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**TAXATION IN THE ASSESSMENT OF  
PROFITABILITY OF LIFE ASSURANCE PRODUCTS  
AND OF LIFE OFFICE APPRAISAL VALUES**

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## INTRODUCTION AND SUMMARY

*This paper describes how the system of life office taxation in the UK impinges on the amount and the emergence of life assurance business profit. It considers how to allow for taxation in the assessment of product profitability and company valuation. Finally, the paper provides a brief overview of the methods of taxation of alternative savings products and of tax systems in the European Community, with a view to drawing conclusions as to possible future changes to the framework of life taxation in the UK.*

Section A outlines the main features of life assurance business taxation, allowing for the changes introduced by the 1989 and 1990 Finance Acts. Taxable income ("I") consists of basic life business investment income and chargeable gains plus profits from the annuity businesses. Life business expenses ("E") are deductible against taxable income, up to the level of such income. The deductions for basic life acquisition costs are spread over a period of up to seven years. Full corporation tax is applied to shareholders' unfranked profits, the remaining balance of I-E being subject to a reduced rate of corporation tax equal to the basic rate of income tax. From 14th March 1989 the minimum level of tax payable for a proprietary office is based on surplus arising less bonus payments, rather than on the amount of the transfer to the profit and loss account. The mechanics by which an office which has an excess of I or E can balance its tax position are also considered in Section A. Appendix I contains a detailed outline of the tax system and the examples in Appendix II illustrate the method of calculating NC1 profit, of computing tax payable and the effect of paying a dividend.

*Both Companies Act and Insurance Companies Act balance sheets make implicit or explicit allowance for tax payable in the future. The method of accounting for this tax can significantly affect the timing of emergence of profit.*

Section B describes the effect of taxation on the calculation of mathematical reserves and in the assessment of embedded values and of accruals method profit. It considers the possible impact of a move towards charging tax within the profit and loss account.

## INTRODUCTION AND SUMMARY

The “in-force” and “open” fund approaches to allowing for tax are reviewed. Tax assets such as unutilised excess management expenses have value because they enable some future taxable income to remain free of tax. Consideration is given as to whether projections of taxable income required to value these tax assets should allow for new business.

*Very different tax treatments are appropriate in the assessment of product profitability for an office which pays I-E tax, for one which pays tax on an NCI basis, and for a non-tax paying office.*

A consistent methodology of allowing for taxation in profit-tests is introduced in Section C and developed further in Appendix III. Appendix IV provides some numerical examples on the effect of taxation on maturity proceeds and profitability.

*Should appraisal values reflect value to a gross or a net investor?*

Section D argues that tax credits on dividend payments are recovered by gross investors and that the benefit of the tax credit in the hands of net investors can often be passed on to their ultimate shareholders. A logical consequence is that appraisal values should reflect part or all of the tax credit and that the risk discount rate used should be increased towards the level required by gross investors. For many companies the effect is for embedded values to increase and goodwill to reduce.

*An increasing number of non-insurance savings products are tax-advantaged. Systems of taxation in the European Community generally result in policyholders' investment income being largely free of tax.*

Section E considers these factors and whether they will result in pressure to change the UK I-E taxation basis.

## Section A

### TAX BASIS

*The tax borne by a life office depends both on the basis of taxation and on the amount of taxable income. This section outlines the framework of taxation of life assurance business in the UK and considers briefly how an office can influence its tax base.*

#### 1. Introduction

Life assurance business is a trade. Normally, profits of a trade are treated as income falling within the scope of Schedule D Case I of the Income and Corporation Taxes Act 1988 (ICTA 1988) and are taxed accordingly. However, this basis would result in profits attributable to life policyholders being free from tax and the Inland Revenue normally elects the alternative, of taxing offices on the basis of their investment income less expenses ("I-E"). Life business chargeable gains were brought into the tax net from 1965.

##### 1.1 Pension Business

The proceeds of pension policies, unlike those of qualifying life policies, are liable to tax and, correspondingly, the investment income and gains attributable to pension business are exempted from tax. The profits of the annuity and pension businesses are calculated according to the rules of Schedule D Case I but brought into charge under Schedule D Case VI (and included in "I").

##### 1.2 Recent Changes

The 1989 and 1990 Finance Acts introduced a number of major reforms, including:

- spreading of relief for basic life business commissions and acquisition expenses
- deduction of expenses of the annuity and pension businesses against the profits of those businesses, rather than in the overall I-E computation
- new rules for the apportionment of investment income and gains between classes of business and of franked income between policyholders and shareholders
- restriction on the reservation of surplus for policyholders
- a revised definition of shareholders' profit, applicable from 14th March 1989, based on the increase in long term surplus plus transfer to the profit and loss account

## TAX BASIS

### *Introduction (Contd)*

- definition of the policyholders' share of I-E as total I-E less the unfranked part of shareholders' profit. Only the basic rate of income tax is applied to such income
- inclusion of miscellaneous BLAB profits ("BLAB Case VI profit") within taxable income
- replacement of the foreign life fund provisions by rules which tax the profits of overseas life assurance business
- introduction, from 1991, of an annual charge to tax on unrealised appreciation of life office unit trust holdings. Treatment of unit trust distributions as unfranked rather than franked income.

