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Analysis of Investment Decision by Nigerian Pension Fund Administrators (PFAs)

TSADO, Emmanuel[1*]; GUNU, Umar[2]

[1]Department of Business Administration, Ibrahim Badamasi Babangida University, Lapai. Nigeria
Email: nueltsado@yahoo.com
[2]Ph.D. Department of Business Administration, University of Ilorin, Ilorin, Nigeria
Email: gunu_umar_2002@yahoo.com
[*]Corresponding author
Address: Department of Business Administration, Ibrahim Badamasi Babangida University, Lapai. Nigeria.
Email: nueltsado@yahoo.com

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Abstract

Decisions taken by Pension Fund Administrators whether to invest in a particular asset class or not depend upon relative importance of different factors. The relative importance of these factors and the interactions among decisions taken by PFAs has remained unknown to the contributors. Therefore, this study is designed to examine factors affecting investment decision in PFAs. This research work examined the factors that influence investment decisions in Nigerian PFAs. The study also evaluated investment decisions in Nigerian PFAs based on both qualitative and quantitative factors.

Primary data were used for this research, which were generated through the use of questionnaire. Simple random sampling technique was used to select respondents from five PFAs in Nigeria. Data collected were analysed using factor analysis.

The result of the study indicates that three factors were considered by PFA managers when making investment decisions: Economic, Risk and Security of real estate factors. The study concluded that National Pension Commission should be a bit flexible in its regulatory restriction of investment areas of PFAs to enhance a better investment decision making process. The study therefore, recommended that PFAs should use reward structure to ensure accountability of those that are in charge of investment decision making.

Key words: Investment; Decision making; Pension Fund Administrator; Factor analysis; National pension commission

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INTRODUCTION

Pension reforms have become an important part of public policy across the globe and Nigeria is not an exception. The old defined benefit (DB) schemes in which the government guarantees an agreed level of retirement benefits to civil servants lost favour due to demographic trends, unfunded future liabilities, higher fiscal deficits, and lower benefits for pensioners (Amoo, 2008). These factors prompted governments to gradually replace pay as you go (PAYG) schemes with either fully or partially funded pension schemes where risks are borne by contributors to the fund rather than by the government.

Keeping in view the afore mentioned factors, the federal government of Nigeria introduced Pension Reforms Act (PRA) 2004, which is contributory, fully funded based on individual accounts that are privately managed by Pension Fund Administrators (PFAs). Thus, PFAs are financial institutions established solely for the purpose of accumulation of funds to meet future pension liabilities of the employees; they are charged with the responsibility of investing pension contributions to ensure a fair return. These contributions are very large, estimated at over N1 trillion in 2007 (Pencom, 2008).

PFAs' managers are therefore, decision makers, because their role is to decide upon asset allocations, sector by sector on a year-to-year basis to maximize

expected returns on their predetermined investment criteria of a particular fund. The asset allocation decisions made by these managers over long-term, determine both the benefits to plan members, and to a significant degree shape the economy of the country. However, investment decision is a complex decision characterized by many uncertainties of market factors. As described by Anthony and Mustafa (2010) investment decision is not just a mathematical selection of expected returns on various risk profile but a whole range of factors- such as political, economic, social etc. These factors could have a profound effect on investment decisions of the PFAs.

One of the major challenges confronting the managers of the PFAs in investment decisions is the dearth of investment outlets. According to Pencom (2008), this situation is further complicated by the recapitalization program of the financial sector (banks, insurance companies and stock broking companies). The Nigerian capital market is still under developed. The top twenty companies in the capital market have more than 70% of the total market capitalization, thus, there will be a pool of pension funds chasing few quality investments (Pencom, 2008). Regulatory restrictions of asset allocation and investing limits have also continued to inhibit the performances of the PFA managers in their investment decision making (BGL, 2010).

