

Pension Management, Risks and Investment Strategies: A Study of Defined Contributory Pension Scheme in Nigeria

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Abstract

The decline in defined benefit schemes is necessitated by the perception that defined contribution shifts investment and longevity risks to workers. The plan offers a flexible mechanism for saving for retirement, enabling the enrollees in share of investment returns. The idea of managing risk and establishing dynamic investment strategies in the pension industry cuts across every region of the world as it is critical to the survival and operation of a defined contributory scheme since unprecedented occurrence may exist. The identification and evaluation of actual and potential risk areas as they pertain to pension administration are essential for the termination, transfer, acceptance, or mitigation of each risk. The paper also examines and evaluates whether the relative performance of different investment strategies adopted in the pension scheme is panacea for sustaining it in Nigeria. The methodology applied here is exploratory in nature due to the doubt established by retirees on the adoption of new Contributory Pension Scheme (CPU) in Nigeria as an approach to resolving pension management problems. The paper recommended that a proper institutional design of the pension fund industry and intensive use of market surveillance are efficient tools for dealing with most of the operational risks of funded pension fund schemes in emerging economies.

Keywords

Risk management, investment strategies, defined contributory pension scheme, sustainability, Nigeria

Introduction

The adoption of a defined contributory (DC) plan by Nigeria was due to the challenges experienced in the implementation of defined benefits (DB) by past governments. The risk management of the old scheme, DB, was very high and unbearable for the nation to cope with. For instance, the risk of incurring the enormous retirement benefits had negative implications on the financial responsibility of the government. Thus, the challenges of underfunding and insufficient budgetary allocation, as well as bankruptcy, affected continuous

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adoption of the DB scheme (Orifowomo, 2006; Koripamo-Agary, 2009; Demaki).

The commencement of the pension scheme in Nigeria dates back to the colonial era in 1946 with the passing of a circular No. 19/1945, which gave birth to a superannuated pension scheme for African staff employed by the government. In 1951, a Pension Ordinance was enacted by the colonial administrator. Aside from the private pension scheme that was enacted in Nigeria in 1954 and 1957 before independence, the first legislation to address pension matters established the National Providence Fund (NPF) in 1961 to implement the scheme (Pension Ordinance, 1951; Akeredolu & Okotoni, 2005; Ahmad, 2006).

In 1993, the National Social Insurance Trust Fund (NSITF) came on board under Decree NO. 73 of 1993 to replace the erstwhile National Provident Fund because of the weaknesses associated with NPF, such as inadequate sensitisation of workers, the inability of the workers to bear the risk of pension responsibility, and mismanagement, the National Social Insurance Trust (NSITF) was established by Decree No. 73 of 1993 to replace NPF. NSTIF is a defined benefit scheme, It covered the private sector of the economy with a minimum of a 5 employee workforce. The monthly deduction was 2.5% (employee) and 5% (employer) but later increased to 3.5% (employee) and 6.5% (employer) in 2002. In 1997, with the establishment of Standard Trust Deed and Rules Deed and Rules, every private firm was given autonomy to establish a private Board of Trustees (BOT) to administer their pension plans. 1979, a new law on a pension known as Pension Decree 102 of 1979 enacted as an amendment of all other legislations. In 2004, 2011 and 2014, Pension and Reform Acts enacted at different periods by successive governments (Ojo-Aromokudo, 2009; Fapohunda, 2013; Elekwa et al., 2011; Itheme & Aniche).

The defined contributory (DC) pension scheme of 2004 came following the enactment of the Pension Reform Act (PRA) of July 1, 2004. Under the Act of 2004, workers are covered for retirement benefits. PRA 2004 contains those that are exempted, the age of retirement, and the amount to be saved into the retirement savings account (RSA). For instance, both employers and employees are expected to save 7.5% each since 15% has to be deducted from the total monthly emolument. Other regulations in the Act involve sanctions for non-compliance, risk fund, pension fund investment, and tax rebate.

The fundamental challenges of the PRA 2004 involve inadequate outlets for investment, the problem posed by informal sector, problem of compliance, high transition cost, high commission charges, difficulty of accessing retirement benefits, public enlightenment and education, and need for robust ICT system (Adeola, 2006; Ogbonana & Opara, 2008; Ogwumike, 2008; Barrow, 2008; Ikeayibe & Osadebe, 2014).

