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PENSION ILLUSTRATIONS – A FAIR COMPARISON OR A CONFIDENCE TRICK

by

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1. INTRODUCTION

"Do I view the world as a vale of tears?"

Robert Browning

1.1. On the 6th April this year, the Government's brave new pensions world, as embodied in the 1986 Social Security Act, came into being, though the entry of its showpiece, the new style of personal pensions, was delayed for three months until 1st July.

In parallel, the new world of investor protection, as embodied in the 1986 Financial Services Act, also came into being in April, with several important aspects, including those rules governing the preparation of projections made by life companies and unit trusts for their products, also being delayed until 1st July.

1.2. The changes in both pensions and investor protection were discussed in depth by the profession during the passage of the legislation. And the continued importance of both fields to actuaries is reflected in two forthcoming one day seminars being held by the Institute in the current session.

There is an abundance of literature describing the general framework of both pensions and financial services published by life companies, consulting actuaries and pension consultants, solicitors, accountants and even journalists. So this paper assumes that readers will have a general knowledge of each framework, even though there appears to be a few published papers to the profession on each subject (1) and (2).

1.3. However, the most radical, and least commented on, of the changes brought about by the 1986 Social Security Act was the ending of the right of employers to make membership of the company pension scheme a condition of employment.

From the 6th April 1988 membership of occupational pension schemes has been on a voluntary basis to the extent that employees now have the right to opt out or not join the scheme and make their own pension arrangements.

Effectively, this means that now for millions of employees they, and not their employers, have the final decision in how they arrange their pension.

1.4. The 1986 Social Security Act, in introducing the new style personal pensions, has given employees the choice of various options in planning their pension.

The Government in setting up the new pensions framework, was anxious to ensure that employees would have sufficient information on each type of pension arrangement from which to make their choice.

1.5. Mr Norman Fowler, the Social Services Secretary who was responsible for the Social Security Act, frequently emphasised the importance of suitable and adequate information.

In the original document (3) that introduced personal pensions - the so-called blue book it was stated that:

> **"People must have enough information to weigh up the benefits which a personal pension offers them against those which they may be giving up by not joining their employer's scheme."**

The Government's determination for more and better information was reaffirmed in the subsequent White Paper (4) preceding the Eventual Act where it was stated:

> **"The Government believe that the public have as much right to know how their pensions are building up as how their pay is worked out. We have introduced legislation requiring occupational schemes to disclose to members information about their rights."**

It went on to state that:

> **"It is important that people should be able to identify the build up of their state pension rights. .....The statement itself will be clear and simple, so that people know just where they stand in the state pension scheme."**

These statements related to information on State and occupational schemes and to show that it had allowed for every eventuality, the statement then dealt with the new style personal pensions:

> **"The Government therefore intend that all bodies able to offer occupational and personal pensions should be subject to the rigours of the new financial services regulatory system or equivalent controls and safeguards for members' rights.**

The controls mentioned above should protect the public against overselling by the use of misleading projections of returns."

1.6. The paper is concerned with investigating how the provision of pension information has developed in the light of the aims set out in the White Paper with particular reference to quotations, illustrations and projections and to see whether as Mr Norman Fowler was so fond of quoting whether employees have enough information to make a fair comparison. In particular, the paper analyses whether the financial services legislation has removed the use of misleading projections.

2. PENSION CHOICES

"The more alternatives, the more difficult the choice."

Abbe D'Allainval

2.1. In order to understand the choices available to an employee, it is necessary to consider briefly the new pensions framework as it affects an employee.

2.2. Basically, the UK pension framework is a three tiered system made up as follows:

1. A first tier consisting of the basic flat rate State pension which all employees receive, subject to fulfilling the required contribution conditions.

2. A compulsory second tier with benefits related to an employee's earnings consisting of the following alternatives.

   (a) the State Earnings Related Pension Scheme (Serps).

   (b) A contracted-out occupational pension scheme, on either a salary related or money purchase basis (providing there is a scheme which the employee is eligible to join).

   (c) An Appropriate Personal Pension (APP) used to contract out of Serps.

   (d) In certain circumstances a Special Personal Pension used to contract out of Serps.

The employee must make his choice from these alternatives. If the employee does nothing, then he or she is automatically in Serps by default.

3. The third tier is mainly on a voluntary basis. The employee is not required to make any choice.

   (a) A contracted in occupational scheme which sits on top of Serps or a Special Personal Pension.

   (b) A Personal Pension (PP) which sits on top of Serps or an APP.

   (c) An Additional Voluntary Contribution (AVC) arrangement which sits on top of an occupational scheme. The AVC can be an inhouse arrangement or Free Standing or even a combination of both types.

   AVCs can be regarded as a type of personal pension arrangement available to employees in occupational schemes, even though the 1987 Finance Act specifically states that members of occupational pension schemes cannot contribute to personal pensions and the Inland Revenue is emphatic that AVCs are not personal pensions.

2.3. The financial arrangements for both Serps, with its flat rate rebate and salary based company schemes, with fixed fractional benefit accrual rate, offer employees financial options against either Government or the employer.

Employees can profitably switch out of Serps when young and rejoin when older - a comparison as to when to make such a switch is a straightforward exercise. With company schemes, more complex comparisons are needed to determine whether and when to switch but such switching can be just as profitable.

2.4. In summary, employees have a number of decisions to make regarding their pension arrangements:

(a) which alternative pension arrangement would provide them with the best value for their contributions?

(b) how much should be set aside each month/year to provide an adequate pension?

(c) If employees decide to make their own arrangements through personal pensions, which type of contract and which provider will give the best value?

2.5. The paper is not intended to deal with the question of how one should compare the various types of pension arrangements. Indeed actuaries are well aware of the problems of comparing defined benefit with defined contribution schemes.

These problems of comparing chalk with cheese were conveyed to Norman Fowler during his review of the whole social security system. But like most politicians, he ignored or brushed aside these warnings.

2.6. It has been standard practice for many years for intermediaries selling life and pension products to use quotations from life companies as a leading sales aid to answer some or all of the above questions. This practice is continuing with the new pensions environment. Indeed, it is obligatory for life companies to provide illustrations for personal pensions used to contract out of Serps.

Employees can obtain information and quotations on all three pension alternatives. The object of this paper is to examine the current situation in the provision of such quotations, which can only be described as chaotic, to discuss the implications that arise from the present system and to hopefully suggest how one might proceed to provide information that would fulfill Norman Fowler's specific objective mentioned above.

3. THE BASIC PRINCIPLES OF PENSION ILLUSTRATIONS

"There was a completeness in it, something solid like a principle."

Joseph Conrad

3.1. This section of the paper may sound mundane to actuaries. But in the muddle that has arisen over the various illustration systems it is apparent that there are different ideas as to the basic principles, when it should be obvious that in order to even attempt to make any sort of valid comparisons, the information in the illustrations must be prepared on a consistent basis and with consistent assumptions.

3.2. The basic purposes of life company illustrations were set out in a paper (5) by M Iqbal and E Short presented to the then Institute of Actuaries Student Society over two and a half years ago. Since this paper was not reprinted in the Journal, the purposes are restated here.

3.3. An illustration fulfills two specific functions:

(i) To give an indication of the benefits that are likely to emerge from the contract if certain stated assumptions are borne out.

(ii) To help in the choice of savings contract, and to distinguish between different life companies and other savings institutions.

The first function should be all important. The paper also adds a third function specific to pension schemes, namely where the trustees have a liability to provide a pension (and other benefits) based on earnings at a future date the quotation of a funding rate is the best estimate of a pattern of outlay that will be necessary to meet the emerging liabilities.

3.4. There was little, if any, discussion, on these principles at either the Institute Student Society or the Faculty of Actuaries Student Society, where the paper was also presented.

In retrospect, this was a significant omission. For in researching for this paper it soon became apparent that the various people involved in setting out the ground rules for preparing illustrations, including actuaries, had differing ideas on the basic functions of illustrations.

3.5. There are two approaches to preparing illustrations that show benefits on investment contracts.

3.5.1. The illustrations can be calculated and shown on a money basis, expressing the benefits in the currency that relates to the time the benefits are available.

Or the benefits shown in the illustration can be adjusted to show their real value in terms of purchasing power allowing for price inflation and/or salary growth - usually expressed in current money values.

3.5.2. It is generally accepted that in any properly conducted pension planning exercise, the main objective is to provide the individual with an adequate pension, that adequacy being judged as a proportion of that individual's earnings at or near retirement. This would indicate that pension illustrations should be made in real, rather than money terms, expressing the benefits in current money terms.

However, intermediaries argue that the majority of their clients only think in money terms and want illustrations in money terms at the time the benefits are taken. But if a money illustration basis is used, it is essential that the real value is shown in a form that is clearly understood by an intelligent layman.

For without any accompanying inflation adjustment, a money illustration on its own will continue to produce "telephone number" benefits, a practice that has been condemned as highly misleading by the actuarial profession.

3.6. Secondly, there is the consideration of what benefits should be shown.

3.6.1. The logical system would be to illustrate the overall pension and other benefits provided at retirement from the particular pension arrangement the answer to the obvious question from the employee as to what benefits will he get at retirement from that particular pension arrangement.

This means that the illustration should rollup the benefits making suitable assumptions about future contribution payments.

This latter point on contribution payments is causing all sorts of problems on personal pension illustrations. On life assurance and unit trust savings contracts, it is traditional to pay regular level monetary premiums for the duration of the contract. This approach is being carried over into pensions where in the vast majority of cases, sales are made on the basis of a fixed regular monetary contribution to be reviewed later, when the real value requirement indicates that contributions should rise in line with earnings.