Except as stated, the changes take effect from 1st January 1990. Appendix I contains a detailed description of the basis of life office taxation, and Appendix II contains some numerical examples of the method of calculation of tax payable.

## **2. Tax Base**

The tax base consists of taxable income, less relieviable expenses restricted if necessary to ensure that tax payable is at least equal to tax on shareholders' profit.

### **2.1 Taxable Income**

For an office charged to tax on the basis of its investment income, taxable income ("I") consists of:

- unfranked investment income and chargeable gains (net of indexation relief), plus sundry profits, for basic life business
- unfranked investment income, for general annuity business
- general annuity business Case VI profit, ie shareholders' profit less the excess of investment income over annuity payments
- Case VI profits, ie shareholders' profits, for the pension and overseas businesses.

Pension business investment income and gains are exempted from charge to tax.

Franked investment income is deemed to have already suffered tax and does not constitute taxable income for corporation tax purposes.

## TAX BASIS

### *Tax Base (Contd)*

#### **2.2 Relievable Expenses**

Relievable expenses (“E”) consist of:

- basic life business expenses, including acquisition expenses (less reinsurance commissions) spread over a period of up to seven years
- general annuity business annuities paid, up to the level of general annuity business franked and unfranked investment income
- excess management expenses (“excess E”) brought forward
- interest paid and other charges.

Relievable expenses attributable to basic life business are restricted in amount to the total of basic life business taxable investment income, sundry profit and chargeable gains.

Expenses attributable to the general annuity, overseas and pension businesses are deducted in the computation of Case VI profit for these businesses.

#### **2.3 Minimum Tax Test**

The amount of expenses deductible against taxable income in computing taxable profit is restricted, to ensure that the total amount of tax payable is at least equal to the amount that would be payable if the office was taxed on the basis of its Schedule D Case I profit (“notional Case I”, “NC1” or shareholders’ profit). Application of the NC1 test results in the generation of excess management expenses carried forward (equal to the amount of the restriction), available for future offset against taxable income within the I-E computation.

The Revenue has the option to tax the office on the basis of its shareholders’ profit (“true” Case I) if this results in a higher charge. Doing so results in the loss of existing excess E carried forward.

### **3. Tax Payable**

The amount of tax payable on taxable profit, I-E, is determined by apportioning I-E between shareholders and policyholders. The shareholders’ share of I-E is defined as shareholders’ unfranked profit (see paragraph 4 below). The policyholders’ share is the remaining balance of I-E.

## TAX BASIS

### *Tax Payable (Contd)*

Total tax payable is the sum of:

- basic rate income tax applied to policyholders' I-E
- corporation tax applied to shareholders' I-E.

In addition, tax credits on basic life and general annuity business franked investment income are generally irrecoverable. This income is therefore effectively taxed at the basic rate of income tax. The tax credits may, however, be recovered from the Revenue if there is an excess of unutilised management expenses.

#### **4. Shareholders' Profit**

NC1 profit is defined as the profit and loss transfer plus increase in long term surplus, less losses brought forward, plus shareholders' tax attributable to the NC1 profit. Shareholders' franked income is franked investment income multiplied by the ratio of NC1 profit to the excess of total investment income, gains and transfers from investment reserve over total expenses and commissions as shown in Form 40 of the DTI returns. Shareholders' unfranked profit is the excess of NC1 profit over shareholders' franked income.

The method of calculation of NC1 profit is illustrated in Appendix II.1.

#### **5. Dividend Payments and Group Relief**

The principal effect of dividend payments is to result in an advance payment of corporation tax (ACT) rather than to impinge on the amount of an office's total tax liability. A more detailed description of the application of the ACT rules is contained in paragraph 8 of Appendix I, and Appendix II.3 contains some worked examples.

Losses generated in one company may sometimes be offset against shareholders' profits arising elsewhere in a group ("group relief"); Appendix I paragraph 9 contains a brief outline of the relief.

#### **6. "Sale" of Excess E or Excess I**

In some circumstances it is appropriate for an office to manage its tax base in order to obtain accelerated relief for losses or to limit the amount of tax payable on taxable income.

## TAX BASIS

### *“Sale” of Excess E or Excess I (Contd)*

#### **6.1 Background**

For an office which has an excess of I (more accurately I-E, plus franked income on which tax credits are irrecoverable, greater than both zero and also NC1 profit), a marginal increment to BLAB investment income of £100 results in an increase in tax payable of £25 or more. No increase in tax payable arises for an office which has excess E, unless through operation of the NC1 test. I is more valuable to the excess E office than to the excess I office and a potential opportunity to trade I for mutual profit arises.