However, following the challenges of PRA 2004, a new pension reform act was enacted in 2011 and 2014. The PRA 2011 was enacted as an amendment

to PRA 2004. This amendment contains the exemption of Armed Forces, Intelligence and Secret Services from DC pension scheme. The PRA 2014 was enacted and it has these features: 8% (employee) and 10% (employer) were to be paid, and access to benefits, withdrawal from the Retirement Savings Account (RSA) was reduced from six (6) months to four (4) months, stringent penalties and sanctions imposed, opening temporary RSA by employers for employees that failed to do so, and investment of pension funds (Obasa, 2018).

The DC pension scheme is being implemented by the National Pension Commission (NPC) otherwise known as PenCom. The contributory pension fund is held by Pension Fund Custodian (PFC) and administered by a Pension Fund Administrator (PFA) chosen by workers. Unfortunately, one of the challenges facing pension managers in Nigeria is connected with risk management and the appropriate utilisation of pension funds in high investment. The ability of PFA to identify these two fundamental areas would enable DC to be sustained. Risk management here implies the ability of PFA to develop strategies through which losses could be minimised. On the other hand, investment strategies are the guidelines designed by investors to secure fund building or capital appreciation. According to Graham (1949), these investment strategies can be secured through general trading, selective trading, buying cheap and selling dear, long-pull selection and bargain purchases.

Conceptual Clarifications

What a concept is, varies according to the surrounding welfare culture and an actor's general interests and beliefs (Scherger & Haggermann, 2014). A plethora definition of concepts by scholars is contained in this session for proper understanding of the study.

Moser (1997), defined retirement as "to withdraw from business or public life so as to live at leisure on one's income, savings or pension". He argued that for a retirement to be successful, prime ingredients must be present: robust health, financial security, and the balance of intellectual physical, cultural and social activities. Retirement can be voluntary or involuntary; it can be gradual or sudden; and it can be temporary or permanent (Denton & Spenser, 2009). The meaning of retirement is usually bound up with the receipt of a pension – which is precisely why people are frequently referred to as 'pensioners' (Craig, 2010). This succinctly implies that there is a link between retirement and pension (Obasa, 2018). Pension consists of lump sum payment paid to an employee upon his or her disengagement from active service (Ozor, 2006). This definition is however not sufficient for it fails to mention the contractual legal aspect of pension. Eche posited that pension is a periodic payment and/or a lump sum reward on a contractual legally enforceable agreement between an employer and an employee or any other sum payable gratuitously by the government, employee of labour or organisation to its employee in consideration of past services rendered upon cessation of employment (Eche, 2011).

Since pension has to be paid, effective pension plan has to be put in place by organisations. Baker, Logue and Rader (2005) provided five justifications for pension plans which include: tax advantage of pension; helping people to save for retirement; helping employees attract the most desired employees; and also used as severance pay and helping to restructure the workforce; helping to increase productivity (Adeoye, Alaka & Kotun, 2016).

Obviously, we study pension choice based on two different phenomena such as Defined Benefit (DB) pension scheme and a Defined Contributory (DC) pension scheme. A defined benefit (DB) pension scheme is one where the amount that is remitted to workers are paid as a result of the number of years they have spent with employer in an organisation and the rate of their salaries. It is defined because the benefit formula is considered as defined. In a defined benefit plan, every employee's future benefit is based on a particular formula, and the plan provides a nominal level of benefits on retirement. A defined benefit plan is basically not contributory because employees are not expected to contribute since they have no individual accounts maintained for this purpose. In this plan, the employer makes regular contributions to fund the participants' future benefits. It is also imperative for employer to bear the risk of providing the guaranteed level of retirement benefits (Ruloff, 2005; Salisbury, 2000; Pension Review Board, 2012).

Defined contributory (DC) pension scheme on the other hands refers to how the contributions of employees are basically deducted from their pay and usually combine with portion of contributions from the employer in the organisation. In a defined contribution scheme, an individual employee tends to build up his pension fund to enable him provide for an income during retirement (Yermo, 2013; Ruloff, 2005; Salisbury, 2000). In recent decades, however, defined contribution (DC) pensions have increased greatly in importance. The payouts of DC pensions are not determined by formula. Instead, contributions are made to an investment account during the working years, and the individual can withdraw money from the account's balance during retirement. The sum of the contributions and the earnings and capital gains they accrue determines the total amount that can be withdrawn (Choi, 2015).

