

Analytical Review of the Pension System in Nigeria

- A paper presented at the National Conference on the Implementation of the Pension Reform

by *Olurotimi Okpaise B.Sc, ASA, FIA*
April 19, 2009

 **H R Nigeria Limited**
Consultants and Actuaries

A member of Abelica Global

Agenda

- A Brief General Background
- Some Pre Act Observations
- Some Post Act Observations
- Some Suggestions for the Future

 **H R Nigeria Limited**
Consultants and Actuaries

A member of Abelica Global

Brief Background - Population Census

2006 population census

Males	71.7million
Females	68.3million
Total	140.0million

Population distribution from 1991 census

0 – 9 yrs	32.4%
10 – 24yrs	31.6%
25 – 65yrs	32.6%
Over 65yrs	3.4%

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Pre Act Observations - Public Sector

- Significant Unfunded FGN Pension and Gratuity obligations – some estimates exceeded N250billion.
- Benefits met on a PAYG basis – significant pension and gratuity arrears.
- The system did not deliver financial security in retirement.

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Pre Act Observations – Private Sector

- Funded Provident Funds – DC, basic salary based
- Pension Arrangements (mainly 1st generation banks and oil companies)
- Unfunded structured Gratuity Arrangements
- No structured exit benefits - Ex Gratia payment – SME's
- NSITF

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Pre Act – Private Sector contd.....

Funded Provident – benefit level moderate

Example 25% ABS - 450% TE after 25yrs service
- 250%TE after 15 yrs service ABS assumed to be 70% TE

Provident Benefits were paid as LS to individuals at exit.

Individuals with a series of careers (with different employers) retired with low benefits: accumulations with the last employer.

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Funding Levels Pre Pension Act

Funding levels in pension schemes was low pre Act as indicated from the combined data for 7 pension schemes below.

	N'000
Accrued Pension Liability	67,406,504
Value of Assets Available	30,517,902
Funding Level	45%

In practice timely pension payments depended on the continued good financial standing of the companies.

Equity - different generation of employees - deficit funding.

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Some Impacts of the Act

I briefly discuss some significant changes brought about by the Act:

- Funding (concept)
- Investible Funds
- Protection to those changing jobs

I will also comment on returns to contributors and the adequacy of the contribution rate.

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

New Funding Requirement

Benefits are now fully funded for, as they accrue.

- Pension contributions now have to be met as when due
- CPFAs have to be fully funded. Companies who continue to manage their pension payments have to give a written undertaking to meet pensions as they fall due.

Assets held by PFC at arms length to both the employer and PFA

- hence improved financial security – post employment

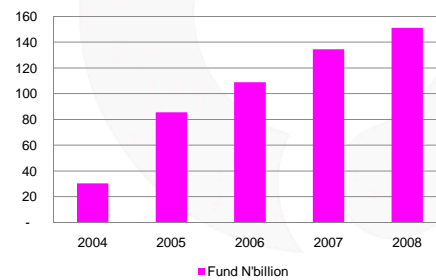
A member of Abelica Global

H R Nigeria Limited
Consultants and Actuaries

Increased Investible Funds

Combined Data of 7 CPFAs

Year Ended	Fund N'billion
2004	31
2005	86
2006	109
2007	135
2008	151
Average Growth Rate	48.6% p.a

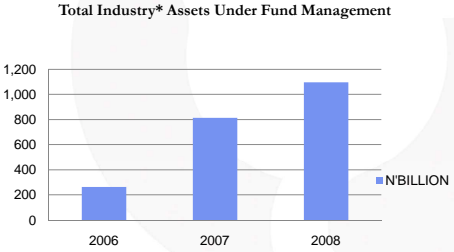


A member of Abelica Global

H R Nigeria Limited
Consultants and Actuaries

Increased Investible Funds

Year	N'billion
2006	265
2007	815
2008	1,099
Average Growth rate	103.6%p.a



* PFA + CPFA

A member of Abelica Global

H R Nigeria Limited
 Consultants and Actuaries

- There clearly has been a significant increase in available investible funds.
- Should compliance levels increase and, salaries maintain their real values, one would expect – in the short term – that new pension contributions and the total asset base will increase at a pace exceeding inflation.

A member of Abelica Global

H R Nigeria Limited
 Consultants and Actuaries

Increased Retirement Benefit for Mobile Workers

We compare below the benefits that may emerge at retirement pre and post the Act for a person with 25years working life who changed jobs 10years to retirement.