Adopting a real value method in current value terms for contracts where there are fixed monetary contributions can be confusing, since the effect of the falling real value of the contributions has to be brought into the equation.

However, a rollup approach assumes that the employee will stay with this particular pension arrangement for the rest of his working life, having made an irrevocable once-for-all choice at outset.

3.6.2. The underlying philosophy of the new pensions environment is flexibility as well as freedom of choice, with the employee being able to change his mind and reassess his pension arrangements at any time. Indeed, if employees intend to take advantage of the financial options available against Serps and company schemes, they need to check their position at regular intervals.

This leads to what can be termed the "brick" approach. The illustration considers only the benefits secured by the current financial year's contributions, that is, it provides the illustration prepared on a single contribution basis. Such an approach should enable the employee to assess the benefits provided by the various pension alternatives and select the best value for that year's contributions. The exercise is repeated afresh each year.

The brick approach avoids having to make any assumption regarding future contributions paid by the employee.

However, to date, the brick method has not gained general acceptance, the demand being for total benefits. This could be provided with a series of brick illustrations, which after all is essentially what a rollup illustration provides.

3.7. The next, and possible the most important consideration in preparing illustrations the assumptions made.

3.7.1. The factors which affect the calculation of benefits are:

(i) Investment return;
(ii) Earnings or salary growth;
(iii) Price inflation;
(iv) Expenses;
(v) Mortality;
(vi) Future contribution payments.

Only some of these factors would apply to certain types of pension arrangements.

If the illustration is on a rollup basis, then absolute values would be required for all factors. But if using a real value basis on current money values, then only relative values are required for investment returns over earnings and over prices and for earnings over prices.

3.7.2. The figures placed against these factors are of necessity subjective. However, it is essential that the assumptions are not over optimistic in the light of general conditions, to avoid unrealistically high benefit illustrations.

3.8. The final consideration is whether illustrations should be produced on a single factor basis, or whether they should be on a multifactor assumption, particularly where investment, earnings and prices factors are concerned.

Actuaries are well aware of the subjective nature of these underlying assumptions. Showing illustrations on more than one basis gives a picture of the possible variation in benefits that can arise from different scenarios.

However, it appears that even illustrations on just two alternative basis causes confusion in the minds of the layman. There is a danger that the lowest illustration on the most conservative assumptions is misinterpreted as a guaranteed benefit. The caveats accompanying the illustrations are either ignored or not understood.

3.9. In summary, the principles that, in the author's view, should guide the preparation of illustrations and provision of information are:

- The illustration must be readily understood by the employee.
- The illustration should not set out misleading information, even if it is apparently understood by the employee.
- The various types of illustration should be prepared on a consistent basis with consistent assumptions.
- he illustration should focus on providing information that assists the employee in planning an adequate pension.
- The illustration should help the employee differentiate between the various alternative arrangements and various investment media.

It is accepted that these principles may be in conflict with stated policy, particularly the final principle.

4. LEGISLATION

"Law is a bottomless pit."

Dr Arbuthnot

4.1. Since the above mentioned paper was produced, a variety of legislative controls effecting, to a greater or lesser extent, the preparation and method of providing certain types of pension illustrations have been introduced - the 1986 Financial Services Act, the Occupational Pension Schemes (Disclosure of Information) Regulations 1986 and various related amending regulations, with further Regulations due under the 1986 Social Security Act.

4.2. Thus institutions providing illustrations do not necessarily have the complete freedom of choice that was available even two years ago in their method of providing illustrations. Now these legislative controls have to be taken into consideration in preparing illustrations. Indeed, as will be seen, for many illustrations, the legislation sets out the precise method by which they will be prepared.

4.3. An understanding of the FSA is essential in order to get to grips with the problems of pension illustrations.

The Act relates to anything defined as an investment. Briefly:

(i) Personal pensions, unless they are deposit based from a bank or building society, are investments.

(ii) Self administered company pension schemes, both salary related and money purchase, are not investments, but all company pension schemes from a life company are investments.

(iii) AVCs managed in house are not investments. AVCs, whether free standing or arranged by the main scheme trustees with an outside institution, are investments, unless deposit based from a bank or building society.

(iv) Serps is not an investment.

4.4. The overall responsibilities for administering the Financial Services Act have been devolved on to the Securities and Investments Board (Sib). In turn there are five Self Regulating Organisations (Sros) responsible, under Sib, for supervising their relevant sector of the investment field, the Sro responsible for life assurance and unit trust companies being Lautro (the Life Assurance and Unit Trust Regulatory Organisation).

All authorised firms must operate within the rules of the authorised body, these rules covering virtually all aspects of operation, including, as far as life companies and unit trust groups are concerned, the preparation of illustrations.

4.5. This variety of legislative control, with no central co-ordinating body overseeing the operations, has been a major contributing factor in the emerging chaos over pension illustrations.

The effect of the controls on illustrations for the various pension alternatives are discussed in detail when describing the relevant illustration methods that now follow.

The examples used to show each type of illustration refer to the author's son - who is at more suitable age for comparison purposes than is his father. He is not a member of any company pension scheme so to provide illustrations for company pension schemes, one has assumed a hypothetical membership of a typical final salary as well as a money purchase scheme.

5. STATE PENSIONS

"For undemocratic reasons and for motives not of State they arrive at their conclusions largely inarticulate."

Rudyard Kipling

5.1. The Department of Social Security has kept its side of the pledge (see Section 1.5) made on its behalf by Mr Norman Fowler to provide a forecast of the State pension entitlement of employees seeking such information.

5.2. Application for a Retirement Pension Forecast is made by obtaining form BR19 from the DSS and sending the completed application to the Central Office of the DSS at Newcastle upon Tyne.

The DSS has been aiming for a turn around of a fortnight in providing a quotation. However, the Central Office states that demand for forecasts has been so great that it is taking longer to produce forecasts.

5.3. The Pension Forecast has two styles to deal with employees who are either in Serps or contracted-out.

The overall Forecast in each case shows both the complete State pension to which the employee is entitled and its component parts Basic, Additional and, if applicable, the almost forgotten Graduated Retirement Benefit, the first attempt to introduce an earnings-related element into the State pension provision.

Note: The DSS use the official designation of the earnings-related part of the State scheme, that is Additional Pension. The expression Serps was devised by the pensions industry. Since this expression is now used universally outside of the Department, the paper will continue to refer to the earnings-related part of the State scheme as Serps

5.4. The format of the Forecast is to show the State pension entitlement based first on the employee's National Insurance contribution record paid to the date of the forecast and then on the total projected pension assuming contributions continue to Normal Retirement Date.

The projected pension is shown in current money values assuming:

(a) that earnings increase at the same rate as prices;

(b) that, on average, earnings will rise by 1.5 per cent a year more than prices.

The base for the forecast is the highest earnings in the last five years to the date of calculation when NI contributions were paid.

5.5. The Pensions Forecast then shows, separately, the basic and Serps components that make up the complete State pension, together with adequacy of the employee's NI contribution record and brief descriptions of the State pension, including such information as Home Responsibilities Protection.

5.6. Where the employee is contracted-out of Serps, the Additional Pension sections shows the total Serps pension, both earned to date and projected, less the Contacted-Out Deduction.

5.7. The Pension Forecast, relating to a contracted-in employee, is shown in Exhibit A. Although obtained in September 1988, the forecast is based on the employee's record up to April 6, 1987. So, as such, the forecast is a year out of date.

The exhibit is a condensed version of the complete Pensions Forecast which runs to four pages.

Note: The forecast, above all else, highlights the dampening effect of the Upper Earnings Limit (UEL) on the ultimate Serps pension. The increase in the Serps pensions when allowing for 1.5 per cent real growth in earnings is less than 8 per cent than the pension assuming no earnings growth.

In this case, the employee's earnings were close to the UEL for the date of the forecast. The assumed 1.5 per cent earnings growth soon puts the employee's earnings above the UEL so that the increase in pensions comes solely from the rise each year in the UEL.

In contrast, while the UEL limits the contributions paid into an Appropriate Personal Pension, it has no limiting effect on the emerging benefits - a further advantage of APPs over Serps, but a feature that, as far as the author is aware, is not mentioned in the APP promotional literature.

5.8. Comment on the Retirement Pension Forecast

As far as it goes, the forecast conforms to the basic requirements for illustrations.

It is readily understood, though the pension figures themselves could be made more prominent among the mass of words. The assumptions of a zero and 1.5 per cent per annum real earnings growth are realistic, though as seen above, the actual assumptions make very little difference to the expected pension for employees with earnings above the national average.

The main drawback in the Pensions Forecast is that the employee is left to determine for himself or herself the value of the pension as a proportion of anticipated earnings at retirement.

The forecast would be even more useful in providing information if it showed the base earnings figure used in the calculation, it is doubtful if the employee will have any idea of this figure, and also the value of this earnings figure on the 1.5 per cent earnings growth assumption.

In the exhibit shown, assuming the base earnings were equal to the UEL at April 5, 1987 of £140 a week, then, in current values, this would increase to around £246 a week by NRD on the 1.5 per cent earnings growth. The Serps pension, as a percentage of final earnings, would be 31 per cent on nil growth, but only 19 per cent on the 1.5 per cent earnings growth assumption.

One feels that if such figures became widely available, then there could well be public pressure for change perhaps to reverse the Serps cutback or at least change the basis for UEL.