Defined contribution (DC) plans specify (define) a firm's payments (contribution) to the pension fund. The funds are allocated to individual employees, much like a bank account or mutual fund. When the individual reaches retirement age, he or she usually can take the accumulated money as a lump-sum payment or use it to purchase a retirement annuity. Special cases of defined contribution plans include Internal Revenue Code (IRC) sections 401(k), 403(b), and 457 plans (Macmillan, n.d). A defined contribution plan will provide many details to determine the annual contribution made by employer on behalf of each employee as well as any relevant regulations. In analysis, contribution rate is assumed. The formula determines how much an

employee receives from each plan (Li, Huang & Zhou (2014). Defined contribution plans are also known as “individual account” plans because each worker has her own account, as opposed to the more traditional “defined benefit” pension plans which pool plan assets for the benefit of all the employee (Forman, 2012).

An important potential drawback of the DC model is that employees, rather than taxpayers, bear the consequences if disappointing investment returns or poor withdrawal decisions yield inadequate retirement savings. CB plans can in principle be further modified to share market risk, leaving as the only fundamental difference between DC and DB plans whether the individual or the plan exercises control over investment decisions (Chingos & West, 2013).

Another argument against DC according to the accounting rules set by the Government Accounting Standards Board (GASB), shifting new hires to a new plan would oblige the sponsor of the closed DB plan to pay down, or “amortize,” its unfunded liabilities more quickly, which would result in higher amortization costs (Costrell, 2012; Bureau of Labour Statistics, 2012 cited in Christensen, Bui & Gilroy, 2014). Third, it has also been argued that Defined contribution plans are more expensive to operate with higher administrative costs due to higher financial management and trading fees (Eide, 2014 cited in Christensen, Bui & Gilroy, 2014). Fourth, It has been discovered that defined contribution pensions deliver lower investment returns, partly because individuals making investment choices do not match the returns of investment experts who manage defined benefit pooled funds and partly because individuals need to invest more conservatively as they approach retirement (Shackford, 2013; Barras, Scaillet & Wermer, 2010; Dabrowski, 2014; Mahler, Chingos & Whitehurst, 2014). Fifth, defined benefit plans promote recruitment and retention of qualified employees. DC plans increase employee turnover and the associated costs have a negative impact on public service quality (Biggs, 2015; Krantz, 2014; Mildenberg, 2014; David and Madland, 2013). Sixth, Lower income workers retain lower returns on a DC plan when compared to a DB plan. DC plans favour higher income workers at the expense of lower income workers (McMahon, 2012; Toder & Smith, 2011). Seventh, switching to a DC plan would do nothing to solve the problem of unfunded liabilities. In fact, it would make the problem worse as the government would need to continue making payments under the old system even as current employee contributions are taken by the new system.

Eight, DC plans do not pool longevity risk. When individuals convert their accumulated savings into an annuity, a fixed payment until they die, their payment is lower because the provider of the annuity knows an individual is more likely to purchase an annuity if they are in good health and have a longer-than-average life expectancy. Since defined benefit plans do pool longevity risk across tens of thousands of plan members, they can base annuity payments on the average life expectancy of the population (Christensen, Bui and Gilroy, 2014).

Countries like Austria, Chile, Denmark, United Kingdom, and United States of America among others that have adopted DC have similar characteristics such as mandatory individual plans, private plans are usually requested to give room for the provision of a minimum return guaranteed by the government, asset allocation of portfolio subject to restriction (Castanbeira & Galasso, 2013). In addition, in such countries, at retirement, individuals have the opportunity of purchasing a lifetime annuity; the amount of income is based on total contributions, investment returns, and interests rates; individuals decide on how their money should be invested; bank accounts have to be opened by the workers with a pension administrators of their choice.

Risk Management and Defined Contributory Pension Scheme

While risk is defined in terms of uncertain events which may have positive or negative effects on the project objectives (Srinivas, 2019), risk management is a process to identify loss exposures faced by an organization and to select the most appropriate techniques for treating such exposure (Hopkin, 2010).

Risk management is an organized and comprehensive method tailored towards “organising”, “identifying” and “responding” to risk factors in order to achieve project goals (Bahamid & Doh, 2017). Risk management is an organizational model aimed at developing the quality of management processes; it stands out by analyzing the events that have not materialized within the organization. Unlike most managerial systems, risk management doesn’t overlap with other internal controls because it represents a different perspective that cuts across planning and control, performance evaluation system, audit, quality and so on.