In practice many excess I (“net” offices) do not sell I to the extent necessary to bring their tax position into balance. Consequently, in Section C, the tax position of a net office and a gross office are considered separately.

#### **6.2 Selling Mechanisms**

The means by which sale of E (equivalently, purchase of I) is achieved include:

- writing income bonds - income bonds generate a substantial level of investment income but comparatively little management expenses and commission.
- reinsurance financing - the reinsurer pays a commission advance to the life office in exchange for the receipt of premium or other payments from the office. This commission is treated as a negative acquisition cost in the office’s tax computation.

Purchase of E (sale of I) is accomplished by the reinsurance out of income bonds or reinsurance financing or by the reinsurance in of short term life business (eg credit life).

#### **6.3 Selling Rate**

The excess E selling rate achieved is equal to the present value of the pre-tax cash flows generated by the mechanism used to achieve the sale, divided by the amount of I generated (or E sold). Currently, selling rates (for transactions between offices or involving the use of reinsurance) are in the range of 10% to 12<sup>1</sup>/<sub>2</sub>%. Somewhat higher rates may apply for transactions involving the purchase of E. For a non-profit or unit-linked office, these transactions will increase or decrease NC1 profit and the selling rates need to be netted down to allow for tax. Since the change in NC1 profit will result in a corresponding change in excess E through operation of the NC1 test, the tax rate to be applied should reflect the difference between the average NC1 tax rate and the gross excess E selling rate. The tax formulae outlined in Section C can be used.

**TAX BASIS***“Sale” of Excess E or Excess I (Contd)***6.4 Postponed Expenses**

Acquisition expenses which have not yet entered the I-E tax computation because of application of the spreading rules (“postponed E”) may be included with excess E for many of the applications considered in this paper. However, it is necessary to bear in mind that postponed E becomes available for relief in stages. For example, sale of postponed E eligible for relief in six years’ time cannot be accomplished by the sale of a four-year income bond.

## Section B

### FINANCIAL REPORTING

*The timing of surplus emergence, and of profit release, depends greatly on the method used to account for current and future tax payable. It is necessary to consider the impact of taxation on both the balance sheet and the income statements of a life office. This section also considers the treatment of tax in the calculation of embedded values and for the ABI proposed accruals method of profit recognition.*

#### 1. Balance Sheets

A UK life office is required to publish at least two balance sheets:

- the first in conformity with the Companies Act 1985
- the second in conformity with the Insurance Companies Act 1982.

The Companies Act 1985 requires the balance sheet of a company to give a “true and fair” view of the state of affairs of the company as at the end of the financial year. Insurance companies are exempted from certain disclosure requirements, a principal effect of which is to permit them to establish and maintain undisclosed reserves. An insurance company which takes advantage of these exemptions is not deemed to have departed from the true and fair view.

The Insurance Companies Act 1982 requires insurance companies to prepare balance sheets in a prescribed format. Regulations have been made controlling the bases used to determine the value of assets and liabilities.

##### 1.1 Investment Income and Expenses

The major impact of tax in the balance sheets is in the determination of liabilities. The provision for policyholders’ benefits in the DTI Returns is determined as the present value of future policyholders’ benefits less premium income plus, perhaps, expenses. This prospective basis allows for investment income to be earned on the assets which are held to match the liabilities. The provision for policyholders’ benefits in the Companies Act balance sheet is usually the “Life Assurance Fund” and is therefore apparently calculated on a retrospective basis, as the accumulation of premiums less claims and expenses. However, this fund calculation is adjusted to allow for any shortfall against the prospective basis by a transfer from other reserves or from the profit and loss account.

Given then that the valuation of the liabilities allows for future investment income, allowance for tax on this income is required if full provision for policyholders’ benefits is to be made.

## FINANCIAL REPORTING

### *Balance Sheets (Contd)*

For basic life assurance business, any investment income received will be taxable and so it is usual to allow for an after-tax rate of investment return when valuing the liabilities. To the extent that future expenses are anticipated in the determination of the provision for BLAB policyholders' benefits, similar considerations apply. Expenses are deductible against taxable income and thus relief for tax may be assumed provided there is sufficient future BLAB taxable investment income. This will usually be the case, as the expenses anticipated relate to policy maintenance and claims handling costs which will generally be lower than investment income.

For pension business, investment income is exempted from tax and so a pre-tax rate of investment return may be used. Any allowance for expenses in the provision for policyholder benefits must be for the full amount, with no deduction for tax.

### **1.2 BLAB Tax Losses**

The above allowances for tax may be modified, however, to the extent that there are tax losses to be carried forward from the balance sheet date. The tax losses that may exist and affect the provision for policyholders' benefits are:

- BLAB deferred acquisition expenses (postponed E)
- BLAB unrelieved expenses of management (excess E)
- BLAB capital gains tax losses carried forward.