The DSS will not provide any information on the derivation of the assumptions, but states that there are no current plans to review the basis, either to up-date the assumptions or to bring them in line with other illustrations.

Finally, employees currently in a contracted-out company scheme considering leaving and making their own arrangements, need a forecast of future Serps benefits. This is not readily available from the forecast service, though it can be ascertained.

6. OCCUPATIONAL PENSIONS

"Guessing what was at the other side of the hill."

Duke of Wellington

6.1. The second part of Mr Norman Fowler's pledge concerned the provision of adequate information to employees concerning benefits and other aspects of their company pension scheme.

Although this pledge was eventually fulfilled, it involved a long period of in-depth consultations between Government, civil servants and the pensions movement, including the accountancy profession, to achieve a satisfactory system acceptable to everyone.

6.1.1. The Government's original concept was grandiose in design, and would have provided employees with every conceivable item of information. It would have also seen the establishment of a central registry, on similar lines to Companies House, where all pension scheme documents, reports and accounts and other literature would have been kept and made available for public inspection.

6.1.2. The pensions movement was able to persuade the Government to lower its sights and set out a realistic system, though it required six pieces of legislation to get it right - The Occupational Pension Schemes (Disclosure of Information) Regulations 1986, and five subsequent amending Regulations. It would come as no surprise if, in the light of experience in working the system, yet more amendments were made.

This paper is concerned mainly with employee benefit statements under these Regulations.

6.2. The Regulations allow considerable flexibility in the provision of employee benefit statements, particularly in the format of the statement and the method of presentation of benefits.

However, the legislation is specific on the method of calculation of the benefits provided by company salary-related schemes.

6.2.1. It states that these benefits must be calculated without regard to possible (!) salary increases in the future and must assume either that pensionable service continues to the statement date or to normal pension age.

Thus benefits must be shown on a total past and future service basic expressed in current value terms.

Trustees are not required to actually calculate the benefits. They can give a formula showing the method of calculation, but in this case they must also give sufficient information about the employee's salary and service.

So, in practical terms, trustees or managers may as well do the actual calculations.

6.2.2. The information need only be provided on the request of the employee and the employee does not have a right to a statement within 12 months of the previous request. However, trustees and managers will find it administratively convenient to fulfil their obligations by providing automatic annual benefit statements to all employees. The majority of schemes already do this.

6.2.3. The lack of a precise format for the benefit statement enables the pension scheme to select its own design and provides the opportunity to highlight to employees the value of the benefits provided by the company pension scheme - in particular the death-in-service and disability benefits.

6.2.4. Exhibit B shows a typical benefit statement. Because it relates to a hypothetical scheme, the layout is basic.

Nevertheless, pension schemes appear to have developed a standard form of benefit statement, possibly because most trustees have relied on their consultants to design the statement.

6.2.5. Trustees are only required in the benefit statement to provide a description of the rights and options available to employees who leave employment before retirement, the so-called early leavers. There is no obligation to provide the actual value of the early leaver benefits on the statement.

It is left to the employee to seek this information, without necessarily being guaranteed the information unless he or she is actually leaving service.

Many pension managers and employers are still wary, if not paranoic, on the subject of early leaver benefits.

A knowledge of the current early leaver benefits and the corresponding transfer values are essential if employees are going to make a complete comparison of company schemes with personal pensions.

6.3. However, the regulations allow trustees considerable flexibility in providing additional information. Many schemes do take the opportunity of providing additional information.

- Some schemes show the benefits as a percentage of the employee's salary, a more meaningful figure in ascertaining the real value of benefits.
- Some schemes are also showing the retirement benefits in money terms at the time of retirement, assuming a future rate of salary growth.
- Many schemes are automatically, or on request, providing early leaver benefit statements to existing employees, but invariably on current money values.

6.3.1. These illustrations would help an employee to compare the benefits from a company scheme with those of a personal pension, particularly the cash sum at retirement, since, as is seen in Section 7, this is the form used for personal pension illustrations.

However, the vast majority of employers are insisting that no such roll-up figures are provided. Their fears are that the assumed earnings growth rate used in the illustration could be misinterpreted by employees and used by trade unions as a benchmark from which to start their wage negotiations.

6.4. Trustees could use the benefit statement to provide further information on the benefits provided by a company scheme, particularly those which an employee would have to pay for if he left and took a personal pension.

In particular, the statement could highlight two important features:

(a) It could remind employees that the benefits at retirement do not rely on investment returns during the period of employment and on annuity rates in force at retirement.

(b) It could set out the policy on pension increases and provide a history of pension increases over the past few years.

If nothing else, such information could focus the attention of employees considering personal pensions on the pension itself. Promotional literature for personal pension deals with the actual pension in phrases such as "the cash sum so accumulated is used to buy a pension" as if there were only one choice of pension. The casual treatment of the pension factor in personal pension illustrations is discussed in Section 7.

Employees need to be constantly reminded to compare, as far as possible, like-with-like between personal pensions and company schemes.

6.5. The use of simple information systems, involving the use of just a keyboard and VDU connected to the mainframe computer, enables employees to get their own benefit information, in their own time with complete confidentiality. Many consultants have already developed such systems for clients, but wider use needs to be made of these developments by the pension scheme administrators.

7. PERSONAL PENSIONS AND COMPANY MONEY PURCHASE SCHEMES

"Confusion now hath made his masterpiece."

William Shakespeare

7.1. Here one has to distinguish between personal pensions and money purchase schemes that are classified as investments and come under within the financial services orbit and those contracts that are outside. The first part of this sections deals with investment contracts.

The contrast in the preparation of illustrations for personal pensions is markedly different from those for Serps and in-house salary related occupational pension schemes discussed in the previous two sections, reflecting the whole philosophy controlling the financial services legislation.

Investment Contracts

7.2. As stated in Section 4, the responsibility for preparing illustrations rests with the appropriate Self Regulating Organisations (Sros), in this case the Securities and Investments Board (Sib) and the Life Assurance and Unit Trust Regulatory Organisation (Lautro).

The vast majority of life companies and unit trust groups operate under the Lautro rules. However, some life companies, for example the subsidiaries of the clearing banks, deal directly with Sib.

7.3. Each Sro has its own rule book and the requirement is for Lautro's rules to be equivalent to those of Sib, not identical.

Fortunately the rules on illustrations are virtually identical, there being very close collaboration between the two bodies in producing the illustration rules (6).

7.4. However, this is the only fortunate feature in the rules, for the actual rules themselves, as is seen from the description below, are a complete "comedy of errors". This feature cannot be ignored because it is obligatory for personal pension providers to provide illustrations when marketing appropriate personal pensions.

7.5. The underlying philosophy of Sib and the Sros was that every rule had to be spelt out in detail, with little flexibility or initiative left as to how the authorised firm interpreted the rules. This has been applied to all illustrations, including pension illustrations.

7.6. The objective of this approach was to ensure that each life company and unit trust group produced the same illustration, irrespective of that company's actual experience, and that the illustration could not be used to distinguish one company from another - a feature of the old type with profit quotations. Indeed, Lautro, besides setting out the formula, has produced the relevant tables obtained from that formula which its members have to use in preparing illustrations so that there should be complete agreement in the illustration produced by members down to the last penny.

7.6.1. One overall feature of the illustrations is that they should be prepared on two sets of assumptions, the objective being to indicate the possible range of benefits that could arise on the basis of these assumptions.

The wording on the illustrations points out to clients that the two illustrations do not represent the upper and lower limits of possible benefits that could emerge.

Although such an approach was recommended in the paper by Iqbal and Short, referred to earlier, it is perhaps not surprising that it has lead to considerable confusion among intermediaries and their clients.

7.6.2. However, despite the attention to fine detail in the rules, they use the phrase "real rates of return" rather loosely, in certain illustrations it means the difference between investment returns and salary or earnings increases and in other illustrations the difference between investment returns and price inflation. But usually it is obvious which "real rate" applies.

The following section sets out a summary of the very detailed basis set out for personal pension illustrations in both Sib and Lautro's rules.

7.7. Appropriate Personal Pensions/Special Personal Pensions

7.7.1. Method - The illustration method adopted must show the pension, expressed in current values, secured by the current year's anticipated contribution to the APP or SPP contract, including the incentive (if applicable) and the tax credit, based on the expected earnings of the employee during the current financial year.

The contribution to an APP or SPP is predetermined, being based on the National Insurance contracted-out rebate applicable to the particular employee. The payment is made by the DSS to the provider on behalf of the employee as soon as possible after the end of the financial year.

7.7.2. Thus the illustration method for APPs/SPPs is the "brick" approach relating to the current financial year. The provider is not permitted to provide a roll-up illustration based on a series of successive bricks.

7.7.3. Assumptions

(a) Up to Retirement Age. (Table 14 Lautro Rule Book)

This can be any age from age 65 for men and 60 for women until age 75. The vast majority of illustrations will be for the Normal Retirement Date.

Investment Return

Lower illustration - a real rate of return over earnings of 0.5% p.a.

Higher illustration - a real rate of return over earnings of 2.5% p.a.

There is a complicated procedure to allow for the delay in payment of the contribution - on average the delay is one year (Note 1 to Table 14).

Expenses - 6.5 per cent of the contribution.

(b) Annuity. (Table 19 Lautro Rule Book).

To conform with the legal requirements relating to the pension provided by an APP/SPP, the annuity has to be on a unisex and unistatus (50 per cent spouses' pension) basis, escalating at 3 per cent per annum.