This research work therefore, is designed to evaluate orthodox investment decision making models in PFAs. It takes into account what PFA managers take into consideration in their investment decisions- i.e the influence of cultural, political, risk and environmental factors on investment decisions in a developing economy like Nigeria.

1. REVIEW OF LITERATURE

1.1 Decision Making Models

Andersen (2008) described decision making as a human cognitive process which leads to a course of action among a set of choices. A decision process gives rise to a choice which can be an action or an opinion. In the context of modelling investment decision making in finance, by far a majority models assume that decision making is a reasoning process which is rational (Andersen, 2008). Classic examples of rational decision models in finance describe how risk willing investors should react to ensure a certain return and has been formalized in models such as the Markowitz mean-variance formulation (Markowitz,1959), the Capital Asset Price Model (Sharp, 1954) as well as the Arbitrage Pricing Theory.

Decision models can be used in descriptive, normative or prescriptive analysis (see French and Gabrielli, 2005). According to French and Gabrielli (2005), descriptive models purport to describe how we do decide, normative models suggest how we should decide, and prescriptive models are models which use normative models to guide the decision maker within other limiting parameters. Normative theory suggests that rational decision-making is transitive-that is to say, if the decision maker has three options, X, Y and Z, if he prefers X to Y and Y to Z, then logically he must prefer X to Z. However, research has shown that decision -making can be intransitive (French, 1986 and Tversky, 1969). Normative models tend to suggest that a transitive thought process will apply in all circumstances, but fail to recognize that there are externalities that will affect the decision (French and Gabrielli, 2005).

The overriding debate in decision theory has therefore been whether decision makers are making mistakes in their decisions or whether the normative models are inadequate. The role of prescriptive models is therefore to recognize and identify intransitives and reflect them in their decision making (French and Gabrieli, 2005).

As observed by Andersen (2008), rational decision making is at the cornerstone of the foundation for modern financial thinking. Nonetheless over the last two decades or so, models of irrational reasoning has led to the appearance of a new field in finance called “Behavioural Finance”. More recently, decision making in a complex environment has been a very active research field notably in interdisciplinary approaches between physics and finance (Andersen, 2008).

1.2 Rational and Irrational Decision Making

Andersen (2008) observed that rational decision making has been at the very core of financial models historically, describing how one should deal with a variety of problems in finance such as for example portfolio allocation (Markowitz, 1954), pricing of financial assets (Sharp, 1964, Lintner, 1965), valuation of firms and of capital costs, pricing of options (Black and Scholes, 1973).

The biggest advantage about the assumption of rational expectations is clearly that it allows one to progress and actually do some calculations on how to make investment decisions in finance, as illustrated by the mentioned Nobel prizes in economy (Andersen, 2008). The disadvantage is however that it is not clear at all whether one thereby has obtained a framework that to any degree describes what the reality of financial market is. The strongest objection against rational expectations is the assumption that all market participants if given access to a complete information set would come to the same conclusion of the price (Smith, 1978).

Questions about the validity of the assumption of rational expectations in decision making and the theory based upon it, already surfaced in the 1980’s (Shiller, 1981). According to Shiller (1981), criticisms were notably raised by a succession of discoveries of anomalies particularly the evidence of excess volatility of returns. Since the reported excess volatility raised some of the very first empirically founded questions related to the

efficient market theory, it became the issue of harsh academic disputes. Following the problems made clear by the puzzle of "excess volatility", competing theories to rational decision making and the efficient market theory surfaced in the 1990s most notably by the field now known as behavioural finance (Andersen, 2008). Andersen (2008) pointed out that emerging field of behavioural finance in turn leads to the more recent theories which view financial markets as a complex system composed of many actors with different goals and often lead by irrational decision making.

Examples of human beliefs that can lead to irrational decision making are (see e.g. Andersen, 2008 for a longer discussion):

Overconfidence- People are overconfident when it comes to decision making. A typical bias is that people have the tendency to ascribe any good outcomes to their own talents, while blaming bad outcomes on external circumstances.

