Research Article

SUSTAINABILITY OF THE CONTRIBUTORY PENSION SCHEME IN NIGERIA

Ngozi B. Ijeoma¹, Chris I. Nwufo²
¹Department of Accountancy, Nnamdi Azikiwe University, Awka-Nigeria
²Department of Accountancy, University of Abuja, Abuja-Nigeria

Correspondence should be addressed to Ngozi B. Ijeoma

Received January 20, 2015; Accepted February 06, 2015; Published February 16, 2015;

Copyright: © 2015 Ngozi B. Ijeoma et al. This is an open access article distributed under the Creative Commons Attribution License, which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.


ABSTRACT

This study examined the stability of the contributory pension scheme (CPS) in Nigeria. The objectives of this study include; to examine whether the CPS has significantly impacted on the economic development of Nigeria; to examine the extent to which CPS has impacted on the development of the Nigerian capital market; and to examine whether there is a sound risk management and effective investment strategy in existence capable of ensuring sustainability of the new scheme. The source of data for this study include primary and secondary source of data collection. The statistical tools employed in the data analysis include the simple regression analysis, the Kruskal-Wallis test and the Cronbach Alpha reliability. The result of this study found there exist a strong positive linear relationship between the contributory pension expenditure and the GDP (gross domestic product) in Nigeria. Also found was that the contributory pension Scheme has significantly impacted the development of the Nigeria Capital market. In addition, the findings revealed significant evidence of sound risk management and investment strategies in existence to ensure sustainability of the contributory pension scheme in Nigeria. The result of reliability test of the responses obtained using the research instrument obtained a Cronbach alpha value of 89.1%. This result implies that the response obtained possess 89.1% internal reliability and consistent.

KEYWORDS: Capital market, GDP, Risk management, Reliability, Pension expenditure

INTRODUCTION

The Federal Republic of Nigeria was fully public pensions prior to June 2004 on the basis of the defined benefits scheme. However, funding of the defined benefits scheme became a problem to the government due to insufficient funding and this resulted to arrears of unpaid pension. Thus, National Pension Commission (2007) asserts that the pension liabilities of the federal government as at 30th June, 2004 stood at N1.681 trillion. The defined benefit scheme encountered problems like inadequate funding, poor administration, fraudulent practices and wrong computations. In his assessment, Adebayo (2012) opines that the major problem of the pension fund administration was the non-payment of pension and gratuity. Anyafo (2000) posited that the public sector as an employer has grown in size and its pension bill as a percentage of the Gross Domestic product (GDP) has also risen significantly. Also, Okafor (2000) affirmed that it seems demand for benefit increases have been met without harmonizing adequacy with affordability. Moreover, Ogunsola (1984) surmised that Nigeria scheme in some quarters was once believed to be the most generous scheme in the world. The contributory pension scheme in Nigeria is a mandatory, fully funded, occupational and uniform scheme for both the private and public sectors. The scheme is mainly a Defined Contributory Scheme and also a defined benefit scheme in the form of Approved Existing Schemes (AES) and closed pension Fund Administration (CPFA).
The contributory pension scheme shifted the burden of financial risk of pension from the employer to the employee thus removing the web of government guarantee. Also, Amoo (2008) highlighted that the new Act migrates Nigeria’s pension from defined benefits to defined contribution pension system. The underlying reason for the change was the inefficient and dysfunctional administration of the old pension scheme. Moreover, Ogwumike (2008) corroborated that the inadequacy of the defined pension scheme also referred to as pay-as-you-go (PAYG) pension scheme made the Federal Government of Nigeria to embark on the contribution pension reform scheme through the 2004 pension reform Act that tends to unify the features of the public service with those of the private sector in terms of the rate of contribution of benefits, key players and regulation.

In the past decade, there has been a global pension reform. The World Bank has played a key role in supporting and financing the Chile’s model of pension reform which has taken a paradigmatic role in pension which was adopted in Nigeria in 2004. Stewart and Yermo (2009) noted that the spread of pension reform can be seen as a response to the accelerated demographic and epidemiological transition in developing countries thrusting the issue of old age support to the forefront of developing policy. Pension reform has been embedded within structural adjustment and has largely constituted a response to fiscal deficits and labour market liberalization. The World Bank’s 1994 report on averting the old age crises supported policies to protect the old and promote growth. The bank supported the introduction of individual retirement earning on the basis of significant economic advantages which includes improved work and saving incentive, strengthening of capital market and reduced fiscal deficit. The Nigerian government under the leadership of the former president Olusegun Obasanjo, came up with its economic development agenda called national Economic Empowerment and Development Strategies (NEEDS). The NEEDS document passed the pension reform act in 2004 with the view that the reform would help to develop the Nigerian capital market (Dostal, 2010). It is therefore conceivable that introduction of CPS would serve as a tool towards realization of the goal of savings mobilization, which can lead to financial deepening and capital market development, thereby fostering economic growth in Nigeria. In addition, funded pension scheme can also reduce government expenditure, thereby releasing funds to direct key policy challenges and initiatives. This is expected to help reduce fiscal burden characterized by the PAYG pension scheme and indeed avoid burdening future generations. Pension fund contributes directly or indirectly to the economic growth of countries worldwide (Njuguna, 2010). This funded pension scheme is now 10 years old in Nigeria and one wonders if the acclaimed economic advantages can be seen in Nigeria. Has the huge amount which has tremendously increased through the years led to financial deepening and capital market development and reduced the problem of scarcity of funds for long term investment in Nigeria? Balogun (2006) and Ogwumike (2008) are however optimistic about the potentials of the new scheme to make financial deepening but without empirical evidence. Gunu and Tsado (2012) in their study revealed that the new scheme has begun to contribute to the increase in growth and development of the Nigerian capital market but did not indicate if there has been a significant impact neither did it address the issue of reduced government expenditure (which is characteristic of the new scheme) been diverted to alter key policy challenges. One is also doubtful of the sustainability of the new scheme in line with averting old age crises as sound investment and efficient management of the huge pension fund asset has great implication on the economy. It is against this backdrop that the researcher decided to undertake this research.

The research objectives of this study includes

i. To examine whether the CPS has significantly impacted on the economic development of Nigeria.

ii. To examine the extent to which CPS has impacted on the development of the Nigerian capital market.

iii. To examine whether there is a sound risk management and effective investment strategy in existence capable of ensuring sustainability of the new scheme.

The research questions for this study includes

i. To what extent has the CPS impacted on the economic development of Nigeria?

ii. To what extent has the CPS impacted on the development of the Nigerian capital market?

iii. Are there sound risk management and investment strategy in existence to ensure sustainability?