Under the new tax regime BLAB acquisition expenses are spread and are recognised for tax purposes over a period of up to seven years. On recognition, they will reduce the amount of tax payable on the investment income in that period. Thus, in calculating the provision for policyholders' benefits it is possible to allow for no tax on that part of the investment income receivable in future periods which is covered by these BLAB deferred expenses.

The tax rules restrict the amount of BLAB expenses that may be recognised for tax purposes to the taxable BLAB income arising. Typically, deductible expenses are heavily weighted towards the beginning of a product's life and the taxable investment return generally skewed towards the end of its life. Frequently, especially for a new and/or a rapidly expanding office, deductible expenses will exceed taxable income even allowing for the deferral of acquisition costs. The excess may be carried forward for deduction in future periods. Just as for deferred acquisition costs, in calculating the provision for policyholders' benefits, it is possible to allow for no tax on the investment income receivable up to the amount of excess deductible expenses carried forward.

## FINANCIAL REPORTING

### *Balance Sheets (Contd)*

In using unrelieved expenses in this way in the DTI balance sheet it is appropriate to use a closed fund approach using only those tax losses available at the balance sheet date. In particular it would not be appropriate to assume that, given the continued sale of new business and consequent generation of tax deductible expenses, these future deductions can be used to cover taxable income arising on the business in force at the balance sheet date. In contrast, within the Companies Act balance sheet, produced on a going concern basis, there is no limitation on the extent to which future expected tax losses can be offset.

BLAB capital gains tax losses may be used to reduce the provision for tax on unrealised gains (see paragraph 1.3). These losses may be used if tax on future chargeable gains is anticipated in the Companies Act balance sheet. The valuation regulations do not allow future investment gains to be brought into account in determining liabilities within the the DTI balance sheet.

### **1.3 Tax Provision for Unrealised Gains**

A provision is required within the DTI balance sheet to meet the tax due when assets are sold, on the BLAB proportion of unrealised gains net of indexation relief. For with-profit funds this provision is implicitly held within the difference between the assets at market value and their value recognised within the life fund. It is usual to see a note to the Companies Act balance sheet which states the amount of tax that would be payable if all assets were realised on the balance sheet date. Explicit provisions may not be required if it is assumed that gains will never be realised.

For unit-linked funds the full market value of the assets is recognised. To preserve equity between generations of policyholders an explicit provision is, therefore, required. This provision will be calculated, taking account of the turnover of assets within the fund and the need to avoid sudden movements in unit prices arising from unpredicted investment activity.

There is a choice of where this provision should be held. It may either be held within the individual unit fund for which the provision is made or it may be held externally from the unit fund but still within the long term fund. If held within the unit fund, in order to maintain equity, it is inappropriate for the provision to be set with the normal degree of actuarial prudence as the profits subsequently arising will fall to different generations of policyholders. Normally, a unit fund provision is matched by assets of a similar type to the unit fund assets - usually by holding more of the same assets.

If the provision is maintained outside the unit fund, profits or losses fall to the shareholders of the life fund and it is possible to mismatch. In particular it may be possible to use high yielding assets which, if there are unrelieved expenses available, can enhance the profits or surplus of the office by using the unrelieved expenses to cover the tax due on the income arising on the assets matching the provision.

## FINANCIAL REPORTING

### *Balance Sheets (Contd)*

#### **1.4 Reservations of Profits**

Prior to the 1989 Finance Act it was common for with-profit offices to increase pension provisions, for tax purposes only, by reserving any Case VI profits arising for the benefit of annuitants. This reservation was subject to a commercial profits test under which the office had to expose a Case VI profit at least equal to the pension business expenses. It appeared in the Case VI computation and not in either balance sheet. This ability to make reservations now no longer exists (although it may be possible to establish a “reasonable expectations” reserve) but no explicit provision for prior reservations is required as the Case VI profit is now explicitly defined.

#### **1.5 Timing Differences**

To the extent that there are mismatches between taxable income and deductible expenses brought into account within the various statutory and the tax accounts, provisions may need to be made for the reversal of these timing differences. Examples of such mismatches are the accrual of investment income and expenses.

#### **1.6 Case VI and NC1 Losses**

The existence of Case VI or NC1 losses will not have an effect on the DTI balance sheet of the company. If an embedded value asset is shown in the Companies Act balance sheet, as described in paragraph 3, it will allow for any brought forward losses that enable future profits to emerge without generating a tax charge. In addition to the balance sheet effect within the embedded value asset, such tax losses may be important within the planning of future capital needs. To the extent that surplus can emerge without generating a tax charge, less future capital will be required.