Organisations face a very wide range of risks that can impact the outcome of their operations. These events may inhibit what the organisation is trying to achieve (hazard risks), enhance what the organisation is doing (opportunity risks), or create uncertainty about the outcomes (control risks). (According to Hopkin (2017). Borghes (2012) opines that the increasingly risky environment in which companies operate is characterized by a rising number of risk components, factors, sources, and drivers. The identification, evaluation, and management of these risks require the capability to coordinate various skills within a company in horizontal and vertical relationships. It is not all risks that usually result to economic loss. Fabozzi (2010) argues that accepting risks is necessary to obtain a competitive advantage and generate a profit. Prudential Financial, Inc. (2016) believes that past performance, asset allocation and diversification do not assure a profit or protect against loss in declining markets and as well as prevent guarantee future results.

Risk management can increase the value of a firm if the process of risk management focuses on protecting value, cash flows, or earnings. Interestingly, a firm’s earnings are a function of its operating cash flow. The link between why risk is managed and how it ought to be managed has been one of the

fundamental advances in the risk management over the years. Risk management is a concept that is predicated on how individual risk events and overall risk are managed proactively by minimising threats and maximising opportunities that will create success (APM, n.d.) It is both planning and managing activities through a consistent re-evaluation of risks already defined and discovery new ones. It is the process of reducing the effects of risks on projects.

Watson (2008) finds that DC schemes are not inherently riskier than DB schemes. Indeed, it is argued that the low operational, governance and regulatory costs and flexibility of DC schemes provide employers and employees with the most cost-effective means of saving for a pension. Under the DC, it is the employee that bears the risk. These inherent risks include investment risk, operational failures, and administrative risk etc.

According to Randle and Rudolph (2014), Defined contribution pension systems have faced criticism in the wake of the financial and economic crisis for not delivering adequate and sustainable pension incomes at retirement. Much of the problem has centered around the misalignment of pension fund management companies and the interests of pension fund members, with the focus on short-term volatility rather than delivering adequate pension income over the long term. When it finds it difficult to meet its financial pension commitment due to limited assets set aside for this, it becomes a risk

Scholars like Moneim (2015), Shimko (2010), Hillson (2009) and Hillson & Simon (2012) have discovered five steps of risk management such as: Identification of the potential risks on the project; determining their consequences on people, and selecting the risks with significant consequence for further analysis; assessment of the total consequences of the significance risks; determining how the likelihood or effect of the consequences can be mitigated; and developing and executing a plan as remedy for overcoming the risks and securing a positive reduction of risks.

According to Morris (2015) and Hillson (2016), the current best practices in risk management are to:

First is a *definition or initiation* phase, ensuring that objectives are agreed and understood by all stakeholders, and determining the scope and level of detail required for the risk process, driven by the riskiness and strategic importance of the project or situation at risk. After definition is *risk identification*, which involves risk management program such as strong risk culture as values, beliefs and attitudes about risks which are learned by individuals. This is followed by identifying those risks to be **assessed** and prioritizing them for future attention and action. In addition, there should *be response planning*, when strategies and actions are determined to deal with risks in a way that is *appropriate, achievable and affordable*. The next stage is to implement planned actions, monitor effectiveness, and report results to stakeholders.

In the pension industry, six groups such as the board of directors, risk management committee, heads of business units, risk management team, risk managers, and chief compliance officer, are responsible for risk management. Their major duty is to maintain equilibrium between risk, reward and growth by establishing and designing policies and philosophies that ensure the discovery, evaluation, and assessment of risk through proper monitoring and auditing.

The pension Reform Acts (PRAs) 2004 and 2014 prevent fund administrators from experiencing insolvency by directing them to manage the fund very well. Section 73(a)(b) of PRA 2004 allowed funds to be invested only on bills, bonds and other securities while Section 92(1)(2)(a)(b)(c) and Section 84 of PRA 2014 direct that 1% annual subvention be set aside to cushion the effects of any shortfall or financial loss in the course of investing pension funds.

Eliminating Risk in Pension Plans

The type of risks that can face the retirees and pension industry are: investment risk, financial risk, liquidity risk, administrative, operation risk, decumulation risk, inflationary risk, and involvement risk. There are some ways by which risk can be decomposed or eliminated. According to He et al. (2015), it may either be done by shifting demographics or volatile market returns and low interest rates or liability-driven –investment (LDI) approach.

Shifting demographics: With the growth of defined contribution (DC), pension plans around the world, in both the private and public systems, market rates of return are increasingly likely to play a large role in the retirement patterns of individuals. A variety of existing theoretical economic models claim that ‘demographic matter’ (Poterba, 2004), i.e. the demographic structure of population could affect financial markets (MacDonald & Cains, 2009).