Mortality - PA(90) minus 2 assuming female mortality for retirement ages below 65 and male mortality from age 65.

Marital Status - 90 per cent of employees are assumed to be married.

Interest Rates

Lower illustration - 8% p.a. absolute

Higher illustration - 10% p.a. absolute.

Expenses - 4 per cent loading.

With this approach, no assumption needs to be made regarding the future trend in NI contracting-out rebates, nor for that matter on price inflation.

7.7.4. On the unisex mortality requirement, it is convenient, as far as life company actuaries are concerned, that there are different retirement ages for men and women in the State pension scheme. Actuaries in quoting unisex annuity rates can assume female mortality below age 65 and male mortality from age 65, since very few women are still working at age 65. It will be interesting to see how actuaries would deal with unisex rates if and when there is a common retirement age brought into the State scheme, though the unistatus requirement of an automatic spouses' pension narrows the differential in mortality rates.

7.7.5. The main objective of an APP/SPP illustration is to enable the employee to compare the APP benefits with those obtainable from Serps dealing solely with the current year's contributions. At this stage, there is no comparison with a company salary-related pension scheme. However the APP illustration is not in the same form for comparison as the illustrations obtainable on Serps which, as seen from Section 5, give total rolled-up pension figures.

Under Lautro rules, the provider is not required to show on the APP illustration an estimate of the comparable Serps benefit. However, there is little point in not providing a Serps comparison and, since Serps is not an investment there is no problem, or rules, in providing this calculation.

7.7.6. Exhibit C in the Appendices sets out an APP illustration on the Lautro basis.

7.8. <u>Comment on the Method</u>

7.8.1. This illustration basis treats APPs and SPPs for what they are - single premium pension contracts that have to be renewed each year. It fulfils one of the prime purposes of illustrations in that it enables the employee to directly compare one pension arrangement (APP) with another (Serps) quoting benefits in real, current value terms.

The investment, expense and mortality assumptions are realistic. The chosen lower and higher real rates of return, which can be compared with the provider's past record, give a practical range of possible results.

7.8.2. It is comparatively easy to decide from the illustration whether the employee should be in or out of Serps and more importantly, by virtually forcing the exercise to be repeated each year, indicating when he should go back into Serps, providing he understands what a real rate of return means. And here lies one of the disadvantages of the method.

7.8.3. Intermediaries are complaining that most of their clients do not understand real investment returns - the layman still tends to think in absolute, rather than relative terms. The misinterpretation of an investment rate of 0.5 per cent can have dire consequences in a sale.

Intermediaries, if they have the time, can explain the concept of a real rate of return and what the illustrative figures mean, though the commission paid on an APP (at single premium rates) does not give intermediaries much of an incentive to find the time.

7.8.4. The confusion of the layman is compounded when he relates the illustrated benefits with the illustrative transfer values for the first five years of the contract - values that are also shown on the illustration form.

These values are shown in money terms on the providers own charging experience in accordance with laid down rules. So for with profits contracts, the life company uses current bonus rates and its current surrender value basis, while on unit linked or unit trust contracts, the provider allows for its actual expenses and assumes an investment growth rate of 10.75 per cent per annum, though the life company can use higher than experienced expense loadings.

These values are shown in Exhibit C. The intermediary can, given time, explain the difference in the two sets of values.

7.8.6. Finally, to add to the confusion, the provider has to enclose the produce details as prescribed by Sib and Lautro. On the illustration form there has to be a statement to the effect that these documents are required reading as seen from Exhibit C.

7.8.7. The defects in the method are brought out when the method is compared with the illustration methods for the protected rights element of a Comp (Contracted Out Money Purchase) Scheme and the methods adopted by non-investment deposit APPs, both of which are described later.

7.9. Personal Pensions

7.9.1. Method - The illustration method is on a total return rolled-up basis showing the monetary value of the accumulated fund at the time of the illustrated retirement age or date. There is no compulsion for the provider to show the equivalent pension, a strange omission given that at least 75 per cent of the accumulated cash value must be used to buy a pension.

7.9.2. Assumptions

(a) Up to Retirement Age.

This can be any chosen age between 50 and 75.

Investment Return

Lower illustration - 8.5 per cent per annum absolute.

Higher illustration - 13 per cent per annum absolute.

Expenses

The charge and expense deductions are standard to all providers and are set out in Schedule 4, Part II of Lautro's Rules. The expense pattern adopted reflects the incidence of commission and other expenses that occur in the real world for regular contribution and single premium contracts.

Regular contributions

Initial - a percentage of the first year's contributions varying by term to vesting at the policy anniversary following age 65 from 6 per cent for one year to 74 per cent for term 25 years or more.

Renewal - 2.5 per cent of contributions after the first year.

Policy Fee -£9 per annum.

Management Charge - 0.3 per cent deducted from the assumed investment return.

Single premium

Expenses - 6.5 per cent of the premium

Policy Fee - Scale based on term to vesting varying from £9 for one year to £30 for terms in excess of nine years.

Management Charge - 0.3 per cent deducted from the assumed investment return.

Contributions

The provider can allow for a variety of contribution patterns in calculating the rolled-up accumulated fund in the illustration including the following:

- Fixed regular monetary contributions.

- Contributions rising by a predetermined annual rate. The Lautro tables provide for increases at 5 per cent each year.

- Contributions rising in line with anticipated price increases. The assumptions for price increases are:

  lower illustration - 4% p.a.
  higher illustration - 10% p.a.

  Thus these assumptions mean that a real return of investment over prices of 4.5% p.a. for the lower illustration and 3% p.a. for the higher illustration.

- Contributions rising in line with average earnings growth at an assumed rate of:

  lower illustration - 5.5% p.a.
  higher illustration - 10% p.a.

  This means that the assumption in each illustration is for a real return of investment over earnings of 3% p.a.

  Taking the earnings and prices growth assumptions together, Lautro is assuming a 1.5 per cent a year growth in earnings over prices for the lower illustration, but nil growth in earnings over prices for the higher illustration - a rather strange pattern.

(b) Annuity.

As already stated, there is no requirement for the illustration to show the pension secured by the accumulated cash sum. But if a pension is shown, and almost all life companies are showing the pension in their illustrations, then the annuity basis must conform to the Lautro/Sib assumptions.

Mortality - PA(90) minus 2 (males or females as appropriate)

Interest - These are the standard assumptions for annuities as described for APPs in Expenses (Section 7.6.3).

Employees and the self-employed buying an annuity from the accumulated cash value of their personal pension have virtually complete freedom in the type of annuity they select. This freedom is reflected in the annuity tables provided by Lautro so that the provider can show in the illustration the type of pension selected by the individual.

Lautro provides the necessary tables to enable annuity rates to be calculated for both the lower and higher illustrations, with separate tables for men and women (no unisex requirements as yet) for level payments, pre-determined annual escalation rates of 3, 4, 5, 6 and 8.5 per cent and annuities linked to the Retail Price Index.

The provision of a spouse's pension is achieved by providing reversionary annuity rates (resurrecting a type of contract that has long since disappeared from a life company's main product range) for widows and widowers for the above range of escalations. The purpose is to enable the illustration to combine a single person annuity with a reversionary annuity to get the required proportion of spouse's pension.

7.9.3. Because the illustration is on a money rolled-up basis there is no apparent contradiction with the illustrative transfer values for the first five years, though it does throw into sharp relief the effect of the charges made by the life company on the early transfer value.

7.9.4. Exhibit C shows a PP illustration assuming that contributions are approximately 3 per cent of the employees earnings and rise each year in line with average earnings. The aim is to provide a comparison on a cost neutral basis with a contracted-out company scheme with a 5 per cent employee contribution.

7.9.5. Although the illustration is on a money basis, Lautro endeavours to provide some indication of the real value of the figures shown by requiring all illustrations to have an accompanying Inflation Statement, prepared by Lautro, in accordance with Schedule 6.

This statement, which is reproduced in Exhibit F, attempts to provide a "plain man's guide to inflation". including abbreviated tables of Vn for three assumed inflation (i.e. interest) rates - 4%, 7% and 10% - with explanatory notes and a worked example on how to use the tables.

7.10. <u>Comment on the method</u>

UNBELIEVABLE!

7.10.1. As a means of enabling employees to compare the benefits provided by personal pensions with those of a company salary based scheme, the Lautro/Sib illustration basis is a complete non starter. The pledge given by Mr Norman Fowler that employees would be provided with adequate information in order to make a fair comparison (see Section 1.5) has not been fulfilled by Lautro and Sib.

7.10.2. A contracted-out company salary based scheme provides a comprehensive pension, including the Serps equivalent GMP, as one benefit. So a fair comparison method should enable the two personal pension component illustrations, APP and PP, to be added together to give some indication of the overall pension provides in real terms. This is not possible with the present illustration basis and life companies are not permitted to adjust or supplement the illustrations to answer the enquiries from intermediaries to provide information that can be used in a pension planning exercise for their clients.

7.10.3. Lautro started on the right lines by initially considering a real value illustration for personal pensions. But then it ran into a series of problems posed by a real value approach, so that other considerations and interests took over, with the result that the real value approach was dropped in favour of a money roll-up basis.

7.10.4. One practical problem is that with personal problems an employee has complete flexibility over the method of payment of his contributions. An illustration basis has to be able to deal with fixed and varying monetary contributions. So if on one hand the illustration allows for the real value of the benefits, then on the other hand it must adjust for the change in real value of the contributions - quite a problem.