The research hypothesis for this study are stated as

i. Contributory pension scheme has not made significant impact on the economic development of Nigeria.

ii. Contributory pension scheme has not impacted the development of the Nigerian capital market.

iii. There is no sound risk management and investment strategy in existence to ensure sustainability of the contributory pension scheme.

LITERATURE REVIEW

Conceptual Framework

Pension represents the amount of money paid to retirees for economic maintenance for past services rendered to the organization. Pension is a vital social security scheme for employees in both public and private sectors of the economy. It can contribute to a better environment for economic growth and development since it connotes improvement on the welfare and standard of living of the citizens of sovereign nations by reducing poverty and under development.

According to Adebayo and Dada (2012) pension consists of lump sum payment paid to an employee upon his disengagement from active service. Pension provides an employee a level of economic benefit when he or she
Theoretical Framework

The contribution pension scheme is based on deferred wage theory. This defers some compensation until an employee retires while the employer promises to provide a pension payment in exchange for current services. According to Keith (2000) here the contributions, both employee and employer (or by an individual within a personal pension type policy) are stated (defined) but the eventual level of pension benefits is unknown; this will depend not only on the continuing level of contribution over the years but also on the investment performance of the accumulating fund and the annuity applicable when the fund vested (i.e. when benefits start to be taken).

Development of pension in Nigeria

Dostal and Cassey (2007) argued that the Nigerian Authority regarded the Chilean reforms (Chilean Model) to be emulated and copied. But they failed in learning the lessons of Chile. In fact, at the time Nigeria was copying, Chile was preparing for an alternative Social Pension Scheme and while the Nigerian government was beginning to give serious attention to pension reforms (using the Chilean Model) in 2005, the Chilean model was being criticized by supporters of the scheme and the World Bank had come to conclude that the Chilean reform model has not delivered the benefit that it was set out for from the beginning because of the too many assumptions made.

Categories of Pension Scheme

Pension scheme is broadly divided into the defined contribution plan and the defined benefits plan. In defined contribution plan, a contribution rate is fixed (Odia and Okoye, 2012). For instance, in Nigeria an employee contributes 7.5% of his monthly emolument while the employer also contributes same amount or more depending on the category of employee. The retirement benefit is variable depending on the performance of the investment selected. In defined benefit plan, the retirement benefit is stipulated usually as a percentage of average salary, but the contribution will vary according to the percentage of the average compensation a participant receives during his or her three earning years under the plan (Owoji, 2008). According to Anthony and Bubble (1997), the two pension plans create very different investment problems for the plan sponsors. While the defined benefit plan creates a liability pattern that must be anticipated and funded, the defined contribution plan creates a liability only as long as there is investment at any point in time. Investment is often left to the people who benefit from the decision or suffer from the consequences (Odia and Okoye, 2012).

In his contribution, Ugwu (2006) as cited in Amuji (2009) stated that there are four main classification of pension in Nigeria. They include, retiring pension, compensatory pension, superannuating pension and compassionate allowance. He explained further that gratuity is a one-and-for-all lump sum of money paid to an employee on retirement. A retiring worker can be entitled to gratuity only or both gratuity and pension. It then implies that a worker who is entitled to pension is also entitled to gratuity.

The function of pension Scheme

According to Barrientos (2002), the key function of pension plan is to enable individuals and households to smooth consumption over the life course, collecting saving during people’s working lives and providing retirement income. Also, pension plans provides insurance against a range of contingencies which may otherwise adversely affect household consumption. A key contingency covered by pension plans is longevity risk, the risk that we may outlive our accumulated resources. Uncertainty over the time of death is a primary factor in explaining the establishment of pension plans. Depending on the detail of pension plan design, other contingencies may be covered. Some pension plans have indexed pension benefits, and therefore protect beneficiaries against inflation risks. Where pension plans calculate benefits with a formula based on some averaging of earnings, they effectively provide insurance against gaps in employment or variations in earnings. The insurance function of pension plans is extremely important (especially in the “Age of
Admad (2008a) stated some of the prospects of the contributory pension scheme to include:

1. Intensified Public Education & Enlightenment
2. Strong Support from and collaboration with stakeholders especially social.
3. Consistent support and strong political will from the executive and legislative arms of government.
4. Federal Government of Nigeria had consistently and religiously met her obligation to the pensions fund contribution.
5. Gradual adoption of the new scheme by other tiers of government especially state government
6. Major corporations and institutions have bought idea of the new scheme
7. Consistent macroeconomic stability to downtrend in inflation

The Nigeria Pension Scheme

The pension system was introduced into Nigeria by the Colonial Administration. The first legislative document on pension in Nigeria was the 1951 Pension Ordinance which has retroactive effect from January 1, 1946. The Ordinance provided public servants with both pension and gratuity (Ahmed, 2006; Odia and Okoye, 2012). The National Provident Fund (NPF) scheme established in 1961 was the first legislation to address pension matters of private organizations in Nigeria. This was the first social protection scheme for the non-pensionable private sector employees in Nigeria. It was mainly a saving scheme where both employee and employer contributed the sum of N4 each on monthly basis. The scheme provided for only one-off lump sum benefit (Ahmad, 2006).

The NPF was followed by Armed Forces Pension Acts No. 103 also of 1972 and by the Pension Acts No. 102 of 1979, 18 years later. The Pension Acts No. 102 of 1976 which commenced on 1st April, 1974 encompassed the recommendation of Udoji Commission which included all consolidated enactments and circulars on pension as well as repealing existing 113 pension laws hitherto in force. Other Pension Acts included: Pension Rights of Judges Act No. 5 of 1985, the Police and other Government Agencies Pension Scheme enacted under Pension Acts No.75 of 1987 and the Local Government Pension edict which culminated in the setting of the Local Government Staff Pension Board of 1987.

Odia and Okoye (2012) explained that in 1993, the National Social Insurance Trust Fund (NSITF) scheme was set up by Decree No. 73 of 1993 to replace the defunct NPF scheme with effect from 1st July 1994 to cater for employees in the private sector of the economy against laws of employment men in old age, invalidity or death (Balogun, 2006). In 1997, parastatals were allowed to have individual pension arrangements for their staff and appoint Boards of Trustees (BOT) to administer their pension plans as specified in the Standard Trust Deed and Rules prepared by the Office of Head of Service of the Federation. Each BOT was free to decide on whether to mention an insured scheme or self-administered arrangement. It must be recall that the first private sector pension scheme in Nigeria set up for the employees of the Nigerian Breweries was in 1954. The United African Company (UAC) scheme followed in 1957.

