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NOTES ON UNIT TRUSTS AND LIFE ASSURANCE

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Any paper to an audience of actuaries could devote a considerable space to setting out the reasons why a type of contract where the benefits are, in the main, not guaranteed and can fluctuate from day to day should not be encouraged. We shall, however, instead confine ourselves to the position as it exists at present namely that policies incorporating life assurance and investment in unit trusts are available in a variety in forms. Similarly, annuity policies are available providing benefits expressed in terms of units.

It seems to us that the contracts available may be classified into five types as follows :-

Type 1. Unit trust saving plans

Most of us will be familiar with the "savings plans" operated by the majority of unit trusts. In these plans the subscriber pays a level amount periodically to the Managers of the Trust and each of these payments purchased a number of units depending on the bid price of the units at the date of payment. Periodically (usually twice a year) the income from the units, less tax at the standard or some lesser rate depending on the personal tax position, is used to acquire further units.

Several of these units trusts now offer the auxiliary benefit of life assurance in connection with their savings plans for subscribers not above a certain age.

An applicant for this type of plan has to state his intention to continue his savings plan for a definite period (ten years in all the plans of type 1 which we have examined) and to make subscriptions at monthly intervals.

The amount of the life cover on death during the saving period is the amount of the total subscriptions to the plan remaining unpaid at the death of the unit-holder.

The amount of the monthly subscriptions must lie between five and forty pounds per month and subject to this upper limit subscriptions may be increased for the balance of the saving period. As the units purchased by each subscriber's payments belong to him beheficially, they may be withdrawn by the subscriber from the savings plan either partially or wholly at any time. At the end of the savings period the units purchased are made over to the subscriber. Alternatively, the subscriber can take the cash value of the units standing to his credit.

In all the plans of Type 1 which we have examined the life assurance benefit has been reassured with a life office. Under one arrangement no extra charge is made by the Managers for the cost of the life assurance cover.

In the other cases a deduction of 9d in the pound is made from each monthly subscription paid as the cost of the life assurance benefit and only the balance is available for investment in units.

Type 2. Unit trust saving policies.

In the Type 1 plans described above the units allotted to each subscriber belong beneficially to him and form his personal "savings bank". No income tax relief is, however, available on this type of arrangement.

If full life assurance tax relief is to be obtained it is necessary to consolidate the temporary life assurance cover and the "savings plan" element of Type 1 into a single contract and this has been arranged in several cases. The units standing to the credit of each subscriber (or policyholder as he should perhaps now been termed) remain in the control of the life assurance company standing behind the unit trust managers. A uniform rate of tax is payable on the income from the units as for an orthodox life fund of an assurance company although it is not clear whether the policyholders receive any benefit from management expense relief.

In several cases the assurance companies have been especially established by the Unit Trust Managers and units may be held,at the option of the policyholder, in any of the trusts under the control of the Managers.

The benefit on death during the term of the policy consists of the units deemed purchased up to that date together with a sterling benefit which is usually along the same lines as for Type 1, namely an amount equal to the subscriptions unpaid at the date of death. The cost of this temporary decreasing cover is met by appropriating a fixed percentage of the subscription. With Type 2 contracts there is more variety available in the term of the plan and the percentage deduction varies accordingly.

A variation in the form of the benefits payable on death is worth mentioning. A guarantee exists that the benefits payable on death will not have a cash value less than the total of the subscriptions due to be paid throughout the plan. When the units deemed held have a value greater than this guaranteed minimum the supplementary life cover ceases and the whole of the subscriptions payable thereafter are allotted towards units.

As with the ordinary type of endowment assurances,under Type 2 a policyholder may surrender his contract by cashing the units standing to his credit. Alternatively the units may be transferred to the policyholder's name on payment of any stamp duty liability or the contract may be made paid-up for the units standing to the credit of the subscriber at that time with the benefits payable on maturity or on earlier death. Further units are added to the paid-up policy on account of the interest accruing thereafter.

Type 3 - Endowment Assurance Type Schemes.

Two schemes are in force in the form of the traditional endowment assurance policy.

