LIFE, DEATH AND MONEY

Delivered by

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ABSTRACT

We seem to be living longer and looking better than our fathers and mothers did and yet the life expectancy of a Nigerian (in 2002) is under 52 years. What is responsible for this apparent paradox?

In the United Kingdom, life expectancy in 1901 was only 46 years for males but by 2001, it had risen to 76 years; the corresponding figures for females were 50 and 81...

By the year 2030 will it be a compulsory requirement in Nigerian churches and marriage registries that the genetic profiles of intending couples be filed with the church before it undertakes to perform the wedding ceremony?

Hearing loss begins at about age 50 and continues throughout life...

Most internal functions of the body peak shortly before the age of 30 and then decline continuously throughout life; by the age of 90 the kidney, which is responsible for eliminating impurities, is functioning at less than half its initial capacity...

The ancient Chinese kings were reputed to have devised for themselves a unique but brutal form of health insurance. What was it?

In 1996, Chinas Peoples Congress found it necessary to pass a law that required children to support their elderly parents...

In Japan, only 57 percent of older people expect care-giving support from their families if they become ill in old age; moreover, among the younger people, only 40 percent expect that they will get that kind of support when it comes to their turn.

The above are among the matters that will feature in my lecture.

The first part of the lecture discusses the length of human life, its recent history and the prospects of future increases. I then go on to discuss some of the major financial decisions that an individual faces in the course of adult life: marriage, housing, health, expenditure on other persons, making provision for the last years of life (retirement), and how they are affected by the changing roles of governments.

INTRODUCTION

To be invited to deliver the annual reunion lecture of the old boys' association of our school is, I consider, especial honour and for this I am grateful to the President, the national executive and the Abuja Branch of the Association. I entered the school, at Field House, on the 7th day of September, 1956 as our school year began in September in those days.

There were forty-eight of us, of whom forty-two are alive today, a survival rate of seven out of every eight, or 87.5 percent over a period of forty-nine years. Within the time available, I was unable to confirm precisely how many of the eighteen who joined us for the Higher School Certificate course in January 1962 are still alive. I salute the memory of my departed mates; may the elements continue to be kind them wherever they are. If the 1956 set continue to hold together another year, then we will have equaled the performance of the class set immediately ahead of us who celebrated the 50th anniversary of their entry last month. Out of forty-eight of them that entered in September 1955, forty-two are still alive.

I am glad to inform you, ladies and gentlemen, that if an insurance company had written a policy on our lives, on how many of us would be alive today, that company will have made a profit. What is more exciting is that our survival experience has even been better than the survival assumptions which United Kingdom companies were using for life insurance policy holders of our age and generation in that country. Therefore, even a U.K. life insurer would have made a profit on the insurance, although the profit would have been greater if the insurance had been on those living in the United Kingdom.

If the 1955 set continue to do as well as they have done, then at least twenty-nine of them should be alive for the 60th anniversary of their entry in 2015 and 11 for the 70th in 2025, when the average age of that class will be about eighty-four. There may well be large deviations from these projected figures, since the assumptions used are strictly applicable to large populations only. Nevertheless, it will be interesting if some of us within these walls today and who will still be around remember to check the figures when the time comes. Obviously, if I am, I will.

LIFE EXPECTANCY

The estimated life expectancy at birth of Nigerians *for* the year 2002 is 51.6 years and 51 years for 2003.

Many Nigerians are not only alarmed by these figures but may also be quick to use them as conclusive evidence that “life is short” here or that “things are *not* getting better”, particularly when the figures are compared with the latest (2004) ones in other places such as Western Europe and USA (above 78), China (72), India (64) and present global average (63).

It is interesting to note that by far the greatest increase in life expectancy in Europe occurred only over the last century or so, as the figures for England and Wales in Table I below:

Table I: Life Expectancy in England & Wales

	Years
16th Century	About 33
1800	About 37
1901	48 [(46(m); 50(f)]
2001	78.5[76(m); 81(f)]

Source: Reference (4) and (5)

The percentages of births for the same population expected to attain age 65 from birth have greatly increased during the 20th century as shown in Table II.

Table II Percentage expected to attain age 65 from birth in England and Wales

	1901	2001
Males	160	less than 10
Females	130	less than 10

Source: Reference (5)

In practically all countries, there has been substantial improvement in longevity at all ages over the last century, but the greatest improvements have been at the youngest ages.

<u>Table Ill: No. of deaths in First year out of 1,000 live births in England and Wales</u>

	1901	2001
Males	36%	83%
Females	46%	89%

source: Reference (5)

The most important factor that led to the reduction in mortality during the century was the conquest of infectious diseases, especially the development and wide use of vaccines and antibiotics.

Earlier, diseases such as tuberculosis, typhoid, measles, scarlet fever, and diptera had been major killers of children and young adults.