According to Adams (2005) pension is the amount paid by government or company to an employee after working for some specific period of time, considered too old or ill to work or have reached the statutory age of retirement. It is equally viewed as the monthly sum paid to a retired officer until death because the officer has worked with the organization paying the sum. Adebayo (2006) stated categorically that pension is also the method whereby a person pays into pension scheme a proportion of his/her earnings during his working life. The contributions provide an income (or pension) on retirement that is treated as earned income. This is taxed at the investor’s marginal rate of income tax. On the other hand, gratuity stands as a lump sum of money payable to a retiring officer who has served for a minimum period of time. A greater importance has been given to pension and gratuity by employers because of the belief that if employees’ future needs are guaranteed, their fears ameliorated and properly taken care of, they will be more motivated to contribute positively to organization’s output. Similarly, various government organizations as well as labour unions have emphasized the need for sound, good and workable pension scheme even in Nigeria. Dhameji and Dhameji (2009) in their study linked commitment to motivation and opined that commitment is also tied to how well an employee is motivated. Motivation here entails the process of influencing employee’s behaviour towards the attainment of organizational goals. Motivation in this case includes meeting the psychological, financial and emotional needs of workers, because it creates an impression in them that there is life after retirement. According to Sule and Ezugwu (2009), a good pension guarantees employee’s comfort and commitment to the organization during his/her active years. In his contribution, Ozor (2006) explained that pension consists of lump sum payment paid to an employee upon his disengagement from active service.
According to him, payment is usually in monthly installments. He further stated that pension plans may be contributory or non-contributory; fixed or variable benefits; group or individual; insured or trustee; private or public, and single or multi-employer. Ugwu (2006) noted that there are four main classifications of pensions in Nigeria and they include: (a) Retiring Pension involves pension usually granted to a worker who is permitted to retire after completing a fixed period of quality service usually 30 to 35 years or on attaining the age of 60 to 65 years for the public service in Nigeria and 70 years of age for professors and judges; (b) Compensatory Pension, this is a type of pension which is granted to a worker whose permanent post is abolished and government is unable to provide him with suitable alternative employment (c) Superannuating Pension involves pension plan given to a worker who retires at the prescribed age limit as stated in the condition of service; and (d) Compassionate Allowance is obtainable when pension is not admissible or allowed on account of a public servants removal from service for misconduct, insolvency or incompetence or inefficiency (Amujiri, 2009). Study by Ojongwa et al. (2013) revealed that pension scheme is something that cannot be treated with levity. They advocated that the pension scheme should go beyond casual approach by any serious government. Successful governments have tried to encourage pension scheme from colonial period to date but the past and present civilian administration led by President Olusegun Obasanjo and President Goodluck Ebele Jonathan has carried out several upward reviews to improve the lots of retirees and pensioners in the country. This is commendable, but the inability of government and private employers of labour to employ strategies for funding the new pension contributory scheme is worrisome as many public and private organizations find it extremely difficult to secure money to pay the entitlement of their retirees and pensioners living in agony and frustration. It is reiterated that government should address this problem as a matter of urgency. It is only then that the benefits of the reforms can be enjoyed by the beneficiaries and the loyalty of serving officers can be guaranteed.

Challenges of the new Pension Scheme

Adejoh (2013) noted the problems of the contributory pension scheme to include the following; (a) Remittance of the benefits to the Retirements Savings Account (RSA) by firms, employers and employees may be difficult; (b) Genuineness of our pension fund administrators and custodians that have licensed; were the licenses given to those competent and qualified? (c) What are the legal frameworks put in place by government such that in spite of political changes, the scheme is sustained by subsequent governments? (d) How do we ensure effective implementation of penalties in the act of non-compliers regardless of their status and origin? (e) How will government and national pension commission monitor, supervise, and enforce the provisions of the Pension Reform Act 2004? (f) What happens if PFAs or PFCs default or go into liquidation? Ijeoma et al. (2013) in their study found that corporate governance in pension industry in Nigeria is still being faced with a lot of challenge and the National Pension commission lacks prompt and adequate sanction breaches. They added that there is generous existence of economic framework to support and force good corporate governance in Nigeria new pension reform and the reform measures were agreed to be adequate. However, they advocated the existence of a generous political framework to support and enforce corporate governance in the sector and that government should not relent in pursuing the necessary democracy that entrenches good leadership and good practices to make the citizen have faith in policies like the pension reform Act (2004).

Ahmad (2008b) argued that corporate governance in the pension industry in Nigeria is still being faced with a lot of challenges notwithstanding the efforts of the Commission. He added that these challenges include: history of bad corporate governance by people in many organizations, inappropriate and adequate sanction for breaches, the “tyranny and immunity “of management, re-defining the roles of the external auditor and self-regulatory organizations (SROs) under the PRA of 2004 to make them culpable on concealing breaches, possible conflicts of interest arising from PFA participation in companies’ boards following fears that they might become major investors and be elected to boards and disclosure of confidential information. However, necessary economic, political and institutional framework must be put in place to support and enforce good corporate governance. Ojonugwa et al. (2013) observed that the new pension scheme, to a large extent, places in the hands of the contributor (and of course their employer), the responsibility for the contribution that is available in the Retirement Savings Account (RSA) upon retirement. One of the major differences between the previous scheme and the new scheme adopted in Nigeria is that, in the old scheme (Defined Benefit Scheme) pensioners queue up at government offices for verification and collection of their monthly pensions while Pensioners in the post 2004 contributory pension scheme (the New Contributory Pension Scheme) do not need to queue up to be verified else their monthly pensions are paid straight into their bank accounts. Another major difference observed was that while pensioners in the old system travel long distances to be verified, the local office of the Pension Fund Administrator (PFA) manages that level of interface without challenges, thereby removing the need for continuous verification of pensioners. One other most fundamental difference between the two is the fact that, the post 2004 era avails the users of pension and annuities, whereas the old scheme does not.

