of defaulting, that is not remitting pension to employees' retirement saving accounts as and when due. If all funds that need to be remitted to employees' RSAs are not made available, then there is no way such unremitted funds can be invested for employees' future benefits. In the last 12 years of DC, many employers have failed to remit employee's monthly contributions and well as theirs to RSA for the benefit of employees' old age security. Consequently, this type of study is timely and it will assist stable workforce and old age security if recommendations are taken seriously by the policy makers and other stakeholders of DC scheme.

### **Three Staged Decision**

The conceptual approach to this study emanates from the fact that human wants are unlimited and when presented with variety of choices, irrational decisions are more likely to be expected than when the options available are limited in supply. In this situation, and in order to guide the decision maker to make good decision, the number of options can be reduced until a point where organization's resources are able to meet the employees' needs without subjecting them to economic hardship. This concept is hinged on the number of



steps taken before arriving at final decision. If two steps are taken, the decision rule becomes *two staged decision*. If three, four, five, ..., nth decision(s) are taken, then the decision rule will be *three staged, four staged, five staged, ..... nth staged decision* respectively. The stage at which decision maker can no longer make any selection is considered the decision rule for that organisation. In this study, Three Staged Decision (TSD) was used to arrive at combination of employees' welfare needs. TSD is a decision rule which enables one to make rational decision when options are restricted due to scarce resources. This implies that as the options are being reduced, it will get to a point where employees will want to take rational decision in respect of choice of employment.

## METHODOLOGICAL APPROACH

The population for this study covers all the organised sectors (i.e. large scale enterprises). Data on motivating welfare package were sourced from the respondents of the selected organisations in six states: Ekiti, Lagos, Ogun, Ondo, Osun and Oyo. The institutions selected are private (354, 29.5%) and public (846, 70.5%). The choice of these institutions is due to availability of research assistants who are able to get the needed data. An interactive discussion with some of the selected employees about the past and current pension contributions was held. Immediately after the interactive section, copies of questionnaire were distributed to the respondents on whether the present scheme should be modified. A purposive random sampling was adopted to select respondents in organisations visited through questionnaire distributed to the respondents. Phi and Cramer's V were used to analyse the data collected.

## RESULTS

### Step I: Selection from fifteen menus

The TSD was employed to arrive at how employer's funded pension should be combined with other welfare packages to maintain stable workforce.

**Table 1: Employment packages on offer and level of satisfaction rating among employees**

Paramount needs to employees in the present employment	Level of satisfaction in the present employment			
	Low	Moderate	High	
Attractive salary	27(17.10%)	26(2.80%)	2(1.60%)	55(4.60%)
Rapid promotion	0	13(1.40%)	0	13(1.10%)
Good pension	2(1.30%)	9(1.00%)	0	11(0.90%)
Job Security	6(3.80%)	81(8.80%)	0	87(7.30%)
Career development	0	66(7.20%)	14(11.40%)	80(6.70%)
Attractive salary and Rapid promotion	36(22.80%)	129(14.00%)	13(10.60%)	178(14.80%)
Attractive salary and Good pension	0	13(1.40%)	4(3.30%)	17(1.40%)
Attractive salary and Job security	19(12.00%)	90(9.80%)	26(21.10%)	135(11.30%)
Attractive salary and Career development	8(5.10%)	151(16.40%)	1(0.80%)	160(13.30%)
Rapid promotion and Good pension	1(0.60%)	46(5.00%)	12(9.80%)	59(4.90%)
Rapid promotion and Job security	11(7.00%)	20(2.20%)	0	31(2.60%)
Rapid promotion and Career development	0	11(1.2%)	0	11(0.90%)
Good pension and Job security	15(9.50%)	46(5.00%)	2(1.60%)	63(5.30%)
Good pension and Career development	4(2.50%)	5(0.50%)	0	9(0.80%)
Job security and Career development	29(18.40%)	213(23.20%)	49(39.80%)	291(24.30%)
<b>Total</b>	<b>158(100.00%)</b>	<b>919(100.00%)</b>	<b>123(100.00%)</b>	<b>1200(100.00%)</b>

Source: Authors' Computation, 2016.  $\Phi = 0.424$ ,  $p > 0.05$ ; Cramer's  $V = 0.699$ ,  $p < 0.05$ .