Hindsight Bias- Is the tendency to think one predicted what had happened whereas in reality it was only realised after the fact.

Framing- Refers to the case where the exact same problem have different outcomes in decision making, depending on how the problem is described.

Confirmation Bias- Is the tendency to search for or interpret information in a way that confirms one's preconceptions.

1.3 Behavioural Finance Approach

According to Andersen (2008), decision making became a research topic in the field of psychology in the 1950's by the work of Edwards W. as well as Simon H. A., who introduced the concept on decision making based on bounded rationality. It was however, not until the work of Daniel K. and Amos T. that results from cognitive psychology found their way into economics and finance (Andersen, 2008).

Behavioural finance studies how psychological and sociological factors influence decision-making and financial markets. It examines how investors react to new information. As observed by Pike and Neale (2006), financial economics traditionally assume that people behave rationally i.e people have the same preferences, perfect knowledge of all alternatives, and understand the consequences of their decisions. But the reality is frequently somewhat different; psychology literature shows that people are irrational in a systemic manner.

However, adherent of the efficient market hypothesis argues that even if some investors do not act rationally, their irrational behaviour is random and therefore cancels out (Akinwale and Abiola, 2007).

Pike and Neale (2006) observed that behavioural finance draws on the work of psychologists such as Kahneman and Tversky (1979 and 1982) on how human decision-making varies from rational decision-making. Examples of the main differences as given by Kahneman and Tversky are (See Pike and Neale, 2006):

Information Processing- One example where humans typically have a bias in information processing relates to loss aversion. This arises where investors or decision makers view gain or losses differently. The very word "loss" is associated with psychological feelings of responsibility, blame and shame. This is called regret-the feeling of bereavement when a wrong alternative is chosen, as a measure by the difference between the payoff received and what could have been achieved (Pike and Neale, 2006).

Self- Deception- Managers and investors can easily deceive themselves regarding their capabilities. This can be seen in overconfidence or over optimism, leading to systematic overestimation of what they can achieve, known as hubris. Over confidence leads stock marketers to be over active in their treading and incur high transaction costs, resulting in poorer returns than had they traded less actively. Good decision-making means knowing the limits to one's knowledge, and the limitations imposed by one's endowment of resources and capabilities (Pike and Neale, 2006).

Representativeness- Pike and Neale (2006) argued that managers tend to make decisions based on stereotypes formed from experience. They look for patterns and use charts to compare recent stock performance with earlier patterns. Such an approach may lead managers to place excessive trust in patterns repeating themselves rather than focusing on the fundamentals. The poor stock market performance of a 'glamorous' shares may be because investors overreact to successful companies thus inflating their share price and reducing their investment yield.

Behavioural finance, grounding decision- making in empirically validated psychological processes has provided a significant source of criticism of orthodox financial theory (Akinwale and Abiola, 2007). Akinwale and Abiola (2007) pointed out that two important issues were raised by behavioural finance. These include:

- How can investors avoid or minimize making irrational decisions, and so achieve higher returns.
- Whether it is possible to exploit irrational behaviour when it arises or not.

1.4 Investment Decision Making in a Complex Environment

Decision making in a complex environment refers to the case where the investment decision of an investor is directly influenced by the outcome of actions taken by other decision makers (Andersen, 2008). As cited by Andersen (2008), a day trader in a stock market is one such example since the decision or choice of when to enter/exit a position depends on the price trajectories created by other day. Some of the first approaches by economists to model decision making in a complex environment was done by Frankel and Froot as well as

Schleifer and Waldmann in 1990. Frankel and Froot introduced a model of the currency markets with three types of actors: fundamentalists, chartists and portfolio managers (Andersen, 2008). Andersen (2008) further argued that their motivation to go beyond the standard rational expectation theory was that the proportion of exchange rate movements that can be explained even after the fact, using contemporaneous macroeconomic variables, is disturbingly low.