Otherwise the situation arises that the current value of the accumulated cash sum at retirement is less than the sum of the fixed monetary contributions - a situation that lends itself to the employee drawing the wrong conclusions. And many life companies still have the format for their personal pension contracts of fixed money contributions with the facility for the employee making increments in those contributions.

This problem does not arise with a money roll-up basis and it was then mooted that a money roll-up illustration, per se, was needed on pension mortgage considerations, where the lender needs some indication of the cash sum available at retirement.

Making pensions mortgages the raison d'etre for a money roll-up basis is an astonishing reason/excuse from Lautro officials, given the Inland Revenue's attitude towards pension mortgages in that these mortgages must not be used as a marketing feature in promoting personal pensions.

7.10.5. The use of the Inflation Statement to convert a monetary benefit illustration into real value benefits is, frankly, a farce.

Lautro has gone to great lengths to ensure complete uniformity in illustrations; the investment and economic expertise within life companies cannot be used in determining illustration basis. Yet in order to get an equivalent real benefit illustration, the employee, who usually has little expertise in this field, has to decide for himself the likely future inflation rate in order to discount the money benefit. And even if employees can take in this abbreviated compound interest course, they will arrive at widely differing answers for real values - in contrast to the uniformity previously required with illustrated benefits.

7.10.6. The basis did not go unchallenged by the Association of British Insurers and the Society of Pension Consultants was highly critical. However, their representations failed to bring about any changes.

7.10.7. There is no shortage of actuarial expertise at Lautro. So the board and its officials should be well aware of current attitudes of both life company executives and the actuarial profession towards the money roll-up basis which produced "telephone number" benefit values. Condemnations of such illustrations have come from the very top of the profession in addresses by previous Presidents of the Institute and the Faculty.

One can only say in mitigation that the Lautro/Sib basis does produce lower telephone number benefit values than those which would have been produced on with profit contracts using the old system of projecting current reversionary and terminal bonus rates.

7.10.8. It has to be accepted that Lautro officials were working under extreme time pressure and that the rules for illustration methods came very low on their list of priorities. Otherwise there is no rational explanation as to why those actuaries involved with Lautro allowed this basis to get into the rule book.

Now that time pressure has eased somewhat, Lautro and Sib should get together and completely re-examine the whole illustration basis for personal pensions - a matter discussed later in the paper.

Non-Investment Contracts

7.11. These contracts consist of personal pensions offered by building societies where the society itself manages the fund in-house.

Some building societies and banks offer their deposit based contract through a life company, which invests back in the society. These contracts are classified as investments by Lautro and Sib and thus illustrations are subject to the above rules.

7.11.1. However, for in-house deposit based personal pensions from building societies, these are not, at present, subject to any financial service controls.

7.11.2. The DSS is currently considering the controls that should be imposed these deposit-based personal pension schemes, particularly regulations on advertisements and other promotional material.

Its proposals issued in May envisage that banks and building societies would not be under any obligation to issue illustrations but if they did, then the following provisions would apply:

(a) The illustrations must be shown in cash, expressed net of inflation. The inflation assumptions must be clearly stated in the illustration, but the proposals do not envisage the Government or any Government department stating (prescribing is the official term) the rates.

One interprets this requirement as the illustrations showing the total rolled-up benefits adjusted for price inflation. It is not clear whether unadjusted cash benefits can be shown in addition to inflation adjusted benefits.

(b) The interest rate assumptions, which must be clearly stated in the illustrations, must be no higher than the average interest rate applied to the scheme over the preceding five years.

Since personal pensions only appeared in July, these requirements will not be operative for some time. As a transitional measure, it can use the average interest rate achieved by a scheme operated by the bank or building society which "most clearly approximates to the type of account on which the scheme is based".

Since building societies are newcomers in this field, such a requirement could be difficult. It also poses problems if current interest rates are higher than the five year average.

(c) Illustrations of future pensions payable from an annuity must comply with the relevant financial services rules.

This latter feature could cause problems. From (b) it would appear that a society is not required to show the cash accumulation benefits to retirement on two rates of interest, it would appear that using just one rate would be sufficient. So which annuity basis would apply in this case?

No doubt all will be revealed when the Regulations are issued, which could be when Parliament reassembles. The DSS envisaged the regulations applying as from December 1, 1988.

7.11.4. Meanwhile, societies are free to do what they like. Some are following the Lautro rules.

However, one major society has used this freedom to design its own illustration form on the advice of its actuarial consultant. The method adopted gives a hint as to how actuaries can produce meaningful illustrations if not hindered by rules and regulations.

7.11.5. The society concerned has in the design of its personal pension contract allowed for expenses through a tiered interest rate structure. For expense purposes only, and employee taking out both an APP and a PP is regarded as having one contract.

The illustration basis recommended by the actuarial consultant is a rolled-up cash benefits for both APPs an PPs, showing the benefit inflation:

(a) Up to retirement age it uses two interest rates:

(i) the current tiered rate 10.15 per cent to 11.40 per cent.

(ii) the alternate basis - a tiered rate from 9 per cent to 10.25 per cent.

The price inflation assumption is 6 per cent per annum and earnings are assumed to grow at 7.5 per cent each year.

The method assumes that for APPs the NI rebate will be adjusted in accordance with the Government Actuary's forecast - reproduced in Appendix D.

(b) Annuity:

It uses the Lautro mortality and expense assumptions, but just one interest rate of 9 per cent - midway between the two Lautro assumptions.

7.11.6. The illustration from this society is shown, in abbreviated form, in Exhibit D. The annuity for the APP follows the legal requirements, while that for the additional fund is a level payment, guaranteed five years, single male annuity.

7.11.7. Comment on the method and the DSS proposals

The format of showing first the cash roll-up benefit and then adjusting them for inflation is possibly the best approach to providing illustrations that are understandable without misleading the employee. It avoids having to provide an inflation statement.

The implied real value assumptions in the basis are somewhat optimistic.

The overall criticism of this and the DSS method is that the employee is still not given any indication of the comparison of the investment returns over long periods between different investment media. This point is discussed in more detail later.

7.12. Contracted-Out Money Purchase Schemes

7.12.1. Rebate-only Schemes.

Illustrations for these schemes follow the rules for APPS, except that since under Comps the contributions are received and invested immediately, the benefits are enhanced by 3 per cent to allow for this feature.

7.12.2. Where Comps provide more than rebate-only benefits, the Lautro rules on illustrations are more flexible compared with personal pensions.

The life company is not under any obligation to separate the protected rights element from the main scheme benefits, neither is there any obligation to show the pension benefits.

So life companies have a choice in illustrations:

either it can show the protected rights separately on a one year real value basis as for APPs, with the 3 per cent enhancement;

or it can show the total cash roll-up benefits on the same basis as for personal pensions with standard expenses on the same basis;

or it can show both, including comparing the total roll-up benefits with the anticipated salary at the retirement date on the Lautro earnings growth assumption.

7.12.3. If a pension benefit is shown, then of necessity the protected rights element would be shown separately primarily because the protected rights and the main benefit pension are on a different basis.

However, the protected rights pension can be based on the cash roll-up accumulation sum shown in the illustration. There is no obligation, as with APPs to show its real value.

The assumptions for the annuity basis are the same as for APPs and PPs.

7.12.4. An example of a Comp illustration is shown in Exhibit E.

7.12.5. Comments - here Lautro has given life companies a certain amount of flexibility that enables them to provide illustrations that will be more readily understood by the employee.

However, it does not provide a basis for comparison with the personal pension alternative.

The ability to show rolled forward benefits and earnings does enable the benefits to be shown as a percentage of those earnings. But they are still "telephone numbers" and frankly the average employee does not believe the earnings illustration.

8. CONCLUSIONS ON THE ILLUSTRATIONS

"Where is the knowledge we have lost in information?"

T S Eliot

8.1. The overall and obvious conclusion is that Mr Norman Fowler's commitment to employees has not been fulfilled. These illustrations give no help at all to employees assessing the merits of company schemes and personal pensions, though they do help in deciding between Serps and personal pensions.

8.2. The failure arises from three outstanding features:

- Lack of cohesion over the methods used for the illustrations. Some are on a one-year value basis, others on a total roll-up system. Some show real values, others just money values. Indeed with some illustrations there is not even a requirement to show the actual pension payments - what the whole exercise is supposed to be about.

- Lack of consistency in the underlying assumptions.

  Table 1 overleaf summarises the basis used in the various illustrations. Personal pensions will show better returns simply because its investment assumptions are more optimistic.

  Most employees will not read the caveats accompanying the illustrations.

  The author is particularly concerned that with personal pensions, the whole emphasis is on the build up to retirement, with the pension aspect treated almost as a bring benefit in the contract instead of being the centrepiece.

- The illustrations make no attempt to compare like-with-like concerning the totality of benefits provided.

  This is particularly evident in comparing company schemes and personal pensions. The illustration makes no attempt to cost the death-in-service and disability benefits provided automatically by almost all company schemes.

  There is also no attempt to compare like-with-like on the actual pension payments.

  Company schemes are more and more providing discretionary pension increases to offset, at least partially, the effects and ravages of inflation on the real value of pensions. When an employee buys a pension from a life company he gets what he pays for and the price of a cost-of-living indexed annuity linked to the Retail Price Index is expensive.

  One underlying fault is that the illustrations have been designed without much regard to their uses, in particular using them to compare with other pension systems.

  And one common feature in all illustrations is the mass of words accompanying the figures - a feature that is certain to ensure the average employee will not study the illustrations as they should be studied.