In particular, during the period between 1901 and 1910, almost half of all deaths recorded at each age between 0 and 44 years in England and Wales had been caused by infectious diseases. Because of the sharp reduction in deaths from infectious diseases, life expectancy at birth increased to 66.4 years by the middle of the century, an increase of almost 18 years above the figure at the beginning.

During the second half of the century, the greatest relative improvements in survival rates were at the older ages.

This has been particularly so since 1970, when survival rates have been increasing at all ages above 45.

Let us leave Europe for a while and return home. Table IV shows the estimated infant mortality rates for Nigerians for each of the years 2001 to 2003, and also for 1960, the year of independence from colonial rule.

Table IV: No of deaths in first year out of 1,000 live births in Nigeria by year of measurement

Year	No. Of death in first year out of 1,000
1960	165[3]
1970	120[2]
1990	114[2]
2001	110[2]
2002	110[2]
2003	98[3]

Although Nigeria is making some progress in this area, the extent to which the country is still far behind the rest of the world is demonstrated by Table IV which gives the infant mortality figures for Nigeria and some 23 other countries for year 2001.

The table shows how far Nigeria and black Africa are behind the rest of mankind in reducing infant mortality. Many Nigerians will be disturbed that Ghana's infant mortality rate is only about half our own; amused that our immediate neighbours are doing as poorly as we are or worse; surprised, but perhaps not surprised, that United Arab Emirates is close to European standards; curious that the rate for India is about double that of China; and amazed that countries such as Japan and Norway have practically eliminated death of infants in the first year of life. Actually, the remaining deaths in those two countries come mainly from among premature babies within the first four weeks of delivery.

The life expectancy of a population is particularly influenced by its mortality rates in infancy and youth. For example, if the infant (first year) rates for Nigeria shown in Table IV could be reduced by half, that alone would increase the country's life expectancy by about three years even if there was no change at any other age; or if, by some magic, the rate could be reduced immediately to that of U.K/U.S.A. where only six die out of every 1,000, Nigeria's life expectancy would be increased by about 7 years. If the improvements were to take place beyond the first year of life to the first five years of life, the increase in life expectancy would be even more in each case.

As in other human development indices, there is variation in infant and childhood mortality rate between Nigeria's six zones, also between urban and rural areas. For the year 2003, for which more detailed figures are readily available, the number of deaths per 1,000 live births in the first year of life for the whole country was 100, but while the urban rate was only 81 per thousand, the rural rate was 121 per thousand.

Thus, the rural rate was 50% higher than the urban rate. Moreover, the experience per zone is shown in Table IV (first column) from which it will be seen that the South-East had the lowest rate, followed closely by the South-West, while the North-East had the highest. The second column of the same table shows the under-5 mortality rate by zone, which is the number of children's deaths in the first 5 years out of 1,000 live births.

Table 2.11 No of deaths in first year out of 1,000 lives births in year 2001 for some countries.

Japan	3
Norway	4
United Kingdom	6
United States	7
United Arab Emirates	8
Malaysia	8
Libya	16
Russian Federation	18
Saudi Arabia	23
China	31

Indonesia	33
Egypt	35
South Africa	56
Ghana	57
Kenya	63
India	67
Botswana	80
Benin	94
Cote d’Ivoire	102
Tanzania	104
Nigeria	110
Chad	117
Mozambique	125
Niger	56

sources: Reference (2)

Furthermore, although Nigeria's mortality rates at most adult ages are also probably generally higher than what is found in those countries that have higher life expectancies. Nigeria's life expectancy will not increase significantly until infant and youth mortality is greatly reduced. From what I have been saying, we can begin to understand why Nigeria's life expectancy is still around 51 years even though we seem to be living longer than our fathers and mothers. It is interesting to compare family size with infant mortality. For this purpose, let us take a look at the "total fertility rate per woman" which is the number of children that is born per woman during her child-bearing years. Table VII shows the infant mortality rate and the total fertility rate for each of the countries listed there.

<u>Table VII Breakdown by zone of Nigeria's Infant and under - 5 mortality.</u>

Zone	No. of children dying in first year out of 1,000 lives births.	No. of children dying Within 5 years out of 1,000 lives births.
South-West	69	113
South-East	66	103
South-South	120	176
North-West	114	269
North-East	125	260
North-Central	103	165
National	100	201

Source: Reference (8)

It will be seen that there appears to exist a strong, direct relationship between infant mortality and total fertility per woman, that is, between the rate at which children die in their first year of life and how large the family size is. On the whole, it is those countries that have the smallest family size which also have the lowest infant mortality rate and vice versa. To make the picture clearer, I have shown the above figures in the form of a graph in Graph A.