More recently models of decision making in complex environment has become a major research field for people working notable in statistical physics. Some of the first work that sparked a lot of interest in this field was e.g. Caldarelli, Marsili and Zhang in 1997, which viewed the market place as a self-organizing complex system (Andersen, 2008).

1.5 Investment of Pension Assets under the Pension Reform Act 2004

As stated in part IX of the Act, all contributions by members shall be invested by the Pension Fund Administrators with the objectives of safety and maintenance of fair returns on amount invested, whose activities shall be monitored and regulated by the National Pension Commission (Pencom) (PRA, 2004). Pension assets shall be invested in any of the following like bond, bills and other securities issued or guaranteed by the Federal Government and the Central Bank of Nigeria, bonds, debentures, redeemable preference shares and other debt instruments issued by corporate entities and listed on the Stock Exchange (Sule, Umogbai and Emerole, 2011). Also, ordinary shares of public limited companies listed on the Stock Exchange with good track records, having declared and paid dividends in the past five years bank deposits and bank securities, investment certificates of closed-end investment funds or hybrid investment funds listed on a Stock Exchange with a good track record of earnings, units sold be open-end investment funds listed on the Stock Exchange and recognized by the Pencom; bonds and other debt securities issued by listed companies, real estate investment, such other instruments as may be prescribed by Pencom (For detail see PRA, 2004 and Sule et al, 2011).

2. METHODOLOGY

This research was a survey into the factors influencing the choice of asset allocation by the PFAs' managers in Nigeria, as such a survey research design was employed. The population of this study was made up of the totality of the staff of the 24 PFAs in Nigeria. The study took a sample of five PFAs which include the following: 1. Stanbic IBTC Pensions Limited 2. ARM Pension Managers 3. Crusader Sterling Pensions Limited 4. Sigma Pensions Limited and 5. Leadway Pensure Limited. Justification for this is that these PFAs were rated as the top PFAs in Nigeria based on the available information as published in the 2009 audited reports of Retirement Savings Accounts (RSA)(BGL,2010).

The study considered only those staff who are directly involved in investment decision making in these PFAs, and this formed the sample frame for this study. According to the Heads of Human Resource Department of these PFAs, the number of staff currently working with them in investment department is 492. The sample size was calculated by taking 25 percent of the population sample. Thus, the sample size was calculated to be 123. But a total of 125 questionnaires were administered in order to increase the response rate.

Simple random sampling method was used to select the respondents from the five selected PFAs for questionnaire administration. The questions in the questionnaire were closed-ended questions. Data from respondents were analyzed using factor analysis by principal component. Factor analysis was chosen because of its advantages: 1. Reduction of number of variables, by combining two or more variables into a single factor. 2. Identification of groups of inter-related variables, to see how they are related to each other (For detail see Child, 1970). The following test instruments were used under factor analysis.

(1) Kaiser-Mayer Olkin (KMO) and Bartlett's test. This is to test the appropriateness of the sample from the population and the suitability of factor analysis.

(2) Communality. 3. Total variance explained (Eigen values). 4. Rotated component matrix.