Table 1

COMPARISON OF ASSUMPTIONS

	Serps		Company Schemes (a)	LAUTRO APPs		LAUTRO Personal Pensions		Building Society Deposit P.P.	
	Lower	Upper	Range	Lower	Upper	Lower	Upper	Lower	Upper
	%	%	%	%	%	%	%	%	%
Investment Return	-	-	8-10	-	-	8.5	13.0	10.15	11.40
Earnings Growth	-	-	6-8	-	-	5.5	10.	7.5	
Prices Increases	-	-	5-6	-	-	4.0	10.0	6	
Investment return over earnings	-	-	2-3	0.5	2.5	3.0	3.0	2.65	3.90
Investment return over prices	-	-	3-5	-	-	4.5	3.0	4.15	5.40
Earnings over prices	Nil	1.5	1-2	-	-	1.5	Nil	1.5	

(a) Concensus of certain consultants.

8.3. Life companies themselves are very dissatisfied with the Lautro illustration rules, primarily because they are causing complete confusion to intermediaries and employees.

8.3.1. The Association of British Insurers is seeking several changes to the Lautro rules on illustrations. It is understood that the main changes it would like to see are:

- A single illustration basis, possibly on a rate of interest midway between the present two rates, say 10.5 per cent.
- The illustration would allow for the life company's own expense experience and charging structure.

In reference to these two features, the ABI points to the success of its own illustration basis in force prior to the introduction of the Lautro rules. This operated on a single interest rate and the company's own expenses.

It is interesting to note that the magazine Money Management, in its annual survey on personal pensions, had dispensation from Lautro to obtain illustrations reflecting the individual charging structure. Sales of that issue were far higher than normal - it was the only opportunity open to intermediaries to get this information.

It is understood that the magazine intends to repeat this exercise for its next survey.

- The basic illustration method for both APPs and PPs would be on a money roll-up system with flexibility being allowed in showing the inflation effect as either discounting back to current values or rolling forward the employer's earnings and showing pensions as a percentage of final earnings.
- Allow more flexibility and discretion in the actual methods used.

8.4. The life companies put forward these views very strongly in the consultation period prior to Lautro's rules being formulated, without any success whatever. The responsibility for the rules rests solely with Lautro.

However the ABI can now approach Lautro with experience on the confusion caused by the rules in their present form. In the current climate of a more flexible approach to the financial services rule books, the ABI hope that Lautro and Sib will be more receptive to its recommendations.

Both Sib and Lautro now have a full time actuary among their officials as well as actuaries on their boards.

8.5. However, one feels that the ABI is still only looking at the narrower view of illustrations as a marketing tool for personal pensions and not the wider implications of helping employees in their choice of pension arrangements.

8.6. One major defect in the whole Lautro illustration method is that it conveys the impression that all investments have the same return. There is no indication of investment risk/reward.

8.6.1. Although the 1986 Social Security Act gives the social security secretary powers to control investments in personal pensions, to date these powers have not been taken up, leaving personal pension providers with complete investment flexibility. Norman Fowler at the time stated that he was leaving it to competition and the best advice requirements to ensure that advisers explained the investment implications to employees.

The author would like to see an Investment Statement accompanying every illustration alongside the Inflation Statement.
What one has in mind is an indication of past investment returns going back as far as 40 or 50 years together with the figures for earnings growth and price inflation.

At least one leading investment house produces a half yearly review of the past investment scene comparing the returns on equities, fixed-interest and cash.

Such a statement would need to be prepared by an independent body (a performance measurement company?) on behalf of the regulatory bodies.

9. CONCLUSIONS

"Read not to contradict and confute, nor to believe and take for granted, nor to find talk and discourse, but to weigh and consider."

Francis Bacon

9.1. By now it should be obvious to everyone that it is impossible to use the present system of illustration for comparing benefits between various pension arrangements, thereby vindicating the hard way the original contention of the profession that it was impossible to provide meaningful comparisons between defined benefit company schemes and defined contribution personal pensions.

9.2. Nevertheless, the profession just cannot wash its hands of the whole business. Illustrations and forecasts are now an established feature of the pensions scheme. The priority is to ensure that these illustrations are meaningful and serve a particular purpose. Who better than the profession to bring this about?

9.3. It is accepted that actuaries, in their role as life company executives, are involved in discussions with the relevant bodies - Sib and Lautro. But at the end of the day, the life assurance industry cannot set the financial services rules.

So why not an independent actuarial body advising Government, civil servants and the financial services regulating bodies on all pension illustrations. After all, the profession is involved in all pension aspects. It is the only body which could ensure a set of standard assumptions and basis acceptable to all parties.

9.4. The consultants have shown the way in which this could be done in dealing with requests from their corporate clients to provide the answer to the question - "How does an employee compare his company scheme with personal pensions?"

9.5. A discussion on ways to compare the two alternative pension arrangements in a paper in itself. It is to be hoped that the subject will be discussed at Staple Inn in the not too distant future.

9.6. An employee in making his decision has to take into consideration a number of factors and consider the position, not only at retirement, but when he changes jobs.

An employee changing jobs in the near future could well be better off taking a personal pension rather than joining or staying in the company scheme, especially if he or she is young and the employee's contribution to the company scheme is high.

9.7. The central theme in the comparison systems being designed by consultants is flexibility, bringing all these features into account.

By using VDUs, the employee can input his own data and get back very quickly his own details.

Some consultants use the one year brick approach, but most still favour a total return approach and a return for those years up to the expected time of changing jobs, as well as to NRD.

One hopes that the consultants will publicise their systems and the approach and philosophy can be discussed by the profession.

But above all, the consultants have used their own basis for ascertaining the personal pension benefits, often using not an assumed rate of investment return, but the average return over the past 25-30 years.

9.8. The consultants are confident that their methods of comparison, using their own basis, conform with the provisions of the financial services regulations. Both Sib and Lautro are not at all certain of the situation in a hybrid illustration or projection.

It would be a retrograde step if consultants were forced to follow the regulations. For they have shown that actuaries, left to exercise their own professional judgement, can produce systems that are meaningful, that work and are understood by employees.

9.9. The final object of this paper is to stimulate interest in the subject and discover views on the profession. The danger with any system enshrined in legislation is that it becomes set in concrete and needs dynamite to get it changed. Action needs to be taken while there is still time.

9.10. In any event, there is a need to educate the public and those advising the public, on illustrations, what they mean and above all what they do not imply. And to do this on the illustration forms themselves in as few words as is necessary.

ACKNOWLEDGEMENTS

It is said that to copy from one source is to plagiarism, but to copy from several sources is research. If this is so, then this paper has been researched in depth.

The author is indebted to so many people for help, information, ideas and material, that space does not permit a complete roll call. However, my especial thanks go to Nigel Bodie, Bryn Davies, Les Owen and Brian Sammons, Malcolm Reid, Chief Executive of Lautro, and Margaret Evens of the Department of Social Security.

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(1) Details of the new pensions framework are described in the 1988 Current Topics paper presented to the Faculty of Actuaries Students' Society.

(2) The Financial Services Act by J P Bannon and M D Moule, presented March 1987.

(3) Personal Pensions: A Consultative Document, 1984.

(4) Reform of Social Security Programmes for Action Cmnd 9691, December 1985.

(5) Promises, Promises, the Reality and Myths of Quotations, by M Iqbal and E Short.

(6) Rule Books of the Securities and Investments Board and the Life Assurance and Unit Trust Regulatory Organisation.

Exhibit 'A'

RETIREMENT PENSION FORECAST

Department of Social Security
Central Office Room 37D Longbenton
Newcastle-upon-Tyne NE98 1YX

The total Retirement Pension you may be entitled to

According to our information and our calculations:

- if you were getting a State Retirement Pension now, you would be entitled to £ 5.54 a week based on our present National Insurance contribution records.

- by the time you are 65, assuming your wages go up at the same rate as prices, you are likely to be entitled to a State Retirement Pension that would be £85.35 a week if you were getting it now. If your wages go up at 1.5% above the rate that prices are going up, you are likely to be entitled to a State Retirement Pension that would be £88.83 a week if you were getting it now.

Basic Pension

To get Basic Pension you need to have enough National Insurance (NI) contributions in enough years. The rules about what count as enough NI contributions and enough years are quite complicated. If you want to know more, detailed information about this is in Leaflet NP32.

Our records, up to 5 April 1987, show that you do not yet have enough NI contributions in enough years to get Basic Pension.

If you go on working and pay enough full-rate NI contributions for 35 tax years between 6 April 1987 and 5 April 2024 you could get the full amount. This would be £41.15 a week if you were getting Basic Pension now.

But, if you only go on working and paying full-rate NI contributions for any 2 tax years between 6 April 1987 and 5 April 2024 you could get the minimum of 25% of the full amount. This would be £10.29 a week if you were getting Basic Pension now.

Additional Pension: what you will be entitled to when you are 65

If you go on working until you are 65 you will be entitled to a bigger Additional Pension. We have worked out how much you would get, as if you had already worked until you were 65 and were getting your Additional Pension now.

We have worked this out in two ways, using your highest earnings in the last five years when you paid contributions:

1. As if each year until you are 65 your earnings go up at the same rate as prices are going up at the moment.

   Working it out this way you will get an Additional Pension of £44.20 a week payable by the State.

2. As if each year until you are 65 your earnings go up 1.5% more than the rate that prices are going up at the moment.

   Working it out this way you will get an Additional Pension of £47.68 a week payable by the State.