### **2. Revenue and Profit and Loss Accounts**

The question that this paragraph addresses is, where should the tax arising be charged? This is an important issue in the UK because accounts for long-term business differentiate between the insurance business revenue, shown in the revenue account, and the business profits which are shown in the profit and loss account. It is not a particular issue if the revenue account represents a wholly non-participating fund, as the tax charged in the revenue account will ultimately be reflected in the profit and loss account. However, it is important if policyholders participate in surplus arising.

## FINANCIAL REPORTING

### *Revenue and Profit and Loss Accounts (Contd)*

#### 2.1 Traditional Practice

Traditionally, for most companies, all tax on life business has been charged to the life revenue account. This included any tax payable on pension business profits, although because of the ability to reserve such profits for annuitants as described in paragraph 1.4 above, such profits were often small. There was thus no tax due on the life business profits within the profit and loss account although it was not uncommon, for presentation purposes, to gross-up the transfer.

#### 2.2 New Considerations

However, the new tax rules, which differentiate between policyholders' and shareholders' income and apply different tax rates to each, have raised the issue of whether the additional tax should be charged to profit and loss.

An example shows how important this issue is. Consider a life office selling only participating pension business, with a total pre-tax surplus of £1,000 and all shareholders' profit covered by shareholders' franked income. (This is a simplistic example but serves to illustrate the effect.) It is assumed that policyholders participate in 90% of the distributed surplus. Whether or not this surplus is before or after tax is not yet defined.

Suppose no tax is charged to the revenue account, surplus allocation within the revenue account would be:

	£
Policyholders	900
Shareholders	100
<b>Total</b>	<b><u>1,000</u></b>

and the profit and loss account would be:

	£
Pre-tax profits	100
Tax	25
<b>After-tax profits</b>	<b><u>75</u></b>

If, however, tax were charged within the revenue account, the revenue account would be:

	£
Policyholders	871
Shareholders	97
Tax	32
<b>Total</b>	<b><u>1,000</u></b>

The profit and loss account would be:

	£
<b>Life profits</b>	<b><u>97</u></b>

## FINANCIAL REPORTING

### *Revenue and Profit and Loss Accounts (Contd)*

It is interesting to note that in the latter case both the shareholders and the Inland Revenue benefit. Somewhat similar considerations also apply to the question of whether the additional tax on the shareholders' proportion of BLAB I-E should be charged to revenue or to profit and loss.

### **2.3 Constraints on Practice**

In deciding where to charge tax, offices will need to have regard to any constraints imposed by their Articles of Association and their marketing literature as well as competitive pressures and "reasonable expectations".

In the final analysis, the choice may not matter if shareholders are inflexible over their demand for profits from life business. In such circumstances product pricing will be reviewed to bring back after-tax profits to the desired level. However, nothing can be done for future profits on in-force business.

## **3. Embedded Values**

For the purposes of this paper, embedded value is defined as the present value of future expected distributable profits arising in respect of shareholders' net assets, surplus assets in the long term fund and from the in-force portfolio. The computation of embedded values can allow for taxation by using:

- an "in-force" approach - existing excess E, and Case VI and NC1 losses, are utilised against relevant taxable income generated by the assets and in-force policies; or
- an "open" fund approach - the value of tax assets is assessed by projecting revenue accounts which incorporate expected future new business.

In the next two paragraphs we consider these possible approaches to the assessment of embedded values.

### **3.1 In-Force Tax Methodology**

Revenue accounts are projected and assessed without any allowance for the impact of writing new business on the tax position of the office. Full allowance is made for any acceleration of tax payable as a result of operation of the NC1 minimum tax test. An alternative is to make partial allowance for the effect of new business, within the NC1 minimum test only, by restricting the amount of any NC1 restriction of expenses relieved to the lesser of the open fund and in-force restriction (as outlined in 3.2). In practice, the difference between the full and partial allowance may be quite small.

## FINANCIAL REPORTING

### *Embedded Values (Contd)*

Tax assets including excess E, and Case VI and NC1 losses are utilised against taxable income arising from the in-force business (the FIFO, first in first out method). This contrasts with the LIFO open fund approach under which, when valuing excess E, future new business acquisition costs are assumed to be relieved first and existing excess E last.

The value of existing excess E is equal to the difference between the value of tax payable with and without excess E. Since this asset can be “sold”, it may be appropriate to apply a floor value equal to a conservative assessment of sale price. This could be justified if the office has a history of selling excess E and intends to continue doing so. It could also be appropriate when assessing company value for the purpose of a purchase or sale.

Use of this method has a number of advantages, including:

- tax being assessed solely in relation to the in-force business, with no credit taken for synergy arising from future new business
- straightforwardness of calculation - no subjective judgement is required of the level, profitability or mix of future new business
- it is the natural corollary for profitability assessment to be based on the total value created by writing new business. In other words, the value attributed to new business is equal to the value of the company allowing for the assumed level of new business less the value of the company if no new business is sold.