3. RESULTS AND DISCUSSION

Table 1
Descriptive Statistic

	N	Mean	Std. Deviation
Return on investment in PFAs facilitates further investment	125	3.97	.177
The inflationary rate in the economy affects the level of investment decision by the PFAs	125	3.10	.390
The income level in the economy determines investment decision by the PFAs	125	2.59	.610
The economic indicators such as per capital consumption influence investment decision in PFAs	125	2.23	.742
Interest rate is a determining factor in investment decision by PFA managers	125	3.26	.522
PFAs investment is based on high risk, high return	125	1.34	.706
PFA managers take into consideration risk elements in their investment decision	125	3.94	.231
Associated risk factor determines the level of investment decision by the PFAs	125	2.95	.437
Effective internal control and operations can help to determine the level of investment in PFAs	125	3.09	.312
Stringent government regulations affect investment decision by the PFAs	125	3.79	.408
Policy guidelines help to determine the conduct of PFAs in their investment decision	125	3.54	.501
Strong legal institution determines the level of investment risk taking by the PFAs	125	3.02	.347
The age of employees' is a determining factor in the investment decisions of PFAs	125	3.13	.538
Traditional beliefs can affect investment decision making in PFAs	125	1.24	.653
Investment decision by PFAs is determined by the level of security of properties	125	3.03	.380
Social insecurity affects the level of investment decision by PFAs	125	2.78	.552
Under-development of Nigerian capital market is a major challenge to investment decision making by PFA managers	125	3.14	.680
Pension funds are invested in long term assets	125	3.18	.498

The descriptive statistics given in table 1, gives the mean and standard deviation of the sample population on each decision variable. The result shows evidence that return on investment and risk factors are rated higher than other variables that affect asset choice management of PFAs in Nigeria. This is indicated by 3.97, 3.94 in the mean value and 0.177 and 0.231 in the standard deviation as shown in table 1.

Table 2
Kaiser-Mayer-Olkin and Bartlett's Test of Sphericity

Kaiser-Meyer-Olkin Measure of Sampling Adequacy		.637
Bartlett's Test of Sphericity	Approx. Chi-Square	652.040
	df	153
	Sig.	.000

From table 2, the Kaiser-Mayer-Olkin measure of sample adequacy gives a value of 0.637. The KMO is close to 1 which represents a perfectly adequate sample and bartlett's test shows a chi-square of 652.040 and a significance level of 1percent i.e .000 which is an indication of the adequacy of the sample. The results from the two test instruments show that factor analysis can be used for the study.

Table 3
Communalities

	Initia	Extraction
Return on investment in PFAs facilitates further investment	1.000	.721
The inflationary rate in the economy affects the level of investment decision by the PFAs	1.000	.617
The income level in the economy determines investment decision by the PFAs	1.000	.709
The economic indicators such as per capital consumption influence investment decision in PFAs	1.000	.704
Interest rate is a determining factor in investment decision by PFA managers	1.000	.639
PFAs investment is based on high risk, high return	1.000	.754
PFA managers take into consideration risk elements in their investment decision	1.000	.693
Associated risk factor determines the level of investment decision by the PFAs	1.000	.693
Effective internal control and operations can help to determine the level of investment in PFAs	1.000	.686
Stringent government regulations affect investment decision by the PFAs	1.000	.654
Policy guidelines help to determine the conduct of PFAs in their investment decision	1.000	.546
Strong legal institution determines the level of investment risk taking by the PFAs	1.000	.709
The age of employees' is a determining factor in the investment decisions of PFAs	1.000	.756
Traditional beliefs can affect investment decision making in PFAs	1.000	.833
Investment decision by PFAs is determined by the level of security of properties	1.000	.789
Social insecurity affects the level of investment decision by PFAs	1.000	.799
Under-development of Nigerian capital market is a major challenge to investment decision making by PFA managers	1.000	.616
Pension funds are invested in long term assets	1.000	.814

Extraction Method: Principal Component Analysis.

Table 3 shows that the proportion of the variance of a variable is explained by common factor. The values are approximately 1, indicating that the communality common factor extracted explained all the variance in the variables.

Table 4
Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	5.172	28.733	28.733	5.172	28.733	28.733
2	3.823	21.239	49.972	3.823	21.239	49.972
3	2.821	15.672	65.644	2.821	15.672	65.644
4	1.218	6.767	72.412			
5	1.164	6.467	78.878			
6	.763	4.239	83.177			
7	.676	3.757	86.874			
8	.544	3.022	89.896			
9	.407	2.261	92.157			
10	.295	1.639	93.796			
11	.212	1.178	94.974			
12	.195	1.083	96.057			
13	.156	.867	96.924			
14	.114	.633	97.557			
15	.102	.576	98.124			
16	.085	.472	98.485			
17	.059	.328	98.718			
18	.036	.201	100.000			

Extraction Method: Principal Component Analysis.