In any case, simple reasoning suggests that if the number of new babies reduces, then the resources available for the good health and sustenance for the fewer babies will be higher and their survival rate will be higher. There are, of course, other factors involved such as the health of the mother and the quality of the general economic and socio-cultural environment of the child. The need to reduce sharply Nigeria's rate of breeding to "international levels" is urgent if her life expectancy is to rise to international levels. It is a minimum requirement for rapid economic advancement. China and India would have not have achieved the progress they made in the last 20 years if these countries had not taken steps to reduce the rates at which children were born.

As the poor are almost invariably the children of the poor; as the poor exist in much greater numbers than the unpoor; as the average family size of the poor is higher than that of the rest of the society, the main task ahead of Nigeria will be how to convince, cajole and, as a last resort, compel, through market and related mechanisms, those who cannot afford to raise many children to stop producing them. This will not be easy, considering the religious and cultural proclivities of the people and the high level of illiteracy. But it has to be done.

There is, of course, the other view that the reduction in the number of children conceived in the more advanced countries is caused by the fact that the financial and social burden of child rearing has become so high as to make it unattractive to have many children. Moreover, very low rates of birth could result in an inadequate supply of a future working adult population that will be necessary to support the entire (aging) population. However, this problem is being addressed by the affected countries through controlled immigration, longer working years and globalisation of the workforce which outsources some types of jobs to countries which have large pools of inexpensive young workers.

Table VIII. Total number of children born per woman during her childbearing years versus number of deaths in the first year of life per 1,000 live births.

	Infant deaths per 1000 live births	Total No. of births per woman during her child-bearing years
Japan	3	1.3
Norway	4	1.8
United Kingdom	6	1.6
United States	7	2.1
United Arab Emirates	8	2.8
Malaysia	8	2.9
Libya	16	3.0
Russian Federation	18	1.1

Saudi Arabia	23	4.5
China	31	1.8
Indonesia	33	2.4
Egypt	35	3.3
South Africa	56	2.6
Ghana	57	4.1
Kenya	63	4.0
India	67	3.0
Botswana	80	3.7
Benin	94	5.7
Cote d’Ivoire	102	4.7
Tanzania	104	5.1
Nigeria	110	5.4
Chad	117	6.7
Mozambigue	125	5.6
Niger	156	8.0

Source: Reference (2)

CAUSE OF DEATH

Medical science makes a distinction between normal aging and disease. When a person eats carbohydrates, the level of sugar in the blood rises. For the same amount of carbohydrate, the rise that take place in an old person is higher than that in a younger person. That results from normal aging. However, the very large rise in blood sugar that takes place when the person already has diabetes is not normal aging. That is disease. Similarly, we all become more forgetful as we age and that is considered normal. But that has to be distinguished from the serious mental decline in a person afflicted with dementia (e.g. in Alzheimer's disease).

Graph A: Total No of Births per Woman during her child-bearing years vs No of deaths in the first year of Life per 1000 live births.

Most internal functions of the body peak shortly before the age of 30 and then decline gradually and continuously throughout life. Even for top athletes, by age 35, peak performance begins to decline. Bone loss begins from about age 40, slowly at first and then accelerates with age, with women achieving a rate of loss twice that of men.

The fastest heart rate attainable during exercise falls with age and the amount of oxygen that we can take during exercise reduces by about 30% to 40% in the years up to age 65.

Hearing loss begins from middle age and continues throughout life. The kidneys shrink and become less effective in removing waste products from the blood and by age 90, half of its initial capability to do so is gone.

The stages of life are often classified as childhood, puberty, young adulthood, middle age and late age. The factors that affect longevity are

(a) Heredity,

(b) Lifestyle (stress, diet and exercise),

(c) External environment and

(d) Medical care.

The oldest living woman as at today is Elizabeth Bolden from U.S.A. aged 115 years and 62 days while the oldest living man is Puerto Rico’s Emiliano Mercado aged 114 years and 57 days. The record for the (verified) longest-ever-lived human being is held by a French woman who lived for 122 years and 164 days. She died on August 4, 1997.

In addition to the infectious diseases that I have earlier mentioned, it is well known that malaria remains a major cause of death among the young in Nigeria. There is also the emerging rise of HIV/AIDS.

Apart from infectious diseases, the other main causes of death below the age of 40 in Nigeria are violence and accidents (including those arising from the use of alcohol and drugs) and the hereditary sickle cell disease.

For women, there is the additional high incidence of deaths during childbirth (maternal mortality), which in the late 1990's to 2001 was about 1,000 maternal deaths for every 100,000 children born alive (about 1 per cent). For the year 1999, according to a Federal government report, the overall rate was 704 maternal deaths per 1,000 live births, with rural areas experience being more than two and a half times that of urban areas. The zonal variations were also as in Table IX.

For men, beyond age 40, disorders of the circulatory system (hypertension, heart disease and stroke) predominate, followed by cancers. Other diseases come behind in ranking. 3.9 At the young ages, men are much more likely than women to die from violence and accidents than women. From about age 40 to 70, cancer dominates a proportion of all female deaths, breast cancer being the leader.