From Table 1, the following organization's incentives: attractive salary, rapid promotion, good pension, job security and career development opportunity were used to generate a list of 15 menus. From the 15 menus newly generated the following three (3) in order of preferences topped the list: job security and career development (24.3%), attractive salary and rapid promotion (14.8%), and attractive salary and career development (13.3%). In the same vein, the following three packages are least sought-after in the 15 menus: good pension and career development (0.8%); career development (0.9%); and rapid promotion (1.1%). The employees' level of satisfaction with their choice of incentives is moderate and significant (Cramer's  $V = 0.699$ ,  $p < 0.05$ ). This seems to suggest that pension incentive is not attractive to employees among the list of organisation incentives (Table 1).

### Step II: Selection from ten menus

Table 2 below shows the relationship between two main packages important to employees and corresponding level of satisfactions.

**Table 2: Two factors paramount to you in the present employment**

Two factors paramount to you in the present employment (Ten menus)	Level of satisfaction rating			Total
	Low	Moderate	High	
Attractive salary and Rapid promotion	6(3.8%)	34(3.7%)	4(3.3%)	44(3.7%)
Attractive salary and Good pension	26(16.5%)	153(16.6%)	23(18.7%)	202(16.8%)
Attractive salary and Job security	15(9.5%)	78(8.5%)	10(8.1%)	103(8.6%)
Attractive salary and Career development	16(10.1%)	75(8.2%)	12(9.8%)	103(8.6%)
Rapid promotion and Good pension	14(8.9%)	79(8.6%)	10(8.1%)	103(8.6%)
Rapid promotion and Job security	20(12.7%)	113(12.3%)	17(13.8%)	150(12.5%)
Rapid promotion and Career development	15(9.5%)	119(12.9%)	16(13%)	150(12.5%)
Good pension and Job security	21(13.3%)	119(12.9%)	10(8.1%)	150(12.5%)
Good pension and Career development	18(11.4%)	77(8.4%)	9(7.3%)	104(8.7%)
Job security and Career development	7(4.4%)	72(7.8%)	12(9.8%)	91(7.6%)
<b>Total</b>	158(100%)	919(100%)	123(100%)	1200(100%)

*Source: Authors' Computation.  $\Phi = 0.090$ ,  $p > 0.05$ ; Cramer's  $V = 0.063$ ,  $p > 0.05$*

The number of incentives were then reduced from 15 to 10 in which employees were required to choose just one combination (Table 2), the most paramount package to them is attractive salary with good pension (16.8%); while the following incentives were given the equal preferences: Rapid promotion and Job security (12.5%); Rapid promotion and Career development (12.5%); and Good pension and Job security (12.5%). The following five packages are least sought-after in the 10 menus: Attractive salary and Rapid promotion (3.7%); Job security and Career development (7.6%); and Attractive salary and Job security (8.6%), Attractive salary and Career development (8.6%); and Rapid promotion and Good pension (8.6%). The level of job satisfaction with employees is low but not significant (Cramer's  $V = 0.09$ ,  $p > 0.05$ ; Cramer's  $V = 0.069$ ,  $p > 0.05$ ).

**Step III: Selection from five menus**

Reducing the number of combination of benefits from ten to 5 menus tends toward efficiency whereby employees are force to make the right choice of combination.

**Table 3: Combination of benefits that fairly meet your needs**

Combination of benefits that fairly meet your needs (Five menus)	Level of satisfaction rating			Total
	Low	Moderate	High	
Good pension with job security	39(24.7%)	400(43.5%)	12(9.8%)	451(37.6%)
Job security with fair salary	26(16.5%)	249(27.1%)	45(36.6%)	320(26.7%)
Rapid promotion with fair salary	0	27(2.9%)	9(7.3%)	36(3%)
Career development with good pension	93(58.9%)	222(24.2%)	56(45.5%)	371(30.9%)
Rapid promotion with career development	0	21(2.3%)	1(0.8%)	22(1.8%)
<b>Total</b>	<b>158(100%)</b>	<b>919(100%)</b>	<b>123(100%)</b>	<b>1200(100%)</b>