The Eigen value of the factors is contained in table 4. The result shows that a maximum of three factors could be obtained, because the three initial Eigen values in column 2 are greater or equal to 1 and their extraction sums of squared loadings are also greater than 1. The general rule of factors analysis stipulates that only factor with Eigen value of 1 and above are considered meaningful for interpretation (Anthony and Mustapha, 2010).

Factor 1 has the highest extraction sum of square loading of 5.172, representing 28.73 percent of variation. And factor 3 has the least extraction sum of square loading of 2.821, representing 15.67 percent of our variation. This result shows that no factor is considered redundant. The extraction sums of square loadings of other factors are between the ranges 5.172 and 0.036. Also, the contributing power of the factors to the explanation of the variance in the variables is considered very significant.

Table 5
Factor Matrix

	Component		
	1	2	3
The economic indicators such as per capital consumption influence investment decision in PFAs	.718	.218	-.345
PFAs investment is based on high risk, high return	.717	-.335	.304
Traditional beliefs can affect investment decision making in PFAs	.703	-.270	.348
Pension funds are invested in long term assets	.518	.030	.068
Effective internal control and operations can help to determine the level of investment in PFAs	.421	.301	.042
Interest rate is a determining factor in investment decision by PFA managers	.296	-.293	.221
Under-development of Nigerian capital market is a major challenge to investment decision making by PFA managers	-.297	.650	.215
Social insecurity affects the level of investment decision by PFAs	-.232	.607	.226
Strong legal institution determines the level of investment risk taking by the PFAs	.374	.576	-.264
Investment decision by PFAs is determined by the level of security of properties	.193	.574	.479
Stringent government regulations affect investment decision by the PFAs	-.502	.503	-.046
The inflationary rate in the economy affects the level of investment decision by the PFAs	.312	.449	-.447
Policy guidelines help to determine the conduct of PFAs in their investment decision	.094	.194	.153
The income level in the economy determines investment decision by the PFAs	.420	.469	-.507
The age of employees' is a determining factor in the investment decisions of PFAs	.282	.417	.448
PFA managers take into consideration risk elements in their investment decision	-.320	.171	.413
Return on investment in PFAs facilitates further investment	-.114	-.110	-.279
Associated risk factor determines the level of investment decision by the PFAs	.257	.184	.263

Extraction Method: Principal Component Analysis. a. 3 components extracted.

Examination of table 5 indicates the following observations:

Factor 1

Variables 1, 2, 3, and 4, load heavily on factor 1 which accounts for about 28.73% of the total variance explained.

Factor 2

Variables 7, 8, 9, 10, and 11, load heavily on factor 2, which accounts for 21.24% of the total variance explained.

Factor 3

Variables 10, 15 and 16 correlate moderately with factor 3, and that account for 15.67% of the total variance explained.

Summary of the factors and their corresponding percentages of total variance explained are given below:

Factor 1	28.73%
Factor 2	21.24%
Factor 3	15.67%
Total	**65.64%**

Table 6
Rotated Factor Matrix

	Component		
	1	2	3
PFAs investment is based on high risk, high return	.821	.068	.201
Traditional beliefs can affect investment decision making in PFAs	.782	.066	.270
Stringent government regulations affect investment decision by the PFAs	-.696	-.012	.149
Under-development of Nigerian capital market is a major challenge to investment decision making by PFA managers	-.566	.025	.486
Social insecurity affects the level of investment decision by PFAs	-.488	.035	.483
Interest rate is a determining factor in investment decision by PFA managers	.454	-.110	.060
Pension funds are invested in long term assets	.394	.283	.198
The income level in the economy determines investment decision by the PFAs	-.082	.804	.010
The economic indicators such as per capital consumption influence investment decision in PFAs	.335	.753	.052
The inflationary rate in the economy affects the level of investment decision by the PFAs	-.138	.692	.016
Strong legal institution determines the level of investment risk taking by the PFAs	-.123	.682	.246
Effective internal control and operations can help to determine the level of investment in PFAs	.150	.380	.320
PFA managers take into consideration risk elements in their investment decision	-.249	-357	.336
Investment decision by PFAs is determined by the level of security of properties	-.084	.116	.758
The age of employees' is a determining factor in the investment decisions of PFAs	.080	.083	.691
Associated risk factor determines the level of investment decision by the PFAs	.148	.087	.374
Return on investment in PFAs facilitates further investment	-.087	.047	-.305
Policy guidelines help to determine the conduct of PFAs in their investment decision	-.009	.062	.257

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a. Rotation converged in 4 iterations.
Source: Field Survey, 2011

Table 6 gives the rotated component factor matrices. The result in table 6 revealed that rotation has made factor loadings more meaningful and interpretable, because it reduces the number of variables that have high loading on any given factor. This makes it easy to identify each variable to a single factor. However, it is important to note that only loadings greater than 0.5 were considered significant after varimax rotation in this research.

Factor 1

Two items had significant loading on factor 1 after varimax rotation, and they can be interpreted as risk factor. These include:

PFA investment is based on high risk, high return

Traditional beliefs can affect investment decision making in PFAs

Factor 2

A total of four variables loaded heavily under factor 2, and they can be interpreted as economic factor. These include:

The income level in the economy determines investment decision by the PFAs.

The economic indicators such as per capital consumption influence investment decision in PFAs.

The inflationary rate in the economy affects the level of investment decision by the PFAs.

Strong legal institution determines the level of investment risk taking by the PFAs.

Factor 3

Only two variables loaded heavily on factor 3, and this can be interpreted as security of real estate factor. These include:

Investment decision in PFAs is determined by the level of security of real estate properties.

The age of employee is a determining factor in the investment decision of PFAs.

CONCLUSIONS AND RECOMMENDATIONS

From the discussion of findings, it is clear that this research work has explored the importance of influence of factors on investment decisions in Nigerian PFAs. It has also demonstrated the extent to which economic, risk

and other qualitative factors determine the choice of asset allocations of PFAs.

The result of this research is also connected with a critical sector of Nigerian economy which needs a serious attention, therefore it is important to mention that this work would serve as an initial effort for further research in order to improve the development of a more comprehensive asset portfolio investment decision making by the PFA managers.

The research concluded that if Pencom would be a bit flexible in its regulatory restriction of investment areas of PFAs, it would enhance a better investment decision making process. This will also go a long way in determining the competence of the PFA mangers with regards to investment management, which will eventually boost their competitiveness.

Based on the conclusion the study proffers the following recommendations:

PFAs need to come up with a favourable investment policy; on this, three components need to be considered. These include: Defining an acceptable level of risk tolerance; Setting parameters for short-term asset allocation; Setting parameters for long-term performance.

PFAs should maintain a fair balance between returns on investment and the pension risks i.e. they should ensure that all investment decisions are made in the best interest of their contributors; diversification of investments, maturity matching etc.

Pencom should continue to develop favourable investment and valuation guide lines, and to ensure compliance as well as taking prompt corrective actions where necessary. However, Pencom should allow fund managers some flexible on asset allocation so that they can create optimum portfolio mix and get rewarded for intelligent risk taking; as good as regulatory restrictions on asset allocation might be, it has the tendency of inhibiting growth as it prevents creativity and innovative thinking on the part of the fund manager.

PFAs should also use reward structure to ensure accountability. This will ensure that those making investment decisions are held responsible: good judgments and good performances should be rewarded, while poor judgments and bad results should be penalized.

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