Ahmad (2008b) argued that corporate governance in the pension industry in Nigeria is still being faced with a lot of challenges notwithstanding the efforts of the Commission. He added that these challenges include: history of bad corporate governance by people in many organizations, inappropriate and adequate sanction for breaches, the “tyranny and immunity “of management, re-defining the roles of the external auditor and self-regulatory organizations (SROs) under the PRA of 2004 to make them culpable on concealing breaches, possible conflicts of interest arising from PFA participation in companies’ boards following fears that they might become major investors and be elected to boards and disclosure of confidential information. However, necessary economic, political and institutional framework must be put in place to support and enforce good corporate governance. Ojonugwa et al. (2013) observed that the new pension scheme, to a large extent, places in the hands of the contributor (and of course their employer), the responsibility for the contribution that is available in the Retirement Savings Account (RSA) upon retirement. One of the major differences between the previous scheme and the new scheme adopted in Nigeria is that, in the old scheme (Defined Benefit Scheme) pensioners queue up at government offices for verification and collection of their monthly pensions while Pensioners in the post 2004 contributory pension scheme (the New Contributory Pension Scheme) do not need to queue up to be verified else their monthly pensions are paid straight into their bank accounts. Another major difference observed was that while pensioners in the old system travel long distances to be verified, the local office of the Pension Fund Administrator (PFA) manages that level of interface without challenges, thereby removing the need for continuous verification of pensioners. One other most fundamental difference between the two is the fact that, the post 2004 era avails the users of pension and annuities, whereas the old scheme does not.
to bank failures in the country. They see some of these
deficit pension operators’ activities as an opportunity to be
millionaires, without having workers interest at heart. In
order to avoid falling victim to these wolves, he advised
the Nigeria Labour congress (NLC) members to register
with the Trust Pension Fund Administrator, which is
owned by socially responsible organizations. He added that
this problem was what bedevilled the old scheme;
therefore, participants in the new pension scheme should
not allow themselves to be fooled like their predecessors.
Dostal (2010) explained that the defenders of the current
pension system would argue that it is too early to make any
claims about the failure of contributory pension scheme
(CPS) to have a positive contribution on the trajectory of
the Nigerian economy. They would point to the global
economic crisis and the 2008 crash of the Nigerian stock
market as unexpected events that explain negative returns
of Pension Fund Administrators (PFAs) but do not question
the system’s viability. Nevertheless, the question
about poor performance of CPS in Nigeria generally can be
traced directly to the larger question of how the banking
system, stock market and macro-economic performance of
the Nigeria economy might interact with it (Dostal, 2010;
that it is important to mention that one major problem of
CPS is still the dearth of investment outlets. The situation
is further complicated by the recapitalization programme
in the financial sector (banks, insurance companies and stock
broking companies) (Adeola, 2006). Another challenge
confronting the scheme as observed by Gunu and Tsado
(2012) is the compliance rate within the working
population. They noted that PenCom confirmed that only
10 out of 36 states of the federation have fully aligned with
the pension reform in the country (PenCom, 2008). In
the private sector, organizations with at least five employees
are required by the Act to implement the Contributory
Pension Scheme. However, compliance by the private
sector has remained a serious challenge due to lack of
comprehensive database of employers of labour in the
country, which limits the extent of enforcement by the
regulator. Also, the employers themselves are not willing
to comply with the provision of the Act, because it is
regarded as additional cost to their organizations.

Economic contribution of Pension fund in different
countries

Using the Ethiopia pension system as a case, Asaminew
(2010) explained that in Ethiopia, unlike other developed
countries and countries in transition, the public pension
system is not endangered with demographic factors such as
retiring baby boomers, shrinking working age populations
and lengthening life span. However, the problem has
always been lack of coverage in the system where a large
percentage of the country’s labour force work for the non-
government sector and lack access to public pension
benefits. Asaminew (2010) stated the need for another
institution standing for the benefit of this group of the
society. He equally noted that the adoption of fully funded
pension scheme is crucial for mobilization of funds (capital) and efficient allocation of credit. Thus, they
should be viewed as catalysts to develop the financial
assets. Therefore responsible government bodies should
draw appropriate rules, policies and guidelines for the
introduction of the scheme in Ethiopia. He added that any
such move to introduce a complementary pension system
will be rewarded by stabilized society, expanded financial
system, and growing economy. According to Ako (2006)
contributory pension scheme is usually in the form of
savings or insurance schemes while the non-contributory
pension is pure cash transfer to beneficiaries rather than
savings or insurance scheme. He noted that in Brazil, the
contributory scheme is operational in all the tiers of
government (federal, state and municipal governments)
including the armed forces, police and private sector
workers. He added that the non-contributory pension
scheme is equally in practice in Brazil but as a socially
inclusive system that provides security benefits for the
elderly poor as well as the physically challenged.

Stewart and Yermo (2009) viewing pension schemes
around Africa explained that a universal, Old Age Pension
System, was initiated in Botswana in 1996. Coverage
extends to all citizens over 65 years of age residing in
Botswana. The costs are born by the government, with 220
pula month provided in benefits, adjusted periodically
according to changes in the cost of living. The fund public
sector employee’s scheme; the Botswana Public Officers
Pensions Fund (BPOPF) was reformed in 2001. The fund
has experienced strong growth as most public servants
exercised their option to join the fund. Occupational
pensions are also growing, with assets having reached the
current market value of around 33 billion of Botswana’s
790,000 labour force, around 300,000 are in private, formal
employment. A gratuity / severance scheme also exists in
Botswana, with employers required to make a cash
payment on the 5th anniversary of an employee’s term of
employment, and similar payments, at double the rate, at
the end of every 5 years thereafter, with eligibility for
pro-rata cash benefits on termination of employment. However,
employers are not required to pre-fund these obligations,
they often do not comply and the payments are not
generally used to fund retirement income. The government
in Botswana is looking to reform their system, to increase
administrative efficiency and sustainability. A Non-Bank
Financial Authority has been created which oversees the
pension fund industry. According to Stewart and Yermo
(2009), there exist two contributory pension schemes for
formal sector workers in Cape Verde. The Administracao
Publical (AP) scheme, which, according to the civil service
census, has an estimated14, 600 contributors (this
comprises of police, teachers, and other civil servants), and
the Instituto Nacional de Previdencia Social (INPS), which
covered approximately 36,400 private sector workers in
2004. The INPS is the National Social Security Institute of
Cape Verde created in 1983 to administrate a compulsory
social security scheme (not only covering pensions, but
the physically challenged.

**Journal of Business & Management Studies**

**Economic contribution of Pension fund in different countries**

Using the Ethiopia pension system as a case, Asaminew
(2010) explained that in Ethiopia, unlike other developed
countries and countries in transition, the public pension
system is not endangered with demographic factors such as
retiring baby boomers, shrinking working age populations
and lengthening life span. However, the problem has
always been lack of coverage in the system where a large
percentage of the country’s labour force work for the non-
government sector and lack access to public pension
benefits. Asaminew (2010) stated the need for another
institution standing for the benefit of this group of the
society. He equally noted that the adoption of fully funded
pension scheme is crucial for mobilization of funds (capital) and efficient allocation of credit. Thus, they
should be viewed as catalysts to develop the financial
assets. Therefore responsible government bodies should
draw appropriate rules, policies and guidelines for the
introduction of the scheme in Ethiopia. He added that any
such move to introduce a complementary pension system
will be rewarded by stabilized society, expanded financial
system, and growing economy. According to Ako (2006)
contributory pension scheme is usually in the form of
savings or insurance schemes while the non-contributory
pension is pure cash transfer to beneficiaries rather than
savings or insurance scheme. He noted that in Brazil, the
contributory scheme is operational in all the tiers of
government (federal, state and municipal governments)
including the armed forces, police and private sector
workers. He added that the non-contributory pension
scheme is equally in practice in Brazil but as a socially
inclusive system that provides security benefits for the
elderly poor as well as the physically challenged.