*Source: Authors' Computation, 2016. Phi = 0.730, p < 0.05; Cramer's V = 0.633, p < 0.05.*

A further reduction of the number of incentives from 10 to five menu items shows that good pension with job security (37.6%) is the top most sought-after incentives employees look for in employment. Second on the list is career development with good pension (30.9%). Rapid promotion with career development (1.8%) and Rapid promotion with fair salary (3.0%) are least sought for in employment (Table 3). The final results provide for interesting interpretation: combination of pension with any organization's incentives is more likely to be sought-after in employment while combination of rapid promotion with other packages is unlikely to be chosen if it is not commensurate with pay rises. The extent of relationship between Five Incentives with level of satisfaction is very strong and significant (Cramer's V = 0.633, p < 0.05) (Table 3).

**Table 4: Employers' funded pension scheme and Number of employers worked within the last 12 years**

Number of employers worked with in the last 12 years		Staying length of employees if the scheme is funded by employers (EPRS)			
		11-20	21-30	31-40	Total
1-2	60(55.6%)	470(85.6%)	335(77.9%)	72(63.7%)	937(78.1%)
3-4	45(41.7%)	64(11.7%)	80(18.6%)	41(36.3%)	230(19.2%)
5-6	3(2.8%)	14(2.6%)	13(3.0%)	0	30(2.5%)
7-9	0	1(.2%)	2(.5%)	0	3(.3%)
<b>Total</b>	<b>108(100%)</b>	<b>549(100%)</b>	<b>430(100%)</b>	<b>113(100%)</b>	<b>1200(100%)</b>

*Source: Authors' Computation, 2016. Gamma = 0.54, p < 0.05*

Table 4 shows the relationship between the lengths of time employees are willing to stay in the present employees if the scheme is funded compared with number of time they have changed employers under defined contribution scheme. As employers agreed to fund pension scheme, the number of job turnover among employees tend to diminish from 7 to 9 (0.3%). The table revealed that there is significantly strong relationship between funded pension scheme and job stability (Gamma = 0.54 p < 0.05). That is, as the willingness of employers to fund pension scheme alone increases, the more employees are willing to remain in the service of such employer.

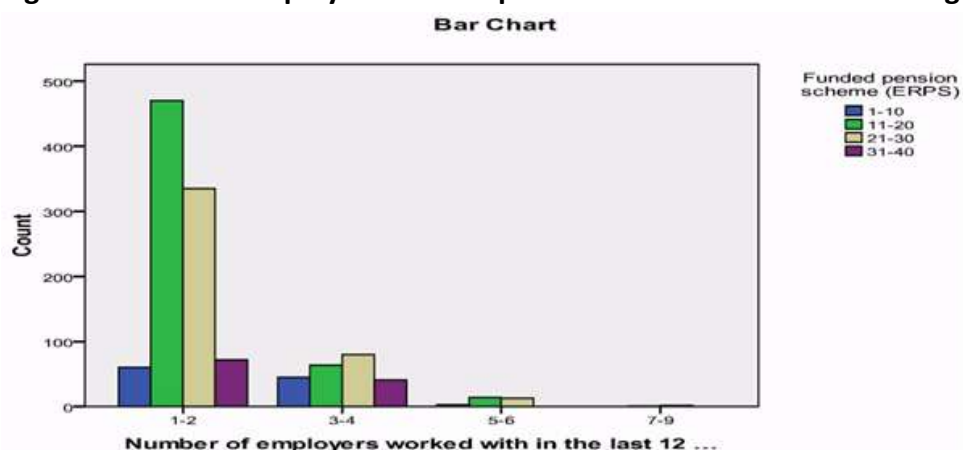
**Figure 4: Effect of employer's funded pension on stable workforce in organisation**

Figure 4 above shows that many employees are willing to stay in the current employment for 11 to 30 years if the employers are willing to fund pension scheme in form of employees' pension retention scheme.