Table IX: No of mothers dying at childbirth for every 100,000 live births in 1999 showing only the lowest two and the highest two zones' figures.

South-West	165
South-East	286
South-South and North-Central not stated.	
North-West	1,025
North-East	1,549
Whole country	704

Source: Reference (7)

FUTURE IMPROVEMENTS

I have earlier said that, during the first half of the last century, the greatest improvement occurred at the earliest ages but during the second half significant improvements began to appear at the higher ages. This has resulted in a situation whereby, in the most developed countries, life expectancy at birth has been increasing, on average, roughly 2.5 (two and a half) years in every decade since the 1970’s. If the trend continues, then Japan’s life expectancy at birth in year 2001 will be about 83.8 and 86.3 in 2021. Today in Sweden, one in eve twenty persons above the age of 80.

At the beginning of the 20th Century, the number of persons aged 100 years and over in the United Kingdom was only about 100 but by the close of the century the actual number was nearly 6,000 (six thousand) and their Government Actuary’s Department has projected that it would rise to 95,000 by the year 2066.

Is there a limit to the length of human life? The greatest driver & mortality improvement has been substantial advances in medical science. Any future significant improvements at the oldest ages will have to come from the conquest, or near conquest, of heart disease and cancer. But the “treatments” and personal lifestyle adjustments may be required to achieve this (such as having to live more and on vegetables, fruits, vitamins and mineral supplements) may make the body to become so frail that it then becomes more susceptible to other causes of death.

Demographers and medical scientists are therefore of the view that, beyond disease prevention and treatment, a greater understanding of the complex dynamics of the underlying aging process is required.

In this, hope is placed on the possibilities that may arise in future from the complete decoding in February 2001 of the human genome which gives the map of the DNA that make up our chromosomes.

MONEY

I have talked at length on life and death; I now move on to the happier but more controversial subject of money, the legendary root of all evil. We were taught from youth that money is the root of all evil. What they failed to teach us is that lack of money is also the root of all evil. Because money contains power, it conveys power and therefore confers on its owner an immediate social ranking which is difficult to contest and impossible to ignore. Without money, or the equivalent support provided by other persons in cash or kind, it is impossible to live long. That is why the richest societies are also the ones with the highest life expectancies.

As the world gets richer, the range of goods and services which money can buy increases by the day. However as there are certain goods, services and kinds of social prestige that money alone cannot buy, and because some of the necessities and joys of life are relatively inexpensive, the pursuit of money must be tempered by other social goals. The youth of today should not be discouraged from making money provided it is done by legitimate means. To make money by legitimate means requires effort, ingenuity and a dash of luck: that the circumstances that are completely out of the individual's control should either favour his economic goals or at least not unfavour it. This results in the further enrichment of the society.

What proportion of his net monthly income should a person aim to save? At least one-third, throughout the working years, but it should be even much higher initially if he happens to come into big money at an early age to be included within the one-third is the "joint contributions" which would have been paid by him and his employer' on his behalf if he belongs to a formal retirement benefit arrangement.

Indeed, at any age, so long as time, health and personal circumstances permit, and within the laws of his society, every individual should seek to attain and maintain a level of material well-being that conduces to the prolongation of his life, and his perception of human dignity.

I shall discuss briefly some of the financial choices that an individual faces in the course of an adult life and how the changing roles of governments affect those choices.

MARRIAGE

Some religions make marriage obligatory, while the bulk of marriage literature and counseling concentrates on love, companionship, procreation and rearing of children. But marriage is also a financial act and, in modern society, almost all the serious problems that may arise between man and wife or wives have a financial dimension. Quarrels on money between man and wife are perhaps the only quarrels that last beyond the grave, in the fights over inheritance. Women have traditionally sought to marry above their status in power, prestige and money, for reasons that we all know but if a young man of humble state chose to marry the daughter of wealthy parents, he instantly became an object of ridicule and contempt among his mates because they opined that he had taken, not a marriage but a financial decision - all that has changed.

For men, money for the wedding and money for the new home is single largest cause of delayed marriages, while the costs of staging marriage ceremonies for their children have led many fathers to financial ruin. What we spend on wedding ceremonies is totally out of proportion to our financial assets.

It is not uncommon for a family to spend on one such ceremony alone the equivalent of its total normal expenditure for a whole year. Some spend up to two or, exceptionally, three times that amount.

Where do we get the money from? We think we have money, but do we? Not if we try to look ten or more years ahead and think about what inflation and possible changes in the world economy might bring in their train. Recognising the critical role of money in marriage, wealthy Americans have pioneered the signing of pre-nuptial agreements which detail, in advance, what assets are brought into the marriage and which are not and how the joint assets are to be shared when it terminates either by divorce or death, and the courts have generally enforced such agreements. The concept is also gaining adherents, albeit gradually, in some Western European countries.