Disadvantages of this approach include:

- possible inconsistency with the “going concern” approach to asset valuation. For example, the higher value placed on excess E on the FIFO basis could lead an office to purchase excess E even if it was likely to remain excess E forever on an open fund basis
- average tax rates and the values attributable to tax assets may bear little resemblance to actual rates and values likely to apply in practice. An example would be a proprietary with-profit office where acquisition costs incurred in writing new business will result in a higher average rate of tax applied to I-E if the reduction in the policyholders’ share of I-E is not offset by a sufficient reduction in shareholders’ unfranked profit taxed at the full rate of corporation tax

## FINANCIAL REPORTING

### *Embedded Values (Contd)*

- new business value added is likely to differ from profitability assessed in the context of continuing new business. For example, in some circumstances the NC1 test may always be expected to apply on an open fund basis, but not if in-force business only is considered. Profitability assessed on these two different bases could be very different.

### **3.2 Open Fund Assessment**

Embedded values can also be assessed as the contribution made by the in-force business to the overall value of the office. One possible approach is outlined here. The value attributable to existing Case VI losses is assessed as the difference between open fund value with and without these losses. The value of existing excess E can be assessed similarly but, as in paragraph 3.1, it may be appropriate to use the sale value, if higher. NC1 losses brought forward can be allowed for in the projection of taxable income, as these losses will usually affect the rate of tax payable and its timing, rather than the tax base itself.

Tax payable on taxable income from the invested assets and the in-force portfolio (ignoring excess E and Case VI losses brought forward) can be assessed by using a projection of revenue accounts with no allowance for new business. The average tax rate  $t$  applied to shareholders' profit may be derived either from an in-force or open fund projection. The advantages and disadvantages noted in paragraph 3.1 apply to a greater or lesser extent to these two approaches.

In some circumstances, the NC1 minimum tax test does not bite, or has only a relatively limited effect, in the open fund projection, but results in a significant acceleration of tax if only in-force business is considered. Since this acceleration will not in fact occur, allowance for the test can be restricted to the lesser of the open fund and in-force effects. Occasionally, even with only this restricted allowance for the NC1 test, the in-force projection results in a build-up of excess E. It is a matter for debate whether the embedded value calculation should allow for such excess E to be sold.

The difference between the open fund approach and the in-force methodology outlined in paragraph 3.1 lies primarily in the value attributed to excess E and Case VI tax losses, as well as in the extent of the allowance made for the NC1 minimum tax test.

The in-force approach allows I-E and profit to emerge quickly and therefore often leads to a fuller tax charge and hence lower in-force values than the open fund method. However, the FIFO method of allowing for tax losses normally places a higher value on these assets.

## FINANCIAL REPORTING

### 4. Accruals Method

Recently, the ABI has introduced for discussion a proposal to revise the basis for accounting for profit on life business.

#### 4.1 Allowing for Tax

Allowance for tax in the accruals method can be made using the principles outlined in paragraph 3, for embedded value accounting. A number of additional points should be considered:

- For the purpose of defining the pattern of emergence of profit, and for loss recognition, profits estimated on a “prudent plus planned margin” basis are discounted using assumed rates of after-tax investment return assessed on a “prudent” basis. The rates of discount will vary according to asset mix and also, for life and pension business because of the difference in tax treatment.
- The full effect of any change in the basis of taxation or in tax rates will emerge at the time of change, possibly as an extraordinary item if a fundamental change in basis occurs.
- The Companies Act balance sheet will record the amount of the shareholders’ interest in the long term fund, being the total accruals profit which has been retained and not distributed. Presumably a provision for deferred tax will be established to meet future tax payable.
- The proposal refers to the inappropriateness of using a closed fund approach for profit recognition. It is not clear to the authors whether the intention is that the open fund methodology outlined in paragraph 3 should be used.
- For a company paying tax on an NC1 basis for the foreseeable future, will the discount rate applied to BLAB profits reflect tax on investment income?

## FINANCIAL REPORTING

### *Accruals Method (Contd)*

#### **4.2 Possibility of Higher Tax Base**

A main effect of the proposal would be to bring forward the recognition of profit on life assurance business. With the level of profit determining the tax charge on pension business and the minimum level of tax, any increase in recognised profits is likely to encourage the Inland Revenue to demand more tax. For instance, the Inland Revenue may not allow reserves stated in the DTI Returns to be used in determining profit but may require use of the accruals method basis with or without planned margins. We understand that the ABI has obtained advice to the effect that such an outcome is unlikely. The following reasons have been advanced:

- Accruals basis profits may be undistributable and so not taxable
- The fundamental review of life assurance taxation has already taken place and therefore further changes are unlikely
- Arguments relating to EC harmonisation and level playing fields may constrain Revenue action
- It may be possible to present accruals profits as discounted future profits, rather than as current profits falling to be taxed
- Accruals profits are subjectively assessed and disclosure is voluntary.