In each case the basic benefit under the policy at maturity consists of units in an actual trust or a sum linked in value to units of an actual Trust. The number of such units secured depends on the price of these units from year to year over the term of the policy. Thus in the case of a twenty year policy for a nominal sum assured of £1,000, the total number of units at maturity will be the number which could have been purchased at the prices ruling by an amount of £1,000 applied in equal annual instalments of £50 irrespective of the annual premium being paid for this nominal sum assured of £1,000.

On death before the end of the term a cash sum is payable to the value at that date of the total number of units attributable to the policy at the date of death together with the outstanding proportion of the nominal sum assured.

In one scheme there is also the guarantee that at maturity or on earlier death at least the nominal amount of the sum assured will be payable. In another arrangement bonuses are allocated in the form of sterling additions to the basic benefit. These reversionary bonuses are determined not in relation to the nominal sum assured but to the market value of the units attributable to the policy at the date of declaration and also to the outstanding proportion of the nominal sum assured. Subsequent fluctuations in the price of the units will not affect the amount of previous bonus additions. On survival to maturity the total number of units will be transferred to the policyholder, free of expenses, together with, where appropriate, the sterling bonuses. All or a part of the units can then either be sold or retained as an investment.

The income arising from the units acquired is not used to purchase further units but is retained in the Fund. Such income is taken into account when determining the rate of premium to be charged. Any interest or excess of that anticipated in the premium basis is, no doubt, a major source of the bonus allocations mentioned above.

On a policy of Type 3 being discontinued after a sufficient number of premiums have been paid a surrender value or a paid-up policy may be taken. The surrender value will vary with the price of the units at the date of surrender. The value at maturity or earlier death of a policy which has been made paid-up will vary with the price of the units underlying the schemes. In the scheme where a guaranteed sum assured applies there is, also, a guaranteed amount to the paid-up policy, this being a proportionate part of the guaranteed sum represented by the proportion which the number of premiums paid bears to the total term of the policy.

<u>Type 4.</u> <u>Schemes requiring an initial lump sum investment.</u>

There are two different schemes to be considered under this heading.

One scheme enables the policyholder to acquire an immediate interest in a block of units in one or both of two associated unit trusts. The whole block of units, which may cost between £500 and £5,000 is purchased by the life office at the offered price current when the policyholder makes his first contribution which must be equal to one fifth of the total cost. The units are transferred to the policyholder at the end of the term chosen or to his estate upon his earlier death. The income from the units is received by the life office and the annual premium for the contract is calculated based on the rate of interest expected to be received.

A paid-up policy will be issued or a surrender value allowed under the terms of the policy and the terms for such operations will take into account the current value of the units secured by the policy.

The second scheme is along very similar lines to the method of house purchase by means of a loan from a life office combined with an endowment assurance. The loan, in this case, is used to purchase units in one or more unit trusts belonging to an approved list. The repayment of the loan is secured by an endowment assurance for a term of between 15 years and 25 years for a sum assured equal to the loan. The endowment assurance may be "with profits" in which case the borrower is required to put up 15 per cent of the cost of the units or "without profits" where the borrower must put up 20 per cent.

In either case, units from the eligible list may be deposited instead at a value based on their current middle market price. Interest on the loan is charged at a fixed rate of 6 per cent per annum. The income from the units in this case belongs to the borrower. The life office offering this scheme will make a loan of not less than £1,000 but not more than the borrower's annual income which must be more than £1,500 per annum.

Changes in the units held are permitted subject to the prior approval of the office provided, as might be expected, that the security of the office is not reduced. More drastically, if the borrower feels at any time that circumstances make it desirable he may reduce his unit trust holdings and invest the proceeds temporarily in British Government Securities with a final redemption date within ten years. One would be interested to learn in more detail what "circumstances" the office would consider justified this action and their interpretation of "temporarily".

The loan is, of course, automatically repaid on the maturity of the policy or on earlier death. Repayment can, however, take place at any other time without charge if six months' notice is given or with a six months interest charge in lieu of notice.

It might be added that the same office offers a similar scheme to that outlined above whereby investment trust shares may be purchased as well as units in a unit trust. The loan advance in this case is limited to 75 per cent of the total cost but the "deposit" can be in "blue chip" equities if acceptable to the life office. The rate of interest charged in this case is 6½ per cent per annum.