For Muslims, Sharia Law has prescribed in stone how assets are to be shared between man and wife on divorce or death. On the death of the husband, all his wives who have no children will be jointly entitled to one-quarter of his assets and this will be shared equally among them; all the wives who have children shall be jointly entitled to one-eighth, shared equally among them. At divorce, if a man dies within three months (Iddah period) of the divorce, the woman will still inherit from him as if he had not died, but after three months, she inherits nothing. If he was already ill before the divorce, the divorce would have no effect on her inheritance. On the other hand, a man inherits half of his wife's asset if she had no children at death but only one-quarter if she had children.[9]

On the other hand, under Chinese law, both husband and wife shall have the freedom to engage in production and other work; they shall have the duty to practice family planning and to maintain each other; the property acquired by the husband and the wife during the period in which they are under "contract of marriage" shall be in their joint possession unless they have agreed otherwise and husband and wife shall have equal rights in the disposition of their jointly possessed property. On divorce, if they are unable to agree on the sharing of their joint property, the court shall decide, after considering the actual circumstances of the property and the rights and interests of the wife and child.[(9)]

Another interesting feature of Chinese family law is that not only does it state that both husband and wife have the right to use his or her own surname and given name but also that children may adopt either their father's or their mother's surname.

Considering the extent to which the futures of spouses are tightly bound together, it is also interesting to note that Chinese law specifically provides that no marriage shall be contracted if the man or woman is an uncured leper or is suffering from any other disease which is regarded by medical science as rending a person unfit for marriage.[(9)] *(emphasis mine).*

In Nigeria today, some churches already insist on production and filing with the church medical documents certifying that bride and groom are free of HIV virus and that the blood of at least one of them is free of the sickle cell gene before they agree to perform the wedding ceremony. Will an exchange between bride and groom and subsequent filing of their genetic profiles be required by some churches in perhaps, 25 years' time before wedding is performed? In 50years'?

HOUSING

For the great majority of the people, the largest single asset they will possess is their own house. Therefore, the consequences of any error of judgement pertaining to it tend to remain with the owner long after they occur. Irrespective of his place of work or residence, a typical member of any generation almost certainly built his first house in his hometown or village, not without reason: cheap or free land availability, fear of discrimination against non-indigenes in times of tension or crisis, the need to have a respectable place to stay when he "visits home" to see his parents and extended family and for the usual weekend merry-making, or the expectation 'at when, in the end, he "retires" or dies, it is to his hometown he would return. That this home at home had little economic value hardly came into consideration.

But the more economically daring built, or acquired his first house where he worked and lived and expected to be for many years, or at another place where houses had greater economic value than where he was living. On retirement from full-time work, both found that not only had they grown beyond the village but also that they would have to spend more time in the city in order to be among their lifelong friends and also to earn some income to supplement their pensions. The former usually lost out, as a good part of the capital that have been available towards acquiring an economic asset for his future had been sunk into an emotionally satisfying project of doubtful economic value.

Another common error was to own and live in a very large and expensive house in early middle age, thereby tying down without returns a high proportion of the owner's financial assets, which asset would otherwise have been available for further investment towards building a stronger financial platform.

When the country then ran into deep economic waters, when inflation transformed into hyperinflation, not only were resources not available to maintain the house, but the house could not find a ready because of its size, even if the owner was (unusually) prepared to sell. Or when subsequent population pressure and government neglect rendered his abode which had earlier been in a "respectable" area into an emerging slum and he now desired to move into a new, "respectable" area, he no longer had sufficient money to do so of the new house price levels. As in all matters, a few were fortunate and got away with it as their other sources of income remained sufficient to cope, but only a few.

I consider it to be the duty of governments to strive to prevent the cost of land from undue escalation. The most obvious way to do this is by increasing the supply of buildable land through the opening up of new areas and provision of appropriate infrastructure. If land values continue to zoom, and the young new entrants into the labour force can neither afford the house rents nor build decent accommodation, the society would be heading for trouble.

VOLUNTARY EXPENDITURE ON OTHER PERSONS

Whatever our station in life, one of the most difficult frequent dilemmas that we face is how much of our income we should spend on 'other persons.' You are in your late thirties; your younger brother by four years dies in a motor accident, leaving behind three children and you already have three of your own. He was a banker with a promising future but his wife is a graduate schoolteacher. How can you cope? you have promised your son who is studying in a local, private university a holiday abroad in order to broaden his education and also because most of his school friends and mates have been abroad and you do not want him to feel inferior.

Just when you think you have the money after several postponements, your mother tells you that the government hospital has given her a nine-month waiting time for her eye cataract operations but she has found a private doctor ready to carry it out for a fee that would wipe out half of your proposed expenditure on your son's journey.