### **Proposal for Employees' Pension Retention Schemes (EPRS) and Policy Consideration**

Following the shortfall and sometimes inaccessibility of pension funds at retirement by the retiring employees under the current defined contribution scheme, attempt needs to be made on how pension should be redesigned to profit both the employees and employers in form of stability of tenure, i.e. low turnover rate among employees. In private institutions, old age retirement security under defined contribution is not guaranteed due to PenCom failure to enforce total compliance among employers. In fact, this is due to the fact earlier identified by Adeyele (2011) and commented that since PenCom play a dual role as administrator and regulator of pension industry, it is not possible to make employers in public institution to comply with the requirement of the law. If the employers in public institutions cannot be sanctioned for non remittances, then the PenCom has no moral right to enforce compliance in private institutions and many employers in the affected private institutions are taking the advantage of PenCom weakness to endanger the future of their employees. Similarly, National Pension Commission (NPC, 2013) has also acknowledged their inability to make Pension Fund Administrators to carry out their statutory role of developing strategies to ensure that clients' outstanding related issues are met.

In order to forestall the impending danger ahead and in view of the above obstacles to the current pension scheme that the following are being put forward for policy consideration and perhaps to redesign pension system in Nigeria. Having regard to the differences and similarities of possible ways of modifying DC's options to benefit both the employees and employers, the following observations are noted:

- i. If the present pension (DC) scheme is allowed to run as EPRS (a modified version of DB), many employees have agreed to stay in the current employment till retirement. Of course, this will benefit employers but job movers are likely to find this type of scheme unprofitable.
- ii. As the scheme is presently being systematically operated, there is high rate of job turnover and this do not please employers because it costs them more to hire new

skills/fresh hands to carry on with the organisation business from where job movers stopped.

- iii. Also, under the DC, it is assumed that employees will be on the job till retirement age; whereas, in reality, due to one or more reasons, they may temporarily disengage from active employment for number of months or years and no contributions during the period of unemployment. It is even possible for some employees to become victims of disability which in turn renders them inactive. In the former DB, operated as pay-as you-go, a scheme called disability benefit was in place but is presently lacking in the present DC. Although, Pension Reform Act 2004 (amended 2014) requires employers to put in place life insurance scheme in the sum of 3 times annual salary to take care for disability but many employers as at the time of research have not complied to this requirement. Thus, the questions that need to be asked and answered are: what fate awaits those who may become victims of disability while in the service of employers that have no disability benefits? Is there any social justification to continue with the DC scheme if the purpose for which it was designed to achieve is being frustrated? Why are employers not complying totally to the requirements of Pension Reform Act 2004 (2014 amended)? Why do employees value present salary and feel unconcerned with their unremitted contributions?

In order to provide answers to the above questions, attempts were made to come up with a policy framework that would enable DC operate as DB especially if annuitisation option of DC is made compulsory for all retirees. In this case, just as DB enables retirees to receive income contingent on survival, DC with annuity option also achieve the same purpose. The only difference between the two options is that DB was guaranteed for 5 years while annuity option under the current DC is guaranteed for 10 years. Another difference is that, the amount of benefit under DB is subject to employee's final salary based on years of service while under the DC, it is subject to employees' total contributions. Employers can benefit a lot by operating DC as DB in the context of employee's pension retention scheme and employees in the service of employer for minimum of five years of service to be entitled to 50% of employer's contributions. The portion of employer's contributions employee can claim should be reviewed upwards taking into consideration the years of services with that employer. This type of scheme as being proposed in this study should be termed 'employee's pension retention scheme' (EPRS). Instead of transferring the risk of retirement completely to employees in forms of DC especially those with phased withdrawal option; these risks should be transferred to life insurance companies in form of compulsory annuitisation.

This study has found justification for the above suggestions because previous studies have shown that DB exists because of the absence of sound insurance mechanism to provide market for life annuity products. It is hoped with active government monitoring and stringent adherence to regulation, the insurance industry will be put in the right direction to offer more efficient pension scheme than those provided in the previous employer/government schemes. It should be remembered that DB did not fail in Nigeria

because of increased longevity but due to want of efficiency in administering the schemes. The business of government/employers is to ensure that pension schemes are put in place for the aged employees. Government cannot be as efficient in managing pension funds as independent bodies like PFA's at the accumulation phase and Life insurance companies at the payout phase. If the problems that led to the phasing out of DB as identified in this study are attended to, then whether DC or EPRS does not really make any difference if the schemes are entrusted into the hands of capable regulators.