Volatile market returns and low interest rates: The uncertainty of interest rate volatility has unfavourable effects on stock market performance. The relationship between interest rate volatility and stock market development is enigma (Hajilee & Nasser, 2017). Greater interest rate volatility indicates a greater chance of interest rate increases which would cause many asset prices to drop. The implication of this volatility is that it creates uncertainty for investors.

Liability Driven Investment. It is meant to gain enough assets to cover all current and future liabilities. A pension fund following on LDI strategy focuses on the pension-fund assets in the context of the promises made to employees

and pensioners. The ultimate objective of pension scheme investment is to ensure that there are sufficient funds to pay the liabilities.

Investment Strategies

The primary purpose of a pension is to ensure that an individual's consumption does not fall after retiring from work: ideally the pension achieves this by providing an income in retirement that is similar to previous labour income (Cannon & Tonks, 2013). Most DC plans allow members a degree of choice about how to invest their contributions. Typically, a range of mutual funds is offered in the plan and the member can choose one or more of them in which to invest. Many plans also offer a 'default' fund for members unable or unwilling to choose their own investment strategy (Byrne, Blake, Cairns & Dowd, 2007).

The design of default investment options in defined contribution (DC) pension plans is of critical policy relevance, as many members of DC plans are incapable or unwilling to choose investment strategies among the great variety offered to them. There is increasing international consensus that some type of life-cycle strategy is desirable for default options, with decreasing risk exposure as the individual ages (Antolin, Payet & Yermo, 2010). The goal behind any investment is to get a return in form of profit attainment. The extent to which individuals remain invested in the default investment strategy varies significantly from one jurisdiction to the next, though in all cases the proportion that do remain in the default is significant. In Sweden, around 99% of new enrollees to the Premium Pension do not actively choose their investment strategy (Frankkila and Lantz, 2020). In Peru, 92% of pension savers invest in the default fund for their age (Superintendencia de Banca, Seguros y AFP, 2019).

It is equally important to say that the various investment strategies can be determined by the choices made by the population and what the average participants will have as pension benefits. The investment strategies are: Life-Cycle and dynamic risk budgets. Under the life-cycle investment strategies; there are linear decrease, step-wise linear approach, piece-wise linear approach, dynamic multi-shaped and average multi-shaped. Life cycle-strategies perform better when benefits are paid as life annuities and are less valuable when benefits are paid as programmed withdrawals. Antonio, Payet and Yermo (2010) posit that the dynamic risk budget investment strategy (DRB) allows changes in the portfolio asset allocation depending on the portfolio risk budget so that the higher the risk budget is, the more aggressive the asset allocation is (*i.e.* the higher is the share of risky assets). Dynamic strategies seem to work better with programmed withdrawals. A mixed of life-cycle and dynamic strategies may be required when benefits are paid combining programmed withdrawals and deferred life annuities bought at the time of retirement.

Other investment strategies associated with Defined Contributory plans are: Optimal Investment Strategy which is a target-driven 'threshold' strategy,

whereby the equity allocation is increased if the accumulating fund is below target and is decreased if it is above (Blake, Wright & Zhang (2013); Deterministic investment strategies are functions of anticipated retirement date of pension participant in an organisation. According to Forsyth and Vetzal (2018), the vast majority of financial products designed for retirement saving use deterministic strategies using mean-variance criteria; Liability Driven Investment (LDI) is another strategy which focuses on how assets can be gained to cover current and future liabilities such as loans, account payable, mortgages, deferred revenues, and accrued expenses. It is common with Defined Benefit plan. The pension fund or plan that uses the LDI strategy tends to focus on the pension funds assets. It is an overarching investment framework (Bonizzi & Kaltenbrunner, 2019).

The objective of the investment strategy of a pension provider should be to grow the assets to provide an income in retirement, and as such it normally has a very long investment horizon. Investing in assets with a longer average duration can provide superior returns, as investment strategies can benefit from term and illiquidity premiums. An appropriately calibrated long-term strategy can also protect from losses due to market downturns as assets would not need to be sold when prices fall, thereby avoiding locking in and thus materialising any short-term losses (OECD Pensions Outlook, 2020).

Risk Management and Investment Strategies as panacea for the sustainability of Defined Contributory Plans

Defined contributory (DC) pension plan can be sustained when effective risk management systems and investment strategies are adopted by the government. Since there are multifarious risks as highlighted above that are associated with the implementation of the new innovation. Interestingly, the various governments in the fourth republic having realised some of the challenges that resulted to the collapse of the old pension scheme tagged defined benefits (DF) or pay-as-you-go, carried out a series of pension reforms that culminated to the introduction of defined contributory plans. For instance, the Pension Act of 2004, enacted by President Olusegun Obasanjo on June 25, 2004 as well as the amended Pension Acts of 2011 and 2014 instituted by President Goodluck Jonathan took into consideration the sustainability of the new pension scheme.

