Matters arising from the Introduction of the Defined Contributory Pension Scheme in Nigeria— A Policy Proposal

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I. Introduction

The pristine pension system relied on children to provide the consumption needs of their parents, when such parents became incapable of producing goods and services due to old age or some other reasons. The system served medieval societies efficiently well until the end of the Stone Age. With the emergence of the industrial society, the administration of pension assumed a formal dimension as an instrument of public policy for which government and employers of labour became responsible for defining associated benefits to beneficiaries and society at large. The catchword for the pension system became the *defined benefits (DB) pension scheme or pay-as-you-go (PAYG)*. Thus, government, employers and employees became the core stakeholders of the pension system unlike the aboriginal scheme that relied on children and parents as the core stakeholders.

Either private or public sector, DB scheme could be funded or unfunded but operationally, they are linked to employee terminal emoluments and years of service. The earliest recorded DB scheme is that of Germany in 1889. The DB scheme served their purpose very well until they recently became unsustainable due to demographic changes and fiscal imbalance that imposed financing difficulties. In some developing countries, the un-sustainability is largely as a result of constraints of financing outstanding pension obligations. In Nigeria for instance, the outstanding public sector pension obligations stood at N2 trillion in 2004. The figure represents 23% of Nigeria's GDP at current market prices compared to 14% for Italy in 2003.

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The identified difficulties associated with the operations of the DB schemes compelled the need for reforms of the pension system by tinkering with existing schemes of DB pension or introducing entirely new ones such as the *defined contributory (DC) pension scheme* pioneered by Chile. Although the body of literature on pension system seems to be exclusively devoted to DB schemes, the scant literature about the DC schemes and its resounding success in Chile paint a picture of success and potentials that will relief the difficulties experienced with the DB pension schemes. The synopsis of DC pension seems to have been inspired by the philosophy of privatization/commercialization as well as the pristine pension system that relied on children.

In line with global trends in pension reforms as well as stark domestic realities, Nigeria introduced the operation of the DC pension scheme on 1st July 2004. The pension reform is an integral part of an overall public policy reforms that seek to achieve sustainable economic growth and social welfare in Nigeria. In this regard, the main thrust of the paper is to examine some salient features of the defined contributory pension scheme and their welfare implications to retirees. In welfare terms, the key questions for public policy are thus 'is the defined contributory pension scheme Pareto optimal?' 'Who amongst the identified core stakeholders of modern society pension system will be hurt most?'

In what follows, an overview of the defined contributory pension scheme is carried out in section 2, while country-specific experiences with the defined contributory pension scheme is reviewed in section 3. Issues of public policy on the defined contributory pension scheme are explored in section 4. Finally, section 5 contains the concluding remarks of the paper.

II. An Overview of the Defined Contributory Pension Scheme

The synopsis of pension is all about the need to smoothen the distribution of consumption expenditure of a citizen over a life span. Pension systems, which have been with mankind from creation, constitute the mechanism for the smoothening of a citizen's lifetime consumption and are, therefore, safeguards against destitution when a citizen is no longer capable of producing goods and services to meet his/her needs due to either old age or some other reasons.

The defined contributory pension scheme requires both the employer and the employee to jointly fund an account in the name of the employee towards fending for the employee in retirement. Both parties base the funding on a fixed rate of contribution. The funds so accumulated together with income generated thereon during years of active labour service by the employee constitute his/her pension assets. At retirement, such assets become an annuity over the lifespan of the retiree.

A retiree may be entitled to withdraw a certain percentage of such assets lump sum. Thereafter, the balance will continue to be invested while the employee conterminously draws out of the fund based on some programmed schedule to finance his consumption needs in retirement. Typically, pension assets under the DC scheme are protected by law from any form of infringement, such as those arising from court processes such as lien.

One of the tangible dividends of the defined contributory pension scheme is that it allows pension asset owners to make decisive input in the growth of the value of their pension asset and its eventual perpetuation. Furthermore, an intangible benefit of the scheme lies in the portability of pension rights and their inherent capacity to free the intrinsic feelings of labour from the often heard emotional concerns of remaining “fixed” in the employment of an enterprise because of the stability and certainty of payments of pension benefits during the lifespan of retirement.