#### **5. Grossing-Up of Profits**

Although it is normal to assess earnings net of tax, earnings may need to be grossed-up to be brought onto an equivalent pre-tax basis for disclosure in the profit and loss account. The grossing-up ratio used in the calculation of NC1 profit can be used to gross-up statutory or embedded value earnings. A number of alternative practices are also in use, with some offices not grossing-up, some using the basic rate of income tax and others using the full corporation tax rate.

The draft accruals method proposal would require after-tax profit recognised in an accounting period to be grossed-up at the “effective tax rate charged in arriving at the after-tax profit”. The exact method to be used in applying this rule has yet to be specified.

## Section C

### PROFITABILITY ASSESSMENT

*This section examines how profit-tests can incorporate the interaction between the corporate tax environment and product level tax.*

*For many offices, the value created by writing new business is a key measure of financial performance. Assessment of profitability, for example by incorporating tax rates and determining the tax base in profit-tests without regard to the corporate tax environment, can result in an incorrect determination of value and in lost opportunities for the creation of shareholder wealth. For both mutual and proprietary offices tax is an important determinant of the ultimate level of policyholder benefits and of the contribution made by new business to the existing business and financial strength of the office.*

#### 1. Measurement of Profitability

New business profitability can be defined as the discounted value of future expected net of tax distributable profits, assessed at the point of sale and using an appropriate risk discount rate. As discussed in Section D, there is an argument that the value so derived should be grossed-up by the basic rate of income tax. Profitability measurement can be based on:

- **Stand-alone New Business.** Product profitability can be assessed without regard to tax synergy arising from other products or from different generations of new business. As noted above, this method can give rise to misleading results.
- **Increase in Embedded Value.** Profitability is assessed by determining the effect on embedded values of writing new business.
- **Change in Appraisal Value.** Profitability is assessed by considering the effect of a change in expected future new business on the value of the company.

For the latter two methods, new business profitability and the effect of taxation can be ascertained by projecting revenue accounts with and without this level of new business. However, it is often necessary to model tax at the profit-test stage.

In this section, we outline a profit-test marginal tax methodology consistent with the “appraisal value” method of assessing profitability. A similar methodology applies for the “embedded value” approach, if the underlying corporate tax scenario is based on an in-force projection rather than on open fund projections which allow for anticipated future new business. General annuity business profitability is not considered separately although GAB products can often be treated similarly to PB products (if annuities in payment exceed investment income).

## PROFITABILITY ASSESSMENT

### *Measurement of Profitability (Contd)*

Product pricing is not considered in this paper. However, the profit-test tax methodology outlined below can be used to ensure that the product pricing structure makes suitable allowance for taxation.

## 2. Type of Office

A starting point is to divide companies into three distinct groups depending on the level of I-E and of NC1 profit. For this purpose an open fund revenue account projection (allowing for both in-force and anticipated new business) is required. The projection should allow for brought forward Case VI and NC1 losses and also allowable capital losses. It should also allow for excess E and postponed E (excluding amounts likely to be utilised by the sale of income bonds or through reinsurance). Existing unrealised gains (or losses) and the corresponding expectation of chargeable gains in the future should also be allowed for in assessing an office's tax position.

The three groups of companies are:

- i) I greater than E and I-E greater than NC1 (a "net" office),
- ii) I-E less than NC1 and NC1 greater than zero ("gross, profitable"),  
and
- iii) I less than E and NC1 less than zero ("gross, loss-making").

Clearly, an office's tax position may not necessarily always fall within one of these groups. The transition from gross or loss-making to net or profitable is considered in paragraph 6 and developed further in Appendix III. Appendix IV illustrates the effect of taxation on policy proceeds and profitability for a unit-linked plan and a low cost with-profit endowment policy.

## 3. Net Office

Firstly we consider an office which is paying tax on an I-E basis and has no Case VI or NC1 losses brought forward.

### 3.1 Derivation of Tax Formulae

The sale of a marginal extra product gives rise to a change in the amount of tax paid by the office each year. This is made up of a change in "shareholders' tax" plus a change in tax on the remaining balance of I-E ("policyholders' tax"):

$$T = t \times N + b \times (I-E-N) \text{ where}$$

- |   |   |   |
|---|---|---|
| t | = | average NC1 tax rate (ie the mix of basic rate on shareholders' franked income and corporation tax on the balance of profit); |
| b | = | basic rate of income tax;   |

## PROFITABILITY ASSESSMENT

*Net Office (Contd)*

and where the product generates

- N = NC1 profit;  
 I = investment income (franked and unfranked) and chargeable gains; and  
 E = expenses, including acquisition costs net of an allowance for spreading.

This equation may also be expressed as:

$$T = b \times (I-E) + (t-b) \times N$$

or, tax at the basic rate on I-E and at the excess rate on NC1 profit.