Or the young, newly married university graduate whose parents at home post to him in Lagos two younger siblings to 'train' and "educate", as this their eldest son has "now got a job in Lagos. It was not uncommon for some fathers while continuing to father more and more children whom they could not afford to train, to openly boast that their duty is to educate the eldest child and then the eldest child's duty to educate his siblings. Owing to cultural conditioning, the society did not necessarily see the behaviour of such fathers, of piling up and shifting their own responsibilities onto the heads of the eldest children, as irresponsible. Instead, the emphasis was on being your brother's keeper!

A person who believes in prayers or other forms of external inspiration would normally resort to it for guidance in a situation of great dilemma. In addition to that, or quite apart from it, young persons in particular often wish there were some quick, practical rules to guide them when taking decisions that involve expenditure on other persons after meeting the regular expenditure on their wife and children, regular savings and compulsory payments such as religious tithes and other fixed subscriptions where applicable. I am putting forward for discussion that expenditure thereafter on other persons should be considered in the following descending order of precedence (some expenditure types fall into one or more categories):

1. Emergency, such as those that may be life threatening on wife and children,

2. Emergency, on close friends, both within and outside the extended family and direct personal staff,

3. Emergency, on other friends and other extended family members,

4. When such expenditure has the potential to promote your own business and goals dear to you.

5. When such expenditure will help to make the beneficiary a more productive, self-reliant human being,

6. Other social, non-festive obligations,

7. Other social, festive obligations deemed necessary by the spender,

8. General non-specific philanthropy.

How much to spend on items (6) and (7) combined? Perhaps an upper limit of 5 percent of total regular expenditure for the month can be recommended although this is likely to increase somewhat with age and affluence but, except for the really affluent, not more than 10 percent. If that is exceeded in a particular month, the excess is used to reduce the budget for the following month. If, however one spends less than this in a particular month, the difference is not carried forward but added to savings. If one cannot afford a gift but thinks one ought to participate in a ceremony, then one should attend only the religious part in the church or mosque that usually goes with such events but avoid the subsequent "reception' which would involve eating, drinking and dancing; alternatively one can tell the host that the gift would come later and then tries to fulfil the promise.

HEALTH

Health maintenance expenses increase with age, especially after the age of 50. Good sanitation, controlled stress, exercise, appropriate dieting and, perhaps, consumption of the right vitamin and mineral supplements, are known to reduce the incidence of ill-health at practically all ages. A medical provider has an unusual advantage over his or her patient: the relationship is one of the few cases in which the provider of the service is the person that decides the extent of service to be provided to his client.

What moderates the medical provider’s charges (from the patient’s viewpoint) is the fact that he can bargain directly with the provider for fee reduction or he can try another provider. This is the traditional way in which the cost of medical service is determined: The provider has an incentive to keep his patient alive and also to retain his patient. However, once a third party is interposed between the patient and the provider and the third party is to pay, then the element of direct bargaining is lost to the patient and the cost of medical provision inevitably rises.

This took place when employers assumed responsibility for the medical bills of their employees. Many employers then beat partial retreat by giving a fixed amount to an employee (usually varying by salary grade) for a whole year as annual medical allowance. It is only in emergency cases that the employer went beyond the fixed allowance. The employer in this arrangement is not involved in making payment to the medical provider. In some other companies, the employer pays directly to the medical provider but there is an upper limit for the year for each employee (save in emergencies) so the employee still has an interest in controlling the cost. Employees and employers have been generally happy with these arrangements. The fixed allowances or upper limits are negotiated during review of remuneration.

Although employees were generally happy with these arrangements, the disadvantage is that some genuine medical need of the employee may have been suppressed and therefore not attended to. However, frivolous medical expenses are greatly reduced.

As happened previously with employers, when an insurer is inter posed between the patient and the provider, the cost of service per person will tend to rise. The advantage of insurance is that the patient will not suppress his gratitude medical needs (if it is covered by the insurance), because he will not have to pay beyond his fixed regular premium but the disadvantage to the system is that frivolous medical demands will multiply.

Moreover, a medical provider may have the perverse initiative to give unnecessary medical treatment to patient in order to make more money from the insurance system. We can therefore see that, ultimately, health insurance is desirable, but it will always result in cost escalation, whether it is private health insurance (which does not involve the government) or public health r5urance such as the national health insurance scheme.

The American system is based more on private health insurance (except for the poor and elderly who use the public system); under the German public health insurance, the cost is assessed per person and a contribution rate is charged on the person and his employer by the government insurance agency as is the case with Nigeria's newly established national health insurance scheme; in the United Kingdom, the cost of public health insurance is met from general taxation. All are having problems of increasing costs.

The ancient Chinese kings were said to have had a brutal form of private health insurance: if the king did not survive an illness, his medical provider was promptly executed.