Another major benefit of the scheme is that it builds up a pool of resources that foster individual and economy-wide prosperity within the paradigm of Franco Modigliani’s life-cycle income hypothesis. Further more, pensions as a component of transfer payments in aggregate government expenditure will cease. And within the ambit of Say’s law productive active labour will bring forth its own retirement income on a concurrent basis. This contrasts with the DB scheme where the payment of pension income of retirees depended on the active labour force.

Pension assets under the DC schemes are bequeathals to heirs. The existence of mature capital markets with high fiduciary standards and transparency enhance the effectiveness of DC pension schemes. The coverage and application of DC pension schemes are versatile. The scheme may not necessarily be uniformly applied by employers in either the public or private sector, but the coverage could be extended to both employees and the self-employed in the formal and /or informal jobs. Per se, the scheme imposes no retirement age on employees. The DC pension scheme builds up long-term investment funds and their assets are portable.

III. Country-Specific Experience

Generally, Chile pioneered the defined contributory pension scheme in 1980 to salvage its DB pension schemes. The Chilean scheme was made compulsory for all full time workers in the country. It requires workers to pay 10% of their annual income into a retirement savings account, with full ownership and control. As at 2003, the scheme proved widely acceptable that 5.6 million Chileans, instead of the targeted 3 million full time workers, were operating the scheme.

The widespread acceptance of the DC pension scheme in Chile spurred other Latin American Countries to introduce it with varying degree of coverage. Mexico and Bolivia introduced the scheme in 1997, while El Salvador followed suit in 1998. Similarly USA, UK, Japan, Nigeria and other OECD countries experiencing fiscal imbalance in sustaining their DB pension schemes have introduced DC pension schemes tailored to their local peculiarities.

In the US, the participation rate of full time workers in the DC pension schemes increased from 45% to 57% between 1988 and 1997. Amongst full time workers in medium and large companies, the rate increased from 43% in 1993 to 55% in 1997. In the UK, the DC pension schemes are very popular amongst younger generation of workers. Overall, the buzzword in pension reforms in most countries is the introduction of DC pension schemes to either replace existing DB pension schemes or be juxtaposed with them.

IV. Issues of Public Policy

For the purpose of analysis, pension system stakeholders are categorized into three core groups as a basis for evaluating the policy thrust of DC pension scheme against a Pareto optimal condition, viz: government, employers and employees compared to the aboriginal family pension scheme that relied on children and parents as stakeholders.

Conceptually, a Pareto optimal condition of welfare exists when a change in public policy improves the welfare of target citizens without making anyone or group worse off. The Pareto optimal condition was espoused in 1895 by Vilfredo Pareto, an Italian Economist, as a yardstick for gauging the impact of public policy on societal welfare.

Under the family and the DB pension schemes, an intergenerational symbiosis exists between children and parents as well as between employees and government-cum-employers. Parents work during their active labour years to raise children, who will in turn work to provide sustenance for the parents when such parents can no longer engage in labour service due to old age/infirmity. Similarly, under the DB schemes, employees work to 'raise' and sustain a corporation as a going-concern during their active labour years. In retirement, the corporation sustains the retirees by paying pension, as is the case with DB schemes. Thus, in operational terms, the DB pension scheme as an instrument of public policy is a translation of the informal family pension scheme to a formal level that reflects and accommodates the exigencies of an industrial society. Hence, in Pareto terms, the DB pension scheme did not alter the welfare standard of pensioners, either as parents or retirees. It could, therefore, be safely concluded that DB pension scheme, as a replacement of the family pension scheme is Pareto optimal.

It is worthy of note that the family pension schemes are still operational without glitches. They offer comparable schemes akin to those of the DB and DC pensions. The objective function of both schemes is to secure and adequately provide for the welfare of citizens in retirement lifespan.

On the contrary, under the DC pension scheme, a retiree shoulders the full burden of the pension system. The identified symbiosis between employees and government-cum-employers is shrugged off. The ability of a holder of pension asset to exercise a decisive role in growing his pension asset carries with it an embedded risk that could be termed the Achilles' heel of the new scheme. The risk could crystallize in the form of pension asset shrinkage and/or loss. The likelihood constitutes a major burden associated with the DC pension schemes.