Stewart and Yermo (2009) viewing pension schemes
around Africa explained that a universal, Old Age Pension
System, was initiated in Botswana in 1996. Coverage
extends to all citizens over 65 years of age residing in
Botswana. The costs are born by the government, with 220
pula month provided in benefits, adjusted periodically
according to changes in the cost of living. The fund public
sector employee’s scheme; the Botswana Public Officers
Pensions Fund (BPOPF) was reformed in 2001. The fund
has experienced strong growth as most public servants
exercised their option to join the fund. Occupational
pensions are also growing, with assets having reached the
current market value of around 33 billion of Botswana’s
790,000 labour force, around 300,000 are in private, formal
employment. A gratuity / severance scheme also exists in
Botswana, with employers required to make a cash
payment on the 5th anniversary of an employee’s term of
employment, and similar payments, at double the rate, at
the end of every 5 years thereafter, with eligibility for
pro-rata cash benefits on termination of employment. However,
employers are not required to pre-fund these obligations,
they often do not comply and the payments are not
generally used to fund retirement income. The government
in Botswana is looking to reform their system, to increase
administrative efficiency and sustainability. A Non-Bank
Financial Authority has been created which oversees the
pension fund industry. According to Stewart and Yermo
(2009), there exist two contributory pension schemes for
formal sector workers in Cape Verde. The Administracao
Publical (AP) scheme, which, according to the civil service
census, has an estimated14, 600 contributors (this
comprises of police, teachers, and other civil servants), and
the Instituto Nacional de Previdencia Social (INPS), which
covered approximately 36,400 private sector workers in
2004. The INPS is the National Social Security Institute of
Cape Verde created in 1983 to administrate a compulsory
social security scheme (not only covering pensions, but

**Journal of Business & Management Studies**
Reporting on the pension system in Ghana, Stewart and Yermo (2009) noted that there are currently two mandatory pension schemes in Ghana which include: the Social Security and National Insurance Trust (SSNIT), which is the main system and covers employees in the private sector, civil and public servants, professionals, traders, artisans, farmers and self-employed; and a small scheme, which is currently phasing-out, and only covers military, police, and a few civil servants, but used to cover all civil servants in the past. This last system is called originally CAP 30 program. In the aggregate both systems cover less than 10 percent of the labour force in Ghana, and cost already around 1.5 percent of GDP. Lesotho introduced her social pension scheme in 2004 where everyone over the age of 70, except those people already receiving a government pension, receives M150 (US$22) each month. The system requires a photo identification for the pension registration, which is paid at post offices throughout the country, with around 3.6% of the population eligible (in 2006 about 72,000 people, 96% of those eligible, were receiving the pension, and more than half of these were women). The scheme is administered by the Ministry of Finance and Development Planning and financed out of the state budget (amounting to 2.4% of the national budget, or 1.43% of GDP) (Stewart and Yermo, 2009). Pension provision in Chile dates back to the 1920s, when social insurance funds (Cajas de Previsión) were established for specific categories of workers providing old age and retirement pensions (Arellano, 1980). These were funded from payroll contributions from employees and employers, with benefits determined by final earnings and contributory history. In the new individual retirement plans in Chile, workers contribute ten percent of their earnings to a retirement savings account kept with one of the pension fund managers. These pension fund managers manage the retirement savings with the returns being credited to the individual retirement accounts. The pension fund managers are permitted a range of charges including a fixed monthly commission, and an earnings related commission on contributions. On paper, pension fund managers compete for affiliates on their rates of return, commission levels, and quality of service, and workers can switch pension fund managers in search of the best deal. In practice, competition is rather limited as pension fund managers have very similar results, and administrative constraints make transfers possible only twice yearly (Barrientos, 1999). Barrientos (2002) deduced from the finding of his study the need to consider the wider impact of pension programmes on household risk management and economic development. Pension schemes can be designed to facilitate and strengthen the contribution of older people to social and economic development. The examples of Brazil and South Africa show that attempts at universalising pension provision focused on the poor can be effective and can attract popular support. To the extent that pension schemes achieve these, they can provide the basis for more extensive social protection. As far as old age support is concerned, the main challenge will be to develop pension schemes into integrated old age support programmes covering health and long term care.

**Sustainability of Pension Scheme**

Speaking on sustainability of pension schemes, Barrientos (2002) reported that the political sustainability of pension schemes in developing countries is a key issue. He further explained that the growth of public provision of old age support programmes in developed countries has been explained by the strong political influence of pressure groups representing the old, such as “gerontocracy”. This is hard to find in developing countries, where the rise in the share of the old in the population has not been accompanied by a growth in public pension programmes. In fact, the spread of pension reform, and pressure on public expenditure on the old point to the opposite trend, ‘reversed gerontocracy’. In developing countries, pension schemes have served as a catalyst for the extension of social protection.

**RESEARCH METHODOLOGY**

The method of research employed in this study includes the descriptive and continuous research method; this involves collection and summarizing of data, and the use of statistical tools such as the simple linear regression, Kruskal-Wallis test and the Reliability analysis.

**Sources of Data Collection**

This study used both primary and secondary data sources of data.

i. Secondary Data: the secondary data were sourced from Central Bank of Nigeria Annual reports and Bullion, Bureau of statistics reports, the National pension Commission Annual Reports, Text books and academic Journals.

ii. Primary Data: Questionnaire survey approach was used. The questions were based on a structured Likert scale of strongly agree, agree, disagree, strongly disagree and undecided.

**Population of the Study**
The population is represented by 24 Pension Fund Administrators as at 31st December, 2013 shown on APPENDIX II. The questionnaire were administered on 15 Pension Funds Administrators on the basis of top 15 Administrators using parameter of highest to lowest Retirement savings accounts registration and the questionnaire were duly completed and returned.

Statistical Tools for data Analysis

Simple Linear Regression

Simple linear regression measures the nature of linear association between a dependent variable (y) and an independent variable (x). Regression analysis explains how one variable is related to another by providing an equation that enables the researcher to estimate the unknown value of a dependent variable using the unknown values of an independent variable (Draper, 1981).

The linear regression model can be expressed by the linear equation:

\[ \hat{y}_i = a + bx_i \]

Where a represents the intercept while b represents the slope of the linear equation.