To make EPRS work, a number of considerations of welfare packages that employers can use to hire and retain employees in their present job have been examined in this study. A strong argument put forward in the study as one of the reasons why DC can also operate as DB (or part) of welfare packages employers use to attract employees to organisations is that employers should design these packages in such a way that pension fund represents part of present salary but deferred to retirement. Even though pension is contributory, this can be done in such a way that employees do not feel they are contributory anything thereby giving credit to employer, and it will make employees become more loyal to the employer by staying on the job. In Pension Reform Act 2014, employee and employer are now mandated to contribute a minimum of 8% and 10% respectively of basic salary of the employees. These percentages can be factored into salary packages so that independent bodies such as PFAs and life insurance companies can manage the schemes on behalf of employees without the employer's control over the funds set aside for this purpose. By so doing, the present DC can run as EPRS by using total contributions to purchase life annuities. To increase the level of competition among the PFAs, they must be mandated by the regulatory bodies to guarantee minimum annual returns so that the fund contributed is not overtaken by inflation rate. The contribution rate can be subjected to these rates of returns. Where the Consumer Protection Index (CPI) is higher, then contribution rate can be reduced, and vice-versa. There will be need to assist organisations to carry out valuation of the scheme every three years in order to ensure the adequacy of funds contributed towards retirement.

## REFERENCES

- Adeyele, J.S. (2015). Systematic investment plan and retirement income security of selected universities in southwest, Nigeria (Unilorin: Ph.D. Thesis).
- Adeyele, J.S. (2011). Pension Reform Act 2004 and its controversies: Repeating or learning from past mistakes? *Journal of Research in National Development*. 9(1): 216-221.
- Adeyele, J.S. (2004). Challenges before actuaries in administering pension funds in Nigeria. (A.B.U: B.Sc. Project)
- Adeyele, J.S. & Maiturare, M.N.(2012). Solvency of pension reform: Issues and challenges of accumulation phase of retirements in Nigeria. *Canadian Social Science*, 8(2), 90- 95.
- Adeyele, J.S. (2012). Repositioning the Nigerian Insurance Industry for sustainable development. *European Journal of Business and Management*, 4(5), 22-30.

Adeyele, J.S. & Adelakun, O.J. (2010). Controversy between financial economics and traditional actuarial approach to pension funding. *Journal of Emerging Trends in Economics and Management Sciences*. 7(1), 1-5

Asher, M.G. & Vasudevan, D. (2008). Rethinking pension reform in Chile: Implications for developing Asia. Available at: [www.ebooksdownloads.xyz/search/rethinking-public-pension](http://www.ebooksdownloads.xyz/search/rethinking-public-pension)

Day, T. (2004). Financial economics and actuarial practice. Publication of the Society of Actuaries.

Ibiwoye, A. (2014). Pensions: The promise, the Perils, the expectations in actuarial perspective. Inaugural Lecture (University of Lagos)

Ibiwoye, A. (2008). Issues in the reform of the Nigerian pension system. *Journal of Research in National Development*. 6(2}, 195-202.

Iyer, S. (1999). Actuarial Mathematics of Social Security Pensions. Geneva: International Labour Organisation.

Moriarty, C. (2006). The actuary's new clothes: A Canadian perspective of financial debate. *The Contingencies I*, 35-41.

Olujide, J.O. & Adeyele, J.S. (2014). Defined contribution pension and its sensitivity to job turnover among lecturers in Nigeria. *Nigerian Journal of Business Administration*, 72(1 &2), 224-242.

Knox, D.M. (2011). The Australian annuity market. World Bank: *Development Research Group*.

Mitchell, O.S. (2001). Developments in decumulation: the role of annuity products in financing retirement. Pension Institute, <http://www.pensions-institute.org>

National Pension Commission (NPC,2013). Service delivery by Pension Funds Administrators. Abuja: NPC.

Whelan, S.F. (2006). Not such a great controversy: Actuarial science and financial economics. USA: Publications of the Society of Actuaries.

Figure 1: Level of satisfaction rating among employees