A pension asset can shrink when a component of a diversified portfolio is totally lost to enterprise collapse or market failure. The former energy giant in the USA, Enron, and Savannah Bank of Nigeria Plc in Nigeria are cases that typify the possibility of shrinkage of even the most diversified pension asset portfolio. In the extreme, a gullible pension asset holder who invests his asset in a single portfolio, such as in any of the cases cited above, would suffer a total loss.

Either way, the incidence of pension asset shrinkage and/or loss is burdensome and increases as the age of the holder advances. In very advanced age, such an incidence will place enormous strains on a retiree, as the traditional fallback on bonds of primordial family pension schemes may have been eroded and/or weakened by the ruthlessness of the logic of market forces and the attendant enthroning of individualism.

The objective function of pension schemes is to safeguard the economic welfare of a citizen in retirement lifespan. The DB scheme, which defined fixed pension benefits, guaranteed the certainty of fulfilling that objective, particularly for adequatelt funded schemes. The fixed sum pension asset may loose transactional value or purchasing power over time in the lifespan of a retiree, but its instrumental utility to an aging retiree with a declining profile of needs is enormous.

The loss of value inherent in the DB pension schemes is often ameliorated by periodic upward reviews of the fixed sum pension benefit by government. For instance, the DB pension of £3 per month in 1967 rose to N35,000 in 2005. A

similar case exists for retirees that are reckoned to be collecting pension for over 30 years. Comparatively, the DC pension scheme obviously empowers the pension asset holder to grow the value of the asset but has conterminously staked such empowerment on the likelihood of shrinkage and/or loss of asset. Thus in economic welfare terms, the DC pension scheme is not Pareto optimal, as a retiree will continuously face the challenges of a likely slump in his welfare due to a probable shrinkage and/or loss of pension asset.
One way to mitigate the likelihood of a shrinkage and/or loss of pension asset is for public policy to institute a compensatory fund that will redeem proven cases of pension asset shrinkage and/or loss. The objective is to ensure that the pension assets of a retiree do not suffer debilitating leakages during retirement lifespan. This will safeguard the assets and guarantee to the holder the certainty of the asset as in the DB scheme. The whole essence of a compensatory scheme being advocated by this paper is to put at bay, grief from retirement lifespan.

In both the US and UK, similar arrangement exists to safeguard and guarantee the certainty of pension assets of retirees. In US, the Pension Benefit Guaranty Corporation (PBGC) operates as a quasi-government enterprise to insure pension assets under the DB scheme. In UK, the Pension Protection Fund (PPF) directly provides compensation to retirees. The US arrangement is based on an insurance scheme, while the UK arrangement is a government enterprise that deals directly and based on compensatory payments to retirees.

The kernel of a pension asset compensatory fund is compassion and moral underpinnings borne out of reparative inklings. This is quite unlike the case with an insurance scheme, which as a commercial venture is primarily driven and sustained by profit motives. Besides, an insurance scheme will require asset holders to pay insurance premiums. Obviously, such payments would constitute debilitating leakages of pension assets and, therefore, be an additional burden on pensioners. The option to insure pension assets as a guarantee against the likelihood of shrinkage and/or loss is not consistent with a Pareto optimal condition.

Another major policy issue that makes the DC pension scheme sub-optimal is that its 'sign-on' effectively triggers a reduction in the welfare of an employee by reducing the disposable income of an employee. The requirement that an employee jointly contributes to the funding of his retirement savings account is effected from employee payroll by check off. Yet, the employee still has to pay tax, which was applied under DB scheme to finance pensions. Therefore, the check-off from employee payroll for tax, in addition to retirement savings, constitutes the magnitude of reduction from employee disposable income. The component of deduction for retirement savings is new to the employee and, therefore, constitutes a burden that reduces his current welfare. The component of deduction for tax is not new per se, but was often the source of government revenue for pension payments [or transfer payments]. Since the DC pension scheme requires an employee to fend for his pension upfront, the continued payment of PAYE tax by employees deserves review.