The Kruskal – Wallis Analysis Rank Sum Test

Biological data from experience never follow a Gaussian (normal) distribution precisely, because a Gaussian distribution extends infinitely in both directions, so it includes both infinitely low negative numbers and infinitely high positive numbers. Many kinds of biological data, however, do follow a bell-shaped distribution that is approximately Gaussian. Because ANOVA works well even if the distribution is only approximately Gaussian (especially with large samples), these tests are used routinely in many fields of science.

An alternative approach does not assume that data of interest follow a Gaussian distribution. In this approach, values are ranked from low to high and the analyses are based on the distribution of ranks. These tests, called nonparametric tests, are appealing because they make fewer assumptions about the distribution of the data. But there is a drawback. Nonparametric tests are less powerful than the parametric tests that assume Gaussian distributions. If the samples are large the difference in power is minor. With small samples, nonparametric tests have little power to detect differences.

The Kruskal – Wallis test which is an extension of the Wilcoxon test for location with two independent samples from continuous populations. The null hypothesis is that the k populations are the same, but when we assume the location model this hypothesis can be written in terms of the respective location parameters (or treatment effects).

\[ H_0: \theta_1 = \theta_2 = \cdots = \theta_k \] (treatment effects)

\[ H_1: \text{At least two } \theta_i \text{'s differs} \]

To perform the test, all \( n_1 + n_2 + \cdots + n_k = N \) observations are pooled into a single array and ranked from 1 to N. The test statistic for H is given as:

\[ H = \frac{12}{N(N+1)} \sum_{i=1}^{k} \frac{R_i^2}{n_i} - 3(N+1) \]

For \( R_i \) being the sum of the ranks from the \( i^{th} \) sample; the appropriate rejection is the large value of H.

Procedure for calculating the Kruskal–Wallis test

i. Rank all the scores in the experiment, irrespective of condition.

ii. Add up the ranks for each condition to produce a rank total for each condition: \( R_1, \ldots, R_k \) where \( k \) is the number of conditions.

iii. Calculate H using the formula:

\[ H = \frac{12}{N(N+1)} \sum_{i=1}^{k} \frac{R_i^2}{n_i} - 3(N+1) \]

which allows for different numbers of subjects in each condition. \( N \) is the total number of subjects and \( n_1, \ldots, n_k \) are the number of subjects in the \( k \) conditions.

iv. The calculated value of \( H \) must equal or exceed the table value of \( \chi^2 \) with \( k - 1 \) degrees of freedom at the chosen level of significance to reject the null hypothesis.

Decision Rule: The decision rule is reject the null hypothesis when the P-value is less or equal to the \( \alpha=0.05 \), otherwise, accept the null hypothesis.

Reliability Test

Having decided on a set of dimensions, it is then necessary to ensure that they form a reliable scale when administered to a particular population. The most commonly used measure of reliability is Cronbach’s alpha coefficient. This gives a measure of the accuracy or consistency with which a set of items measures a single construct. When instruments are described in journal articles, figures for Cronbach’s alpha are normally given. Computing these is straightforward. SPSS (Statistical Package for Social Sciences) for example has a procedure called ‘reliability’. It might be thought that there would be little left to discuss
regarding a statistic which was invented a long time ago and very widely used. There are two issues that concern the design of course evaluation questionnaires which will be raised here.

The first is that Cronbach’s alpha values are a function of the number of items in a scale. Adding more items to a scale tends to increase alpha. The problem is that students can be asked to complete so many questionnaires nowadays that many have become reluctant to complete lengthy ones. Questionnaire design, therefore, has to compromise between reliability and length. Cronbach’s alpha is also a function of the average inter-correlation between items. This means that higher alpha values are obtained if it is assumed that the construct being measured is unidimensional. However, education—and the social sciences generally—deal with constructs which are complex. There can then be a tension between fully describing a construct and achieving reliable measurements. Including all pertinent facets of a construct in a scale will result in multidimensionality, which will reduce alpha values. Restricting the number of dimensions in a scale will increase alpha values, but will mean that the scale no longer addresses the complexity of the construct. The dichotomy is between measurement and validity. The theoretical range of the coefficient is 0 to 1. Suggested guidelines for interpretation are < 0.60 unacceptable, 0.60 – 0.65 undesirable, 0.65 – 0.70 acceptable, 0.70 – 0.80 respectable, 0.80 – 0.90 very good, and > 0.90 consider shortening the scale by reducing the number of items.

DATA ANALYSIS

Regression Analysis on the contribution of Contributory Pension Scheme on Economic Development of Nigeria

H01: Contributory pension Scheme has not made significant impact on the economic development of Nigeria
H11: Contributory pension Scheme has made significant impact on the economic development of Nigeria.

Table 1: Model Summary

<table>
<thead>
<tr>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>.760</td>
<td>.578</td>
<td>.518</td>
<td>7.06999E6</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Pension Expenditure

Table 2: ANOVA

<table>
<thead>
<tr>
<th>Model</th>
<th>Sum of Squares</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Regression</td>
<td>4.791E14</td>
<td>1</td>
<td>4.791E14</td>
<td>9.584</td>
<td>.017a</td>
</tr>
<tr>
<td>Residual</td>
<td>3.499E14</td>
<td>7</td>
<td>4.998E13</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>8.290E14</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Pension Expenditure
b. Dependent Variable: GDP

Table 3: Coefficients

<table>
<thead>
<tr>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.727E7</td>
<td>3480362.271</td>
<td>.760</td>
</tr>
<tr>
<td></td>
<td>Pension Expenditure</td>
<td>89.677</td>
<td>28.967</td>
<td>.3096</td>
</tr>
</tbody>
</table>

a. Dependent Variable: GDP

Figure 1: Distribution of CPS and GDP (2004-2012)
Kruskal-Wallis Test to examine the extent to which Contributory Pension Scheme has impacted on the development of the Nigerian Capital market

H02: Contributory pension Scheme has not impacted the development of the Nigeria Capital market

H12: Contributory pension Scheme has impacted the development of the Nigeria Capital market

**Table 4: Ranks**

<table>
<thead>
<tr>
<th>Option</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undecided</td>
<td>5</td>
<td>14.60</td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>5</td>
<td>7.00</td>
</tr>
<tr>
<td>Disagree</td>
<td>5</td>
<td>7.00</td>
</tr>
<tr>
<td>Agree</td>
<td>5</td>
<td>13.40</td>
</tr>
<tr>
<td>Strongly agree</td>
<td>5</td>
<td>23.00</td>
</tr>
<tr>
<td>Total</td>
<td>25</td>
<td></td>
</tr>
</tbody>
</table>