Please remember, the amount of Additional Pension you get may be different if in the future you decide to leave or join a contracted-out occupational pension scheme used instead of SERPS. The same applies if you leave or join a personal pension scheme.

Exhibit 'B'

Nut House, High Road, Bulton

NUTS & BOLTS PENSION FUND

PERSONAL BENEFIT STATEMENT AS AT 6TH APRIL 1988

Name: E. Shortson   Membership No: TR265443GF

Set out below is a statement of the main benefits which you will receive from the Fund in various circumstances. They are based on your salary record up to 6th April 1988 and the other personal information shown below; sections other than the one relating to Normal Retirement show what would have been paid if the relevant event had taken place on 6th April 1988.

Date of: Birth	18.02.1960
Entry to Fund	23.05.1985
Commencement of Pensionable Service	23.05.1985
Normal Retirement	28.02.2025
Pensionable service to Normal Retirement Date	39 yrs 9 mths
Basic Annual Salary at 6th April 1988	£16,230 p.a.
Pensionable Salary at 6th April 1988	£14,098 p.a.
Your contributions with interest to 6th April 1988	£1,650

If you think that any of this information is wrong, please contact Mr J. Bloggs, Fund Administrator, Nut House, High Road, Bolton.

IF YOU WORK TO NORMAL RETIREMENT DATE

Your Fund pension will be	£9,340 p.a.
Of which you have so far earned	£666 p.a.
You can then exchange some pension for a lump sum of	£24,345
If you do, your reduced pension will be	£6,635 p.a.
If you die on pension, your spouse's pension will be	£4,670 p.a.

IF YOU RETIRE BECAUSE OF ILL HEALTH

Your Fund pension will be	£5,002 p.a.
If you die on pension, your spouse's pension will be	£2,501 p.a.

IF YOU DIE IN SERVICE

A cash sum will be payable of	£32,460
Your spouse's pension will be	£2,501 p.a.
Allowance payable for each eligible child	£834 p.a.

IF YOU LEAVE SERVICE

For an explanation of the options available on leaving service, please refer to the member's explanatory booklet. Full details of your own benefits may be obtained from the Fund Administrator at the above address.

NOTES

This statement confers no right to benefit. It should be read in conjunction with the member's explanatory booklet. All benefits will be calculated according to the Trust Deed and Rules of the Fund and legislation at the date they become payable. Further information about the Fund is available from the Fund Administrator at the above address.

Exhibit 'C'

PERSONAL PENSION
PROTECTED RIGHTS ILLUSTRATION
Investment in Pension With Profits Fund

Member - Male born 18/02/60 Retirement at State Pension Age 65

Estimated Earnings in tax year 88/89 £16230

Tax Year		88/89
Employer's contracted out rebate	£	533.25
Employee's contracted out rebate	£	280.66
Plus return of basic rate tax paid on employee's rebate	£	93.55
2% incentive	£	280.66

Illustrative retirement benefits	0.5% p.a. real rate of return	2.5% p.a. real rate of return
Fund at normal retirement age which provides	£ 1290	£ 2600
Member's pension	£ 103 p.a.	£ 242 p.a.
Spouse's pension	£ 52 p.a.	£ 121 p.a.

Corresponding SERPS benefits given up:	Member's pension	£ 61 p.a.
	Spouse's pension	£ 30 p.a.

Transfer values after	1 year	£	1251
	2 years	£	1389
	3 years	£	1812
	4 years	£	2351
	5 years	£	2916

The figures quoted in these illustrations comply with the rates of return and other factors prescribed by LAUTRO.

Notes

a) The illustrative retirement funds assume a future real rate of return in excess of the increase in national average earnings.
b) Immediate annuity rates at retirement are assumed to be based on an interest rate of 10% per annum (2.50% real rate of return) and 8% per annum (0.50% real rate of return). The figures shown are not guaranteed and no forecast is implied.
c) Pensions are payable monthly in advance throughout life.
d) Pensions in payment will increase at 3.00% per annum.
e) On death before retirement, the full value of the fund will be paid.

THIS ILLUSTRATION MUST BE READ IN CONJUNCTION WITH LEAFLET QL47

Exhibit 'C'

PERSONAL PENSION ILLUSTRATION
Investment in Pension With Profits Fund

Member - Male born 18/02/60 (Employed)
Normal retirement age 60

Contributions payable monthly from 01/09/88 for 31 years 5 months

1. Contributions
Increasing in line with the Index of Average Earnings

Employee's gross monthly contribution (initially)	£	40.00
Employee's monthly contribution payable to Standard Life net of basic rate tax relief (initially)	£	30.00

2. Benefits
Illustrative retirement benefits:

	8.5% p.a. rate of return		13.0% p.a. rate of return	
Fund at normal retirement age	£	108000	£	381000
which provides				
Tax free cash	£	27200	£	95300
plus Member's pension	£	8470 p.a.	£	33900 p.a.

Transfer values after	1 year	£	307
	2 years	£	682
	3 years	£	1331
	4 years	£	2195
	5 years	£	3324

The figures quoted in these illustrations comply with the rates of return and other factors prescribed by LAUTRO.

Notes

a) The illustrative retirement funds assume the rates of return shown above.
b) Immediate annuity rates at retirement are assumed to be based on an interest rate of 10% per annum (13.0% rate of return) and 8% per annum (8.5% rate of return). The figures shown are not guaranteed and no forecast is implied.
c) Pensions are payable monthly in advance throughout life.
d) On death before retirement, the full value of the fund will be paid.
e) Gross contributions will change in line with changes in the Index of Average Earnings.

THIS QUOTATION MUST BE READ IN CONJUNCTION WITH LEAFLET QL44

Exhibit 'D'

RETIREMENT INVESTMENT ACCOUNT

Personal Illustration

```
Customer details
=======================================
Name          m
Address


Occupation
Customer number
Date of birth(dd/mm/yy) 18/02/60
   Age 28 years  6 months
Sex (M/F)  M

Annual income                 £16230
Highest personal tax rate      25.00%
```

```
Projection details
=======================================
Preferred retirement ages
  Gov't contributions      65
  Add'l contributions      65

Regular contribns  Employer Employee
 % of earnings           %    3    %
 Monetary amount    £        £
 Annual or monthly(A/M) M         a
 Increasing at 5% pa    N         N
Initial single contribn   £
Transfer-in: Gov't cbn    £
             Add'l cbn    £
Delay Gov't cbn? N Backdate Gov't? Y
50% Spouses Pen? n Gov't bonus? Y
Input checked - select next step
```

```
Contributions Paid into Accounts    1
=======================================

Government Contributions Per Year

  National Ins Rebate        £   814

+ Basic Rate Tax Relief      £    94

+ 2% Bonus Incentive         £   281
                             =======

Total Gov't Contributions    £  1189

Transfer-in                  £     0
```

```
Contributions Paid into Accounts    2
=======================================

 Additional Contributions Per Year
                    Employer Employee
Contributions Paid  £     0  £  487
+ Basic Rate Tax Rlf         £  162
                    =======  =======
Total Add'l Cbns    £     0  £  649

Initial Single Cbn Paid      £    0
+ Basic Rate Tax Rlf         £    0
                             =======
Total Initial Single Cbn     £    0
Transfer-in                  £    0
```

```
 Benefits in Cash Terms
=======================================
  Interest Rates: Current  Alternate

 Gov't fund at 65 £752499   £583617

   Pension       £64753  pa £50221  pa
 & Spouses Pen £32376  pa £25110  pa

 Add'l fund at 65 £695029   £553853

   Pension       £85081  pa £67799  pa
 or Lump Sum     £150000    £150000
  & Pension      £66719  pa £49437  pa
```

```
 Benefits in Real Terms
=======================================
  Interest Rates: Current  Alternate

 Gov't fund at 65 £89710    £69576

   Pension       £7720   pa £5987   pa
 & Spouses Pen £3860   pa £2993   pa

 Add'l fund at 65 £82858    £66028

   Pension       £10143  pa £8083   pa
 or Lump Sum     £17882     £17882
  & Pension      £7954   pa £5894   pa
```

The illustration attached is based on the following assumptions:

(i) Basic rate tax of 25%

(ii) Price inflation of 6% p.a.

(iii) Increase in earnings of 7.5% p.a.

Exhibit 'D'

Notes

1. The illustration represents only an indication of the possible level of benefits under the scheme.
2. The illustration in the left hand column is based on our current rates which are as follows

10.15% to 11.40%

3. The illustration in the right hand column is based on tiered rates from 9% to 10.25%.
4. The rates of interest and interest rate bands may vary according to market conditions.
5. The "Benefits in Real Terms" are equivalent to the "Benefits in Cash Terms" adjusted for inflation to show what the benefits at retirement would be worth in today's money.
6. Where contributions are dependent upon earnings, we have made an assumption about future increases in earnings.
7. The pension figures are illustrated using annuity rates based on 9% interest. The annuity is payable monthly in advance. The actual annuity rates applicable at retirement will depend on prevailing market conditions at that time. Pensions resulting from Government contributions increase at 3% per annum.
8. Where contributions include amounts payable by the government, we have adopted their estimate for the contribution rates payable after the 5th April 1993.
9. The maximum lump sum payable may be reduced if pension benefits are provided for surviving spouses or dependants.
10. This illustration is based on our understanding of current legislation and Inland Revenue practice.