	Pre Act	Post Act
Benefit at Retirement as a % of Exit Pay	160%	440%

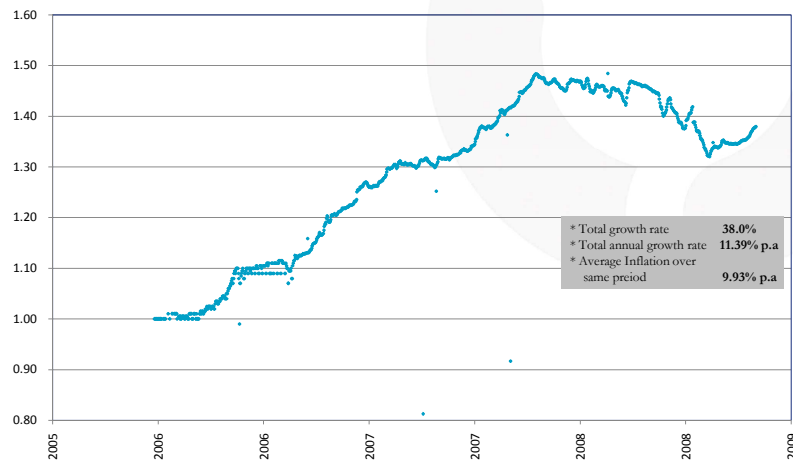
A member of Abelica Global

H R Nigeria Limited
Consultants and Actuaries

Sample Trend of Unit Prices

Daily Composite Unit Prices

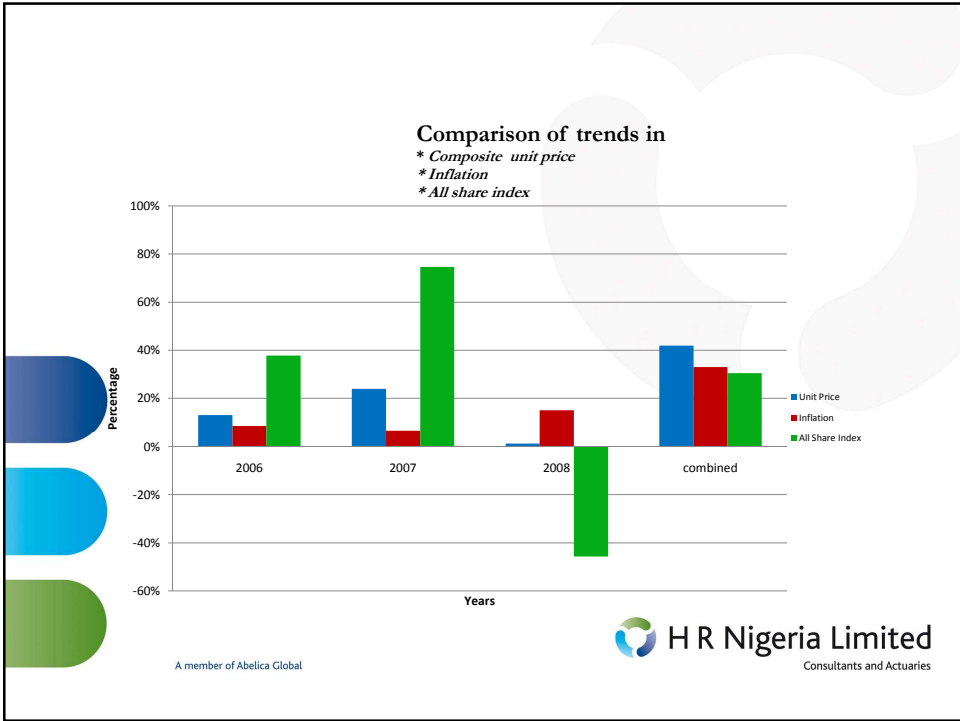
March 17, 2006 - April 30, 2009



* Total growth rate 38.0%
* Total annual growth rate 11.39% p.a
* Average Inflation over same period 9.93% p.a

A member of Abelica Global

H R Nigeria Limited
Consultants and Actuaries




Adequacy of 'Standard' Contribution Rates

The 'standard' combined contribution rate of 15% *ATE* in my view is ***broadly*** adequate for providing a reasonable pension at retirement.