**Table 5: Test Statistics**

<table>
<thead>
<tr>
<th></th>
<th>Response on the extent to which CPS has impacted on development in Nigeria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi-Square</td>
<td>18.855</td>
</tr>
<tr>
<td>df</td>
<td>4</td>
</tr>
<tr>
<td>Asymp. Sig.</td>
<td>.001</td>
</tr>
</tbody>
</table>

a. Kruskal Wallis Test
Kruskal-Wallis Test to examine whether there is sound risk management and effective strategy in existence capable of ensuring sustainability of the contributory pension scheme

H03: There is no sound risk management and investment strategies in existence to ensure sustainability of the contributory pension scheme

H13: There are sound risk management and investment strategies in existence to ensure sustainability of the contributory pension scheme

Table 6: Ranks

<table>
<thead>
<tr>
<th>Response on sound risk management</th>
<th>Option</th>
<th>N</th>
<th>Mean Rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undecided</td>
<td>28</td>
<td>42.09</td>
<td></td>
</tr>
<tr>
<td>Strongly disagree</td>
<td>28</td>
<td>41.09</td>
<td></td>
</tr>
<tr>
<td>Disagree</td>
<td>28</td>
<td>48.30</td>
<td></td>
</tr>
<tr>
<td>Agree</td>
<td>28</td>
<td>94.52</td>
<td></td>
</tr>
<tr>
<td>Strongly agree</td>
<td>28</td>
<td>126.50</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>140</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 7: Test Statistics\(^{a,b}\)

<table>
<thead>
<tr>
<th>Response on sound risk management</th>
<th>Chi-Square</th>
<th>df</th>
<th>Asymp. Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Undecided</td>
<td>106.873</td>
<td>4</td>
<td>.000</td>
</tr>
</tbody>
</table>

Reliability Analysis on the responses on the research Instrument

Table 8: Case Processing Summary

<table>
<thead>
<tr>
<th>Cases</th>
<th>N</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Valid</td>
<td>5</td>
<td>45.5</td>
</tr>
<tr>
<td>Excluded(^a)</td>
<td>6</td>
<td>54.5</td>
</tr>
<tr>
<td>Total</td>
<td>11</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Discussion of Findings
The result of the Regression analysis revealed the presence of strong correlation between contributory pension expenditure and GDP with a correlation coefficient of 76.0% and a coefficient of determination value of 57.8% (see Table 1).

The result also found that contributory pension expenditure has significant contribution on GDP with F-ratio and t-value of 9.584 and 3.096 respectively (see Table 2 and Table 3) and corresponding p-value of 0.017 which falls on the rejection region of the hypothesis assuming a 95% confidence level. This result expresses strong impact of contributory pension on GDP of Nigeria over the observed period.

The result of the Kruskal-Wallis analysis in Table 4 found that majority of the respondents strongly agreed that contributory pension Scheme has impacted the development of the Nigeria Capital market since the mean rank for option “strongly agree” was obtained as 23 and observed to be the greater mean rank.

The result of the test statistic (see Table 5) further revealed a Chi-square value of 18.855 and a p-value (significant value) of 0.001 which falls on the rejection region of the null hypothesis assuming a 95% confidence level (since p-value = 0.001 is less than α = 0.05). Thus, this result connotes that contributory pension Scheme has impacted the development of the Nigeria Capital market.

The result of the Kruskal-Wallis analysis in Table 6 revealed that majority of the respondents strongly agreed to the existence of sound risk management and investment strategies to ensure sustainability of the contributory pension scheme since the mean rank for option “strongly agree” was 126 and observed to be the greater mean rank.

Also, the test statistic details (see Table 7) found a Chi-square value of 106.873 and a p-value (significant value) of 0.00 which falls on the rejection region of the null hypothesis assuming a 95% confidence level (since p-value = 0.00 is less than α = 0.05). Thus, this result implies that there are evidence of sound risk management and investment strategies in existence to ensure sustainability of the contributory pension scheme.

From the result of the reliability analysis of the responses from the questionnaire (see Table 8 and Table 9), it was found that the Cronbach’s Alpha measure for the instrument was obtained as 0.891 (89.1%). This implies that the responses from the research instrument (Questionnaire) were 89.1% consistent, reliable and very good.

CONCLUSION

The contribution pension scheme was designed to facilitate efficient and effective pension administration in Nigeria. This is because with the defined contribution systems, beneficiaries have a direct incentive to seek improved management. It was found from the present study that there exist a strong positive linear relationship between the contributory pension expenditure and the GDP in Nigeria. Also found was that the contributory pension Scheme has significantly impacted the development of the Nigeria Capital market. In addition, the findings revealed significant evidence of sound risk management and investment strategies in existence to ensure sustainability of the contributory pension scheme in Nigeria. The result on reliability of the responses obtained in answering the research question presented in this study showed 89.1% consistency and very good reliability of the research instrument employed.

However, for the sustainability of the contributory pension scheme, challenges such as exception clause, partial application of the scheme and delay in payment of pensions must be surmounted. Also, we advocate that effective risk management of the pension fund assets must be pursued. Moreover, contributory pension scheme had created investment opportunities there by bestowing the Nigerian economy.

RECOMMENDATION

Contributory pension scheme was aimed at eradicating the problem of the defined benefit scheme in Nigeria. Thus, for sustainability of the contributory pension scheme the following recommendations were made:

i. Government should remove the exception clause from the new pension scheme. The scheme should apply to all public and private sector employees and pensioners.

ii. Government should encourage state and local governments in Nigeria to adopt the Pension Reform Act 2014

iii. National Pension Commission (PENCOM) should continue the sanction of erring employers, employees, PFAs and PFCs

iv. PENCOM should strictly monitor the operations of PFAs and PFCs

v. PENCOM should increase the minimum paid up capital requirement of PFAs and PFCs which is presently N 1 billion to N25 billion.

REFERENCE


[22] Dostal, J. M. (2010). Pension reform in Nigeria five years on: Great leap or inappropriate policy design? Paper for the 60th Conference of the Political Studies Association (PSA) at the University of Edinburgh, Scotland.