Type 5. Annuity Plans

There are, at present, three annuity Schemes in which the benefits are expressed in terms of a unit trust. Two of these schems are deferred annuity policies for the self-employed under Section 22 of the 1956 Finance Act whilst the third is an immediate annuity.

(i) Deferred Annuity Scheme - Type A.

This policy provides for the payment of a succession of single premiums. Each such premium purchases a number of Investment - Trust - Units depending on the age at purchase, the age at which the annuity is to commence and the price of these units at the date of purchase. After the vesting of the annuity the amount of the quarterly annuity payment will vary according to the price of the units at the date of payment by the Company.

(ii) Deferred Annuity Scheme - Type B.

In this Scheme there are two Funds each completely under the control of the office operating this scheme. During the period of deferment premiums are paid into the accumulation account where they are invested at the discretion of the Company. It is the Company's intended policy that this Fund should be invested almost exclusively in high class ordinary shares. Dividends and interest income (which, of course, are free of tax) are added to the accumulation account and all expenses are paid out of the Fund.

From time to time the Company determines the net value of an accumulation unit having due regard to the current market value of the assets representing the accumulation account and the number of accumulation units outstanding. The net value of the accumulation unit is used for determining the amounts payable to the estates of those policyholders who die before their annuities vest.

During the vesting period the policyholder is free to pay premiums at any time and each premium secures a number of accumulation units.
At the vesting date of the annuity the policyholder may select to receive either :-

(i) a variable annuity, that is an annuity whose sterling amounts will vary from time to time in accordance with the experience of the fund,

or (ii) a conventional annuity providing a constant sterling amount each year,

or (iii) a combination of types (i) and (ii)

If the policyholder selects a variable annuity the net value of his accumulation units (or the appropriate fraction if option (iii) above is taken) is transferred from the accumulation account to the annuity account of the variable annuity fund and is converted into an annuity on an equitable basis as determined by the Company's Actuary.

The annuity is expressed in terms of 'annuity units' on the basis of the then current value of an annuity unit, so that the sterling amount received in payment by the policyholder fluctuates in accordance with the value of the unit thereafter.

The value of the annuity unit is calculated periodically such that the fund held in the variable annuity account is sufficient to meet all the variable annuities included in the account.

If the policyholder selects a fixed annuity the net value of his accumulation units (or the appropriate part thereof) is transferred out of the variable annuity fund and converted into a fixed annuity.

Guarantees

Under its traditional contracts a life office gives guarantees of capital, interest, mortality and expenses. These are specific factors in the premium basis and departure of the experience from the assumptions either eats into, or adds to, the surplus of the office. Where appropriate there may also be guaranteed paid-up values and possibly guaranteed surrender values and these constitute an extension of the normal guarantees to events other than death or maturity.

The nature of equity-linked contracts is such that there is no guarantee of capital, although in some types of contract there is a minimum capital guarantee, as for example in the variation of type 2 described previously. Such a guarantee may be appreciated by the policyholder but may not be reasonable from the point of view of the office; certainly it does not seem to be susceptible to proper actuarial treatment.

In general, guarantees of interest, mortality and expenses are given under types 3, 4 and 5 (i). The interest guarantee arises because in each case premiums are calculated taking into account "expected" dividends on the units purchased. The actual dividends go into the funds of the office.

In types 1 and 2 there are really only guarantees of mortality and expenses. The actual balance of premium after paying (on a pre-determined formula) for expenses and life cover is applied to purchase units at the current price and the only yield which affects the final proceeds of the contract is the actual yield on the units. The dividends roll up to the credit of the policyholder. No assumed rate of interest comes into the transaction. Compare this with type 3 in which the cash instalment invested is $\frac{\text{Nominal S.A.}}{n}$ where n

is the term of the policy, and will not in general be the same as the premium but related to it (inter alia)by the rate of interest assumed by the office. In general we can say that where the roll up of dividends accrues specifically to the policyholder (this may occur in fact because he is the technical owner (type 1); or effectively because he is credited with them by the office but is not the technical owner (type 2)) there is no guarantee of interest or of capital.