The ability of any nation to sustain DC pension scheme is a function of investment strategy adopted by its pension act. The greater the investment portfolio returns, the more secured the retirement fund, the higher the income at retirement. The impact assessment of investment strategies on potential retirees' pension assets in Nigeria shows that pension managers have been able to generate high investment. For instance, the amount invested by different PFAs was about N7.5 trillion as at February 2014 which represented the total Pension Fund Asset Under Management (AUM) (Nairametric, 2018). The total

value of pension fund assets based on unaudited valuation reports grew from N7.51 trillion as December 2017 to N8.64 trillion as at December 2018. This represents a net growth of N1.12 trillion (15%) (PenCom, 2018) From pension fund assets worth N9.9 trillion as at November, 2019, only N40.52 billion was invested in infrastructure while 71.4% was invested in FGN securities by PFA. (Nairametric, 2020; PenCom, 2019).

China is another country whose pension fund assets have grown over the years. In 2019, China's total pension assets grew by 19% to more than RMB 15 trillion. This is a year-on-year growth rate similar to its long term average of 17% recorded over the last decade (KPMG, 2020). From these two countries, it shows that investment of pension funds has appreciated over the years, a major factor that is responsible for the sustainability of the DC plans.

In order to safeguard the pension fund in the custody of the Pension Fund Custodians, with respect to the PFAs investment pension fund management, Section 78 of PRA 2014 compel PFAs to establish an investment strategy committee as well as Risk Management Committee. In addition to this, Section 8 of PRA 2014 also specifies that the maximum investment limits under the Multi-Fund Structure that 10% of the total pension asset be invested in equity, money market and debt, while 7.5% of the issued share capital can be invested in the ordinary shares of a listed company.

Conclusion and Policy Recommendations

Pension funds and their weakened financial position have received significant attention in recent years. The growth of funded pensions and the growing emphasis on risk management should strengthen the role of pension funds as stable, long-term institutional investors. Employees' pension fund is the total amount remitted into their retirement savings account (RSA), administered by licensed agencies such as the Pension Fund Administrators (PFAs). These funds are expected to be invested into different businesses to generate money in order to cater for the needs of participants covered by defined contributory (DC) pension schemes. How pension funds managers manage risk has a very important bearing on the distribution of financial and other risks among the different sectors of the economy. As employers and governments have become more aware of the funding challenges pension funds face from aging populations, and more conscious of the investment risks involved in funded pension plans, they have sought to manage that risk in a variety of ways. Reductions in state pension benefits in most countries, and movements from defined benefit (DB) to defined contribution (DC) pension plans by many businesses, have increasingly transferred retirement risk (including investment, market, longevity risks, etc.) to the household sector.

The major determinants of pension fund investment are the economic, risk and security of real estate factors. The prominent risk in Nigeria relates to the management of funds. This arises from endemic corruption and misappropriation of funds by pension managers, poor asset management,

inconsistent policy on the part of the government and PFAs, dysfunctional micro-economy, incessant and unjustified government intervention in the administrative, economic, managerial, and technical activities of pension managers.

To sustain the defined contributory (DC) plans in Nigeria, there is need for policymakers to review the governance risks and identify improvement opportunities; evaluate investment choice by pension managers; amend the Pension Reform Act of 2014 to enable it to accommodate more investments in the real estate, oil sector, construction business aside from those specified by the Act such as bonds, bills and other securities.

Policy makers should come up with regulatory policies that will enhance financial stability of pension funds since the liability structure of pension funds are very high. There should be discovery of better risk management systems. In addition, the tax and related regulations should be designed to reduce barriers to prudent funding policies. Aside from this, the policy makers should consider ways of facilitating the development of certain markets. The investment choice should be carefully selected in order to generate high internal rate of returns (IRR). There is need to diversify into other contemporary markets to enhance greater sustainability of the scheme. In order to achieve this, the PFAs should analyse the investment portfolios constructively, assess the investment risks, evaluate investment objectives, be critical on the potential costs and benefits of investments, and follow the PenCom guideline regulating risk management and investments in equity. Pension policy makers should make sure a proper institutional design of the pension fund industry and intensive use of market surveillance are efficient tools for dealing with most of the operational risks of funded pension fund schemes in emerging economies.

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