I, however, discuss some potential issues below especially if;

- future pension increases are contemplated (or if high inflation persists)
- the contributory salary is a low fraction of total pay

A member of Abelica Global


H R Nigeria Limited
 Consultants and Actuaries

Projections

- ✓ 30 year old at entry
- ✓ Salary increases -2%p.a
 0%p.a
 +2%p.a
 +5%p.a
- ✓ PFA investment returns +3%
- ✓ Project benefits to age 55 & 60 – lump sum and annuity percentage exit pay
- ✓ Allow for pension increases at 10% p.a. (inflation)
- ✓ Assume ATE is 70% total pay

 **H R Nigeria Limited**
Consultants and Actuaries

A member of Abelica Global

Benefit as a % of Exit Pay

Summary of Projection								
Salary Increase Rate	8%	10%	12%	15%				
Inflation	10%	10%	10%	10%				
Real Rate	-2%	0%	2%	5%				
Investment Return:	13.0%							
Benefit as a % of Exit Pay								
Age	Lumpsum	Annuity	Lumpsum	Annuity	Lumpsum	Annuity	Lumpsum	Annuity
55	721%	80.11%	559%	62.11%	443%	49.22%	324%	36.00%
60	991%	123.875%	724%	90.50%	544%	68.00%	374%	46.75%

 **H R Nigeria Limited**
Consultants and Actuaries

A member of Abelica Global

Benefit as a % of Exit Pay

Summary of Projection allowing for pension increase of 10% per annum								
Salary Increase Rate per annum:	8%	10%	12%	15%				
Inflation	10%	10%	10%	10%				
Real Rate per annum	-2%	0%	2%	5%				
Investment Return rate per annum	13.0%							
Benefit as a % of Exit Pay								
Age	Flat Annuity	Annuity - 10% Increase	Flat Annuity	Annuity - 10% Increase	Flat Annuity	Annuity - 10% Increase	Flat Annuity	Annuity - 10% Increase
55	80.11%	36.05%	62.11%	27.95%	49.22%	22.15%	36%	16.20%
60	123.875%	58.29%	90.5%	42.588%	68%	32.00%	46.75%	22.00%

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

From the above it is obvious that a persistent high level of inflation will erode the value of pension in retirement. Hence it is advisable for individuals to review their contribution rates as they get closer to retirement to explore what ‘top-up’ contributions they need to make in order to secure an adequate retirement income. Financial Planners – will be able to provide necessary advice.

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Suggested Future Considerations

- Minimum Guaranteed Return on Contributions
- Multiple Funds
- Scope of Cover
- Risk Based Contingency Reserve

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Minimum Guaranteed Return

The current approach on allowable investments connotes conservatism – each PFA has a pooled fund, which in practice will mainly be FGN bonds and highly rated money market instruments.

This conservatism is, one presumes, because the regulator intends protecting the contributors.

Should this be the case, then I propose, we go a step further, and give contributors an explicit guarantee of capital protection i.e. minimum nil% p.a. return.

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Multiple Funds

Going the other extreme, the current approach does not allow the individual to demonstrate their risk preference.

A 25 year old may for instance be more willing to take on investment risk (e.g. equity) than a 50 year old.

Hence I suggest PFAs be allowed to manage more than one fund with members choosing investment offerings reflecting their preferences.

This, I believe will in the long term promote a better expression of investment management capabilities to the benefit of the contributors.

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Multiple Funds contd....

The published objectives/strategies of these Funds together with performance will provide contributors with more awareness for choice. Examples of available Fund in a PFA could be:

- Capital Guaranteed Managed Fund
- Equity Fund
- Fixed Interest Fund
- Managed Fund
- Property Linked Funds etc

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Scope of Cover

The National Bureau of statistics indicates that over 70% of the working population are self employed.

My view is that compliance/awareness programmes have so far focused on the main formal sector.

I believe that the level of confidence in our Pension Arrangement - especially from the perspectives of capability, transparency and financial security is sufficiently high to actively expand the Act to the informal sector – especially the Self Employed.

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Lastly, I propose PFAs and CPFAs maintain **risk based contingency reserves** consistent with relevant stated objectives.

Such reserves could be linked to the following risks:

Market Risk	Longetivity Risk
Credit Risk	Interest Risk
Liquidity Risk	Operational Risk

Examples of stated objectives are:

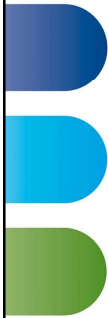
PFA: capital preservation

CPFA: 100% solvency at all times

A member of Abelica Global

 **H R Nigeria Limited**
Consultants and Actuaries

Thank you for your attention



A member of Abelica Global