Under type 5 (ii) the only guarantee is a minor one in respect of partial expenses, those for management based on a stated formula. Direct expenses such as commission and stamp duty are debited to the fund as they occur and are not covered by a formula. Even the management expense formula is capable of limited amendment.

This paper has endeavoured to present the position as it stands at present on contracts combining life assurance cover with unit trust investment. The various types of contract available to the public have been described and the guarantees the policyholder can expect have been shown in the summary chart. Whether these contracts will ever become popular with the general public depends on many factors, but the authors' sharethe view that a person's basic insurance needs should be satisfied by orthodox policies. These equity-linked contracts have been pushed onto the public with the statement that these policies offer unit trust investment on the cheap with free life cover provided that the normal tax reliefs can be obtained. However, this is in theory the idea behind an endowment assurance contract where after providing for the expenses and the cost of the life cover, the balance of the premium is invested in the life office fund. The two funds are invested widely - the unit trust somewhat limited - but with different principles in mind, one concerned with safety of both capital and a certain level of interest, the other concerned mainly with capital growth. It can be seen therefore that ultimately the intending policyholder has the choice, under normal circumstances, of a guaranteed sum, with or without profits, on death or maturity or the right to participate in the capital fortunes or misfortunes of the funds purchased by his premiums. In a buoyant economy the holder of an equity-linked contract would probably do better than a with profit policy-holder where the bonuses usually depend on the actuarial surplus thrown up by the valuation basis and the revenue account. Here the claims of equity-linked policies could be largely discounted if it was thought prudent to distribute part of the capital appreciation of the life office fund to the generation of policyholders whose premiums had earned it.

Viewing these types of contract with the orthodox policyholders in mind it can be seen that Types 1 and 2 should cause no worry as long as the underwriting principles are on the same standard basis. The"house purchase"alternative to Type 4 would also not affect the main fund, for unless a very severe depression occurred - when this would be a minor worry - the security offered by the units purchased and the surrender value of the endowment should be sufficient. With the other alternative to Type 4, the whole number of units in the chosen trust is bought at the outset by the life office. At this stage the funds of the orthodox policyholders are invested in the trust and through it in stocks that otherwise might not have been considered. To compensate the main fund for this, an allowance should be made in the premium calculations. In Type 3 where units are purchased by successive portions of the nominal sum assured, the interests of the policyholder and the office diverge, one needing capital growth, the other a reasonable yield. In calculating the premium for these contractsthe expected value in sterling of the dividends is taken into account. If the actual sterling return for each £100 invested falls below this expected level during the term of the contract, the office will make a loss. The normal fund can be immunized against interest and capital loss by suitable choice of investments but in the contract under discussion there is no such choice. The extent to which this point should affect the premium and the level of the expected return from the trust is a decision for the actuary supervising each individual scheme.

SUMMARY

It is convenient to summarise the types as follows :

Type.	Death Benefit.	Maturity Benefit	Roll up of Dividends	Tax relief	Effective guarantees
1.	Units purchased to date by amount invested plus cash amount of unpaid subscriptions.	Units purchased to date.	Yes	At mortality on premiums for decreasing temporary assurance.	Expenses and mortality only.
2.	As type 1 with possible variations such as guaranteed minimum cash value.	Units purchased to date.	Yes, effectively, although office is technical owner of units during contract period.	Life assurance relief on full subscription.	Expenses and mortality only. May be minimum capital guarantee
3.	Units purchased by successive portions of nominal S.A. plus complementary proportion of nominal sum assured in cash.	Units purchased to date.	No roll up, but may be sterling bonuses.	Life assurance relief on full subscription.	Interest Expenses Mortality
	Units purchased (all purchased at outset by office)	Units purchased	No roll up, may be sterling bonuses.	Life assurance relief on full subscription (Special initial premium)	Interest Expenses Mortality
5. (i)	Dependent on price of units.	Annuity Benefit Dependent on prices of units	No	1956 F.A.	Interest Expenses Mortality
5. (ii)	Dependent on accumulation unit.	Dependent on value of annuity unit.	Dividend etc go to accumulation or annuity account as appropriate.	1956 F.A.	Part guarantee of expenses only.