RETIREMENT

The subject of retirement benefits has been very topical since the new Pension Reform Act came into effect from the 1st of July, 2004 and during the extensive debate before its introduction. Before 1988, keen observers of Nigeria's public service pension system, which was based on pension and gratuity at retirement calculated on final renumeration and years of service, had observed that it was rapidly approaching a crisis unless urgent remedial action was taken. In that year, the then federal military government set up a committee to review the system, and the committee reported in 1989. I was the chairman of that committee.

The effect of that committee's recommendations would have been to reduce significantly the cost of paying the benefits. However, in implementing the proposals, the military government only effected those which resulted in further increases in the cost, and was silent on the more critical ones required to bring down the net cost which, therefore, continued to escalate. By March, 2000, the problem of meeting the payments as well as the administrative muddle had reached such an extent that another committee had to be set up by the then new civilian government to review the system. Again, I was the chairman of that committee.

The committee was asked to come up with a funded system, and that employees should pay part of the cost but we were not asked to convert the system to one which is based on creating an account for each individual to which his own and his employer's contributions are credited and interest added - which, at that time, would have been a radical or even revolutionary change. To buttress this point, majority of those appointed to the committee were public servants whose retirement benefits would be calculated on the existing system.

The committee came up with another package of recommendations to reduce the cost and also to establish a department within the Ministry of Finance to monitor future costs and submit proposals for changes to the government from time to time.

Among the recommendations put forward for immediate implementation were:

(a) To replace the then existing system of gratuity with a contributory system where by the government contributes 21 percent and the employee contributes 7l percent;

(b) That the minimum age to qualify for unreduced pension be increased from 45 to 55;

(c) That for new entrants into the service from, a specified date, the maximum rate of 80 percent of remuneration for pension shall be reached after 40 years of service instead of the existing 35 years.

It was also stated that further cost reduction measures may be necessary in future. Meanwhile, a move had begun within the government to radically change the system (from a final remuneration, defined benefit arrangement) to a defined contribution arrangement where the benefit would be based on accumulated contributions and interest earnings.

The problem of non-payment of benefits was practically non-existent in the private sector. In the Appendix is an outline of some of the main provisions of the Pension Reform Act 2004 that are relevant to this lecture (some point of detail are omitted).

Some of the major fears of employees concerning the Act are as follows.

(i). Private-sector employees are worried that the assets of their pension schemes being taken away from the custody of their scheme trustees may become endangered in the custody of new institutions are remote from them.

(ii) The benefit to be payable from the new system will be too small compared to those payable under the old system, especially for the government employees.

(iii) The system does not allow for any hedge against inflation.

(iv) The return on the contributions may be smaller than expected, as the results of adverse effect on high operational charges by the PFAs and PFCs.

(v). Many private sector employees still argue that the new arrangement should have been tested first on the public sector only before extending it to the private sector which had no problem in paying benefits.

Among the arguments put forward in favour of the new system are the following:
(i) It is not only the contributions that will be tax -exempt but also the benefits. This is an advantage to the private employees whose retirement benefits were not previously tax-exempt.

(ii) The funds built up will be available for long term investments which should ultimately accelerate the development of the economy for the benefit of all.

(iii). Government spending on retirement benefits will now be more manageable.

(iv) There is no cross-subsidy between employees as each individuals benefits will be based on his own retirement account. Many consider this to be more equitable than the previous defined benefit arrangement.

Worldwide, because of the aging population, the changing attitudes regarding the level of support that parents can expect to receive from their children at old age, and the financial imbalances being faced by many national pension schemes and company staff pension schemes, the subject of retirement benefits in terms of the changing roles of the employee, his employer and the government have been undergoing continuing debate.

According to a recent survey in Japan, only 57% of older people expect care-giving support from their families if they become ill in old age; moreover, among the younger people, only 40% expect that they will get that kind of support when it comes to their turn [4]. And in 1996, China's People's Congress found it necessary to pass a law that required children to support their elderly parents [9].

REFERENCES

(1) Calculations are based on the assumption that the average entry age at the school was about 14 years and using the mortality table based on insured lives taking up life insurance policies in the United Kingdom between 1969 and 1970.

(2) Human Development 2003 (UNDP website).

(3) At a glance: Nigeria (UNICEF).

(4) The future of retirement in a world of rising life expectancies (published in 2005 by HSBC bank). This publication had also sometimes as quoted other sources which it indicated where applicable.

(5) Longevity in the 2Ith century. By R.C. Willets et. al., (Journal of the Institute of Actuaries, Vol. 10, Part N, No.48).

(6) The Merck Manual of Medical Information, Second Home Edition, Chapter 3.

(7) Millennium Development Goals Report 2004 ˜ERIA. (a federal government publication), Executive Summary.

(8). National Population Commission (Nigeria) and ORC Macro. 2004, Nigeria Demographic and Health Survey 2003: Key Findings.

(9) The Holy Qur’an translation and commentary by Abdullah Thsuf Ali published in the United Kingdom by The Islamic Foundation, Chapters 2 and 4.