One option is to make contribution for retirement savings tax deductible. Another is to convert the tax deductions to contributions for an increased level of retirement savings. On the other hand, employees are allowed to enjoy a clean pay by abrogating PAYE tax. In essence, the burden of tax as an instrument of fiscal policy will be borne by employers alone who are the second pillar of the identified pension system core stakeholders.

On the basis of the forgoing analysis, the introduction of DC pension scheme in Nigeria will hurt employees the most out of the three identified core stakeholders of a pension system. The symbiosis that exists between the stakeholders under the DB pension scheme is stripped off. Under the DC pension scheme, the pensioner alone as the third core stakeholder of the pension system bears the burden of the likelihood of shrinkage and/or loss of his pension asset.

As a corollary, a DC pension asset is a bequeathal, and so is potentially encrusted with transferable rights and can, thus, be held on a hereditable basis depending on the extent of its perpetuation by successive holders. This dimension, though latent, is apparent and does not seem to have been factored into the scheme despite the fact that the scheme began 1st July 2004. The DB pension scheme operated with in-built mechanism that automatically extinguished the claim to pension by heirs, and was, thus, clearly stripped of any form of transferability and the possibility of bequeath. The hereditability of the DC pension scheme poses the challenge of dealing with the rights and the attendant claims of heirs, especially rancorous ones. The propensity of rancorous heirs to extinguish a pension asset by immediate consumption may, in aggregate terms, trigger agitations that might precipitate a possible loss of confidence in the system, and the attendant undermining of its effectiveness.

The flip side of a pension asset transcending into a bequeathal is one in which the retiree, due to longevity, outlives his asset. This possibility, which is non-existent under the DB scheme, is eminently real because draw down of pension asset is based on some planned profile at the time of retirement. Yet, neither the planner nor the plan mechanism has the capability of factoring a retiree's actual lifespan with a limiting precision. In the long run, the idea that matters is that a retiree's actual lifespan is a crystallized position that is not amenable to planned draw down of pension asset at the time of retirement. Thus, whether a pension asset becomes a bequeathal or not is a threshold position that seems uncontrollable by any logic.

A sound legal framework that is capable of striking a balance between cultural cleavages and the exigencies of an industrial society need to be crafted to deal decisively with issues relating to hereditability of pension assets. Beyond its theoretical abstraction, the longevity of a pension asset holder poses no daunting challenge. At such an advanced stage in life, age will necessarily impose on the retiree a significantly small profile of needs. As a result, cases of longevity risk that crystallized should be dealt with on merit and treated under a government social security system designed for it and other deserving related cases.

V. Concluding Remarks

Overall, the benefits of DC pension scheme form the crux of the pension reforms in Nigeria. As the economic manager and, indeed, the institutional capacity builder of the economy, the CBN should once more rise to the challenge of paving the way under the DC pension scheme. This will inspire confidence in the pension system and also smoothen out the identified issues that constitute one of the reasons making employees apprehensive about the workable benefits of the DC pension. Besides, it seems that the likelihood of pension asset shrinkage and/or loss does not get adequate mention in public discussions. As a result, in groping for a safe kerb, most employees that operated a funded scheme in the DB scheme tend to unnecessarily clamor for a closed scheme under the new system.

Under the DC pension scheme, a closed pension scheme only vouches for the institutional integrity of the pension asset custodian as well as the administrator, but does not vitiate the identified likelihood of shrinkage and/or loss of pension assets. Neither does it rouse a countervailing ameliorative measure such as the proposed compensatory fund being advocated in this paper.

Since the holder of a pension asset would not know the precise length of a retirement lifespan, it is not likely that asset drawn down will be structured to a zero level such that it matches the limiting date of retirement lifespan. On *a priori*, a net positive balance of a pension asset under the DB scheme will be a bequeathal. The DC scheme is new in Nigeria but some countries have operated it for a period that is reasonably long enough to lend itself to evaluation against the welfare objective of public policy. The outcome of such evaluation will enrich the operations of the scheme in Nigeria.