Exhibit 'D'

Institute of Actuaries • Faculty of Actuaries

Staple Inn Hall, High Holborn, London WC1V 7QJ
Telephone: 01-242 0106. Fax: 01-405 2482
Telegraphic Address: Actinst London WC1

23 St. Andrew Square,
Edinburgh EH2 1AQ
Telephone: 031-557 1575

To: All UK Fellows and Associates

Dear Member,

CONTRACTED-OUT REBATE

Members may be interested in the following extract from a letter from the Government Actuary to the Chairman of the Pension Standards Joint Committee regarding the projected level of the contracted-out rebate in future quinquennia.

"On the same assumptions as those set out in my report on the review of the contracting-out terms (Cm 110), in particular assuming that the weightings by age and sex remain the same, the contracted-out contribution reduction in successive 5 year periods would be as follows:

	%
1993-98	4.8
1998-2003	4.3
2003-08	3.9
2008-13	3.6
2013-18	3.5
2018 onwards	3.4

These figures assume that the 0.4% additional margin which has been included in the rebate of 5.8% for 1988-93 will not be added in later periods. The gradually reducing level of the rebate simply reflects the declining proportion of those contracted-out who will be accruing guaranteed minimum pensions at an accelerated rate."

Yours sincerely,

C D A Mackie
Secretary-General
Institute of Actuaries

W W Mair
Secretary
Faculty of Actuaries

September 1987

Exhibit 'E'

FLEXIBLE EXECUTIVE PENSION PLAN
Contracted out under Social Security Act 1986

Male, Date of birth 18.2.1960
Selected Retirement Date (SRD) : 65th Birthday
State Pension Age (SPA) : 65th Birthday
Age of Dependant at SRD : 62 (Assumed)
Service to SRD : 36 years 5 months
Pensionable Earnings £16,230 : Assumed Gross Earnings £16,230

INITIAL CONTRIBUTIONS

	EMPLOYEE	EMPLOYER
Gross monthly contribution	£40.58	£66.35
Less tax relief at 25.00%	£10.14	
Less saving in N.I. contributions	£22.88	£43.47
Less tax relief at 35.00%		£8.00
Net monthly outlay	£7.56	£14.88

Government incentive from DHSS £183.04

RETIREMENT FUND AT SRD INCLUDING PROTECTED RIGHTS
Assuming growth per annum of (a) 8.50% and (b) 13.00%

	(a)	(b)
Projected value of the Fund	£497,000	£2,130,000

The offer price of Accumulation Units in the Pension Managed Fund has grown at an average rate of 24.4% p.a. compound since the date that prices were first published (May 1980) until the end of July 1988. This is equal to a real rate of return in excess of National Average Earnings of 14.3% p.a. It must, however be borne in mind that past performance is not necessarily a guide to the future.

Exhibit 'E'

FLEXIBLE EXECUTIVE PENSION PLAN
Contracted out under Social Security Act 1986

RETIREMENT BENEFITS AT SRD INCLUDING PROTECTED RIGHTS BENEFIT
These figures should be compared with assumed earnings at age 65 of £111,533 and £501,712 assuming they increase by (a) 5.50% p.a. and (b) 10.00% p.a. respectively.

	(a)	(b)
From projected Fund providing	**£497,000**	**£2,130,000**
Personal Pension each year	£42,300	£210,200
Dependant's Pension each year	£9,660	£47,600

COMPARISON WITH FUTURE SERPS

The projected future SERPS given up by electing to contract out would be (a) £14,100 and (b) £59,800 assuming that Gross Earnings increase by (a) 5.50% and (b) 10.00% per annum respectively. The projected personal pension provided by the N.I. contribution rebates, plus tax relief on the gross equivalent of the employee's rebate, and the Government Incentive would be (a) £21,300 and (b) £105,000 assuming growth per annum of (a) 8.50% and (b) 13.00% respectively.

BENEFITS ON DEATH BEFORE SRD

The value of the benefits payable will be equal to the value of the Fund at the date of death.

THIS ILLUSTRATION IS BASED ON THE FOLLOWING ASSUMPTIONS

* The monthly contributions increase by (a) 5.50% and (b) 10.00% per annum compound.

* All pensions illustrated will increase at 3.00% per annum compound.

* The monthly contribution is first due 2.9.1988 and last due 2.2.2025. £66.35 is payable by the employer and £40.58 by the member.

Exhibit 'E'

FLEXIBLE EXECUTIVE PENSION PLAN
Contracted out under Social Security Act 1986

Supplementary Illustration

The Flexible Executive Pension Plan is essentially a long term investment contract to provide income in retirement and the transfer value on early surrender may be less than the premium paid, especially in the early years.

TRANSFER VALUES IN THE FIRST FIVE YEARS ASSUMING INCREASING PREMIUMS
Illustration on a Unit Linked Basis

At end of Year	
1	£1,271
2	£2,773
3	£4,788
4	£7,187
5	£9,870

The transfer values set out above have been calculated according to rules prescribed by Lautro. [redacted] does not guarantee that the amount to be paid if the contract is surrendered at one of the durations specified will be as high as the amount indicated.

The amount actually payable will be determined by the number of units attaching and the ruling bid price of the units to which the Flexible Executive Pension Plan is linked (less any relevant charges).

The transfer values quoted are the amounts that could be payable on transfer of pension rights to another pension contract. The transfer value would not be payable directly to the pension scheme member.

Exhibit 'F'

SCHEDULE 6

STATEMENT OF THE EFFECT OF INFLATION

Both the purchasing power of the ultimate benefit and the real cost of any future premiums/investments payable will depend on the rate of inflation over the period of the contract. By way of illustration the following table shows what £1,000 will be worth in today's money at the end of the periods shown if the annual rate of inflation over the period is as shown:-

Period (years)	*4% Inflation*	*7% Inflation*	*10% Inflation*
	£	£	£
1	962	935	909
2	925	873	826
3	889	816	751
4	855	763	683
5	822	713	621
10	676	508	386
15	555	362	239
20	456	258	149
25	375	184	92
30	308	131	57
35	253	94	36
40	208	67	22
45	171	48	14
50	141	34	9

[Illustrations of future benefits have been calculated on the assumption that an average investment return of either 8.5% or 13% will be achieved each year in the period prior to retirement. Some part of this investment return will, however, be needed to compensate for the effects of inflation.

If you want to know how much the illustrated future benefits might be worth in today's terms you should use the table above to make allowance for future inflation. Find the figure in the table which is appropriate to the number of years before the benefit will be paid and to the rate of inflation assumed over that period (eg. for a period of 10 years with inflation at 4% the appropriate figure is 676). (For numbers of years not shown in the table you may find it helpful to use the nearest period given). Multiply the illustrated future benefit (in pounds) by that figure and divide the result by 1,000. You will then be able to see the buying power, on your chosen assumptions, of the sum illustrated in today's pounds.

In deciding which inflation rate to choose, you should bear in mind that the investment rate of return used to calculate the illustrated benefits can be seen as the sum of two different parts. One part is the inflationary element; the other is the real rate of return. So in round terms, the rate of inflation plus the real rate of return equals the investment rate of return. Past experience suggests that over long periods you could reasonably expect the real rate of return to be in the range 3 - 5%. So a reasonable rate of inflation to choose is a rate 3 - 5% less than the illustrated return. [Where a fixed annuity is illustrated you should remember that inflation at the selected rate should be assumed to continue after retirement thus gradually reducing the real value of any benefits.]**

Exhibit 'F'

Example

An illustration given for an investment return of 8.5% shows a retirement fund of £10,000 available in 10 years' time. At this rate of return and using an inflation rate of 4% you would arrive at a real rate of return of approximately 4.5% (8.5 minus 4) which is within the range 3 - 5%. The figure in the table corresponding to 10 years and 4% is 676 and so the answer to your question is £6,760.

$$\text{(i.e. } \frac{£10{,}000 \times 676)}{1{,}000} \quad]^*$$

NOTE

1) Figures need not be given for any period longer than four years after the period of the projection. Where the projection includes an annuity (other than a joint life annuity) the period of the projection for this purpose need not extend beyond attainment of age 90 by the annuitant. For joint life annuities the period of the projection need not extend beyond attainment of age 90 by the first life whose death will result in a cessation or reduction of the annuity and it shall be assumed that deaths occur in age seniority order.

2) Figures need not be given for periods of from 1 to 4 years inclusive where the period of the projection exceeds 5 years.

3) The words "Both" and "and the real cost of any future premiums/investments payable" may be omitted if the statement relates to a policy or pension contract under which no regular premium is payable or a lump sum investment into a unit trust.

4) * Delete in the case of a projection which is not in respect of a pension contract where the term of the projection (disregarding any such term occurring after the commencement of an annuity) exceeds five years.

5) Where the contract is one for which the wording referred to in Note 4 is required, it shall be permissible to include with the projection an illustration of the real value of the benefits. In performing such an illustration a Member shall:-

a) Multiply the projected benefit by

$$\left(\frac{1}{1.04}\right)^N \text{ and } \left(\frac{1}{1.10}\right)^N$$

for the projections calculated at the lower and higher rates of return respectively, with the results rounded down to three significant figures. N shall be the term (in years) of the projection but disregarding any such term arising after the commencement of any annuity; where N is not an integral number of years a Member may assume a term of N' + 1/2 years where N' is the number of complete years in such term and

b) Indicate that the illustration assumes inflation rates for the period prior to the commencement of any annuity of 4% and 10% and

c) If a fixed annuity has been projected, indicate that no allowance has been made for inflation after the commencement of the annuity or in the case of an escalating annuity make it clear that the allowance for inflation is limited to the rate of escalation.

6) ** Delete where no fixed annuity is illustrated.