## APPENDIX I

### PENSION FUND ADMINISTRATORS, RESPONSES TO QUESTIONNAIRE

<table>
<thead>
<tr>
<th>S/N</th>
<th>QUESTIONS</th>
<th>RESPONSES</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>The investments of the Pension Fund Administrator are optimally diversified</td>
<td>10 2 2 0 1</td>
</tr>
<tr>
<td>2.</td>
<td>Risks are thoroughly evaluated in taking decisions by Pension Fund Administrators</td>
<td>13 1 1 0 0</td>
</tr>
<tr>
<td>3.</td>
<td>Probabilities are attached to levels of returns on investments.</td>
<td>11 1 1 0 0</td>
</tr>
<tr>
<td>4.</td>
<td>Expected returns are calculated on the streams of investments</td>
<td>12 2 0 0 1</td>
</tr>
<tr>
<td>5.</td>
<td>The risks of loss are weighed by the prospect of gain</td>
<td>11 2 1 1 0</td>
</tr>
<tr>
<td>6.</td>
<td>Expected returns from projects are discounted at a rate higher than that of the true cost of capital</td>
<td>12 3 0 0 0</td>
</tr>
<tr>
<td>7.</td>
<td>Risk-return trade-off are used in investment portfolios</td>
<td>12 2 0 1 0</td>
</tr>
<tr>
<td>8.</td>
<td>Liquidity is maintained in the investment analysis.</td>
<td>11 3 0 1 0</td>
</tr>
<tr>
<td>9.</td>
<td>The rate of return on investment, net of taxes and inflation are maximized</td>
<td>12 2 0 1 0</td>
</tr>
<tr>
<td>10.</td>
<td>Business and markets risks are considered in investment analysis</td>
<td>12 2 1 0 1</td>
</tr>
<tr>
<td>11.</td>
<td>Purchasing power risk and interest rate risks are major consideration in investment decisions</td>
<td>12 1 0 1 1</td>
</tr>
<tr>
<td>12.</td>
<td>Political risks and union risks are considered decision taking</td>
<td>12 1 0 1 1</td>
</tr>
<tr>
<td>13.</td>
<td>Investment decisions are promptly timed</td>
<td>11 2 0 1 1</td>
</tr>
<tr>
<td>14.</td>
<td>There are assets alternatives for investment portfolios.</td>
<td>10 3 1 1 0</td>
</tr>
<tr>
<td>15.</td>
<td>There are variances in expected rates of return</td>
<td>12 1 1 1 0</td>
</tr>
<tr>
<td>16.</td>
<td>Inflation has effects on expected returns</td>
<td>11 2 1 1 0</td>
</tr>
<tr>
<td>17.</td>
<td>There are risk tolerance levels in the investment decisions</td>
<td>11 3 1 0 0</td>
</tr>
<tr>
<td>18.</td>
<td>Investment decisions are reassessed and reappraised on a continuous basis</td>
<td>12 2 1 0 0</td>
</tr>
<tr>
<td>19.</td>
<td>Capital Asset Pricing Model is applied in investment decisions</td>
<td>11 3 1 0 0</td>
</tr>
<tr>
<td>20.</td>
<td>Optimal financial flow is a criteria in the investment process</td>
<td>13 2 0 0 0</td>
</tr>
<tr>
<td>21.</td>
<td>Quantitative indicators like profit and loss accounts and the balance sheet are used in investment evaluation</td>
<td>11 3 0 0 1</td>
</tr>
<tr>
<td>22.</td>
<td>Stock market ratings are considered for investment process in stocks.</td>
<td>12 2 0 0 1</td>
</tr>
<tr>
<td>23.</td>
<td>Financial ratios are considered in assessing potential investment outlay</td>
<td>11 3 0 0 1</td>
</tr>
<tr>
<td>24.</td>
<td>Portfolio analysis is applied in investment decision</td>
<td>10 2 1 1 1</td>
</tr>
<tr>
<td>25.</td>
<td>Balanced working capital position is maintained</td>
<td>12 2 1 0 0</td>
</tr>
<tr>
<td>26.</td>
<td>Optimum balance of cash is maintained by the company</td>
<td>11 3 1 0 0</td>
</tr>
<tr>
<td>27.</td>
<td>Surplus funds are invested in commercial papers</td>
<td>13 2 1 0 0</td>
</tr>
<tr>
<td>28.</td>
<td>Managers are familiar with operators of capital markets for optimum investment deals.</td>
<td>12 3 0 0 0</td>
</tr>
<tr>
<td>29.</td>
<td>Contributory Pension Scheme has improved the development of money market</td>
<td>14 0 0 0 1</td>
</tr>
<tr>
<td>30.</td>
<td>Contributory Pension Scheme has contributed to development of capital market</td>
<td>12 3 0 0 0</td>
</tr>
<tr>
<td>31.</td>
<td>Contributory Pension Schemes has improved the Nigerian Stock Market</td>
<td>13 0 0 0 2</td>
</tr>
<tr>
<td>32.</td>
<td>Contributory Pension Scheme had improved the development of the Nigerian economy as evidenced by the Gross Domestic</td>
<td>12 2 0 0 1</td>
</tr>
</tbody>
</table>
33. Exemption clause in the contributory pension scheme negates the effective operation of the scheme

34. Distortions in banks and other financial institutions cause delay in payment of pensions

35. Uniform application of contributory pension scheme in all the three tiers of government will strengthen pension administration in Nigeria

36. Contributory pension scheme has reduced the financial burden and strains of pension on the Federal Republic of Nigeria.

APPENDIX II

SAMPLE SIZE: PENSION FUND ADMINISTRATORS

i. Stanbic IBTC Pension Managers Ltd
ii. Trustfund Pension PLC
iii. Sigma Pensions Limited
iv. ARM Pension Managers Ltd.
v. Premium Pension Ltd.
vi. Leadway Pension PFA Ltd.
vii. Pension Alliance Ltd.
viii. Crusader Sterling Pensions Ltd
ix. Legacy Pension PFA Ltd.
x. First Guarantee Pension Ltd.
xii. NLPC Pension Fund Administrators Ltd.
xii. ALLCO Pension Managers
xiii. Oak Pensions Ltd.
xiv. Apt pension Fund Managers Ltd.
xv. Fidelity Pension Managers Ltd.

APPENDIX III

GROSS DOMESTIC PRODUCT

<table>
<thead>
<tr>
<th>YEAR</th>
<th>(₦) MILLION</th>
</tr>
</thead>
<tbody>
<tr>
<td>2004</td>
<td>11411066.91</td>
</tr>
<tr>
<td>2005</td>
<td>14610881.45</td>
</tr>
<tr>
<td>2006</td>
<td>18564594.73</td>
</tr>
<tr>
<td>2007</td>
<td>20657317.67</td>
</tr>
<tr>
<td>2008</td>
<td>24794329.29</td>
</tr>
<tr>
<td>2009</td>
<td>24794238.66</td>
</tr>
<tr>
<td>2010</td>
<td>33984754.13</td>
</tr>
<tr>
<td>2011</td>
<td>37409860.61</td>
</tr>
<tr>
<td>2012</td>
<td>40544099.94</td>
</tr>
</tbody>
</table>