(10) Marriage Law of the People’s Republic of China, chapters 2, 3 and 4.

(11) Guinnessworldrecords.com and Guinness Book of Records.

APPENDIX

With certain exceptions, all companies with at least five employees and federal government employees are now compulsorily required to join the new scheme. State government employees are excluded.

The minimum monthly joint contributions by both employee and employer is 15 percent of remuneration. For the public service, it should be 7.5 percent each by the employee and the employer. Remuneration is defined as the sum of basic salary, housing and transport allowances.

The administration and investment of all schemes are now to be handled by new institutions to be referred to as Pension Fund Administrators (PFAs). The minimum capital requirement for a PFA is #150 million.

Also another set of institutions to be referred to as Pension Fund Custodians (PFC's) are to be responsible for the physical custody of the assets on the instruction of the PFAs. A PFC must have a minimum "net worth" of 5 billion naira and "must have a total balance sheet value of 125 billion naira" or is only owned by a financial institution with "a total balance sheet shared value" of at least that amount.

A regulator, National Pension Commission (referred to as PenCom) is established under the Act.

An individual employee can choose and change his own PFA.

The accumulated contributions at retirement must be used by the PFA to secure a pension, for life, at any time after the age of 50 years.

If the resulting pension is more than 50% of the final remuneration then the difference could be commuted by the employee back to a single lump sum payment.

A minimum pension for those with a specified minimum period of contribution may be fixed by PenCom from time to time.

The sequence of events starts with the employee choosing his own PFA. It is the PFA that chooses the PFC to which the contributions will be paid to directly by his employer.

The PFA will issue a periodic statement of account (showing the accumulated contributions) to each employee.

In the case of the federal public service and the federal capital territory where the previous scheme was unfunded, the government will calculate the amount due to each employee which is equivalent to his accrued relevant benefit up till June 30, 2004 and issue a bond to the employee. The employee shall hold the bond as evidence of government liability. When he retires, the bond shall be redeemed by the CBN. The proceeds shall then be transferred to the credit of the account of the member with his PFA.

However, for employees in self-funded government and the private sector agencies the employer shall credit their accounts with the amount to which the employee is entitled from prior retirement benefit scheme(s). If the available funds are not sufficient to meet the accrued liabilities to the employee, the employer shall issue to the employee a written obligation on the liabilities, and the obligation shall have the same priority as salary.

Subject to the guidelines to be issued by PenCom from time to time, the pension fund may be invested in the usual instruments, that is, government stocks, debentures and shares of companies quoted on the stock exchange, bank deposits and bank securities, investment and unit trusts, real estate and other investments approved by PenCom.

It is the PFA that gives investment instructions to the PFC in respect of the PFA's fund that is in the custody of the PFC. Every PFA is required to build up a statutory reserve fund as specified under the Act.

There is provision for the PFAs and PFCs to charge fees for their services and in practice this is expected to be regulated by PenCom. By the time of writing, 13 prospective PFAs and 5 prospective PFCs have received approval-in-principle by PenCom. In certain very restricted circumstances, a scheme in existence before the 1st July, 2004 may be allowed to convert itself to a PFA but which will serve only the employees of the associated company; only the scheme operated by Shell Petroleum has received approval-in-principle under this provision.

ABOUT THE LECIURER

Chief Ajibola Ogunshola, 61, entered Field House at Government College, Ibadan, on the 7th of September, 1956 and completed the Higher School Certificate course in December, 1963.

After obtaining a B.Sc. Honours degree in Mathematics from the University of Ibadan in 1967, he embarked on actuarial professional examinations and training and, in 1973, became the first black African to qualify as a Fellow of the Institute of Actuaries of United Kingdom.

On his return to Nigeria, he was appointed the first Head of the Life Department of NICON Insurance and later became the first Managing Director of Niger Insurance Plc. until December, 1985.

Chief Ogunshola then established his own actuarial consultancy service and he is now the Chairman of Alexander Forbes Consulting Actuaries (Nigeria) Ltd. The firm is part of a global anti-risk management group of companies, which is the 7th largest of its type in the world. He was the foundation President of Nigeria Actuarial Society in 1982 and also a past president of Association of Pension Funds of Nigeria.

He has served for many years as the Chairman of the Committee of Actuaries which gives actuarial advice to the United Nations Staff Pension Fund.

Chief Ogunshola is also the chairman of the board of directors of Punch Nigeria Ltd; which publishes *Punch* Newspapers. Under his Chairmanship, new life was brought into what seemed a dying company and the papers have, for many years now, been the most widely read in the country.

He is an Honorary Member of the Medical Society of the College of Medicine at the University of Lagos, Honorary Fellow of the Nigerian Institute of Public Relations and a Fellow of the Institute of Directors.

He is married to Iyabo Ogunshola, the Managing Director of Dewey & Co., and they have four children.