### 3.2 Non-Profit and Unit-Linked Policies

It is useful to expand the above equation in order to draw a parallel with the results obtained in paragraph 4, for a gross office.

Since NC1 profit is gross profit (say P) net of policyholders' tax, ie:

$$N = P - b \times (I-E-N),$$

T can be re-expressed as:

$$T = \frac{b \times (I-E) + (t-b) \times (P - b \times (I-E))}{(1-b)}$$

Consequently, profit-tests for life products can incorporate:

- tax on I-E at the basic rate, plus
- tax on profits, net of this level of I-E tax, at the rate  $(t-b)/(1-b)$ .

### 3.3 With-Profit Policies

A different approach is required for profit-testing with-profit policies because NC1 profit is based directly on the net profit and loss transfer, Tr, grossed-up at the average NC1 tax rate, t. Any additional surplus arising is absorbed within the investment reserve and does not generate an immediate tax charge. For these products, T can be calculated as:

$$T = t \times N + b \times (I - E - N) \quad \text{or, equivalently,}$$

$$T = \frac{b \times (I - E) + (t - b) \times Tr}{(1 - t)}$$

## PROFITABILITY ASSESSMENT

### *Net Office (Contd)*

Profit-tests can therefore allow for:

- tax on I-E at the basic rate, plus
- tax on grossed-up profit and loss transfer at the rate  $(t - b)$ .

Occasionally, surplus arising may not be fully absorbed within the investment reserve. The formula specified in paragraph 3.2, with minor adjustments, may be used if notional tax on surplus arising from the product is to be allowed for.

### **3.4 Pension Policies**

For pension products, the contribution to I-E (ie Case VI profit) is similar to NC1 profit. Consequently, the above expressions result in a tax rate of  $t$  applied to NC1 profit, for both with-profit and non-profit policies.

Conceivably, some net offices will have pension Case VI profit always less than zero. Tax at the excess rate of  $(t - b)/(1 - t)$  should be applied to pension product profits since the products do not contribute taxable I-E but will augment the office's NC1 profit.

### **3.5 Other Points**

For a mutual office, or if NC1 profit for the office is always covered by shareholders' franked income, the tax rate  $t$  can be set equal to the basic rate. For with-profit mutual offices, unallocated surplus is not attributed to GAB, OLAB or PB, and Case VI profit is untaxed, unless through operation of the floor test. Profit-tests for pension products need not then allow for tax.

Since excess  $E$  generated by the product can be offset against the office's excess of  $I$ , product excess  $E$  obtains immediate relief. No allowance need be made for the NC1 minimum tax test.

The average NC1 tax rate,  $t$ , may be determined at product level (for all products) or at company level by assessing the amount of profit which is not covered by franked investment income. In practice, analysis at product level would need to have regard to the overall tax position of the office.

## **4. Gross Office**

Some offices always expect to pay tax on an NC1 basis (ie an open fund projection shows that the NC1 test always applies). The NC1 test results in a permanent build-up of excess  $E$ . An appropriate strategy for an office in this position is to sell excess  $E$  either via reinsurance or the sale of income bonds.

## PROFITABILITY ASSESSMENT

### *Gross Office (Contd)*

#### 4.1 Derivation of Tax Formulae

Product excess I can be assumed to be relieved by excess E in the office and product excess E sold.

If the market rate for selling excess E is e, profit-tests can incorporate e as an effective tax rate on I-E. In addition, for a proprietary office, product profits, P, net of this selling rate contribute to the office's NC1 profit. Let  $M = P - e \times (I-E)$ . Profit M generates a broadly equal amount of excess E through operation of the NC1 test. In turn, the sale of such excess E generates profit. The tax charge generated by the product, less the profit derived from selling excess E, can be determined from the expression:

$$T = e \times (I-E) + t \times M - e \times M + t \times (e \times M) - e \times (e \times M) + \dots, \text{ ie}$$

$$T = \frac{e \times (I-E) + (t - e) \times (P - e \times (I-E))}{(1 - e)}$$

#### 4.2 Non-Profit and Unit-Linked Policies

Consequently, profit-tests for non-profit or unit-linked life products can incorporate:

- tax on I - E at the excess E selling rate, e, plus
- tax on profits, net of this level of I - E tax, at the rate  $(t-e)/(1-e)$ .

#### 4.3 With-Profit Policies

As noted in paragraph 3.3, a different formula is required for with-profit policies because undistributed surplus arising does not generate a tax charge. The allowance for tax is:

$$T = \frac{e \times (I-E) + (t-e) \times Tr}{(1-t)}$$

#### 4.4 Other Points

As stated in Section A, it may be possible to sell postponed E, that is acquisition costs which have not yet entered the I-E computation under the spreading rules. The definition of E would then include all basic life acquisition costs (with no allowance for spreading).

Profits from pension products augment both I-E and NC1 and hence do not generate excess E through operation of the NC1 test. Pension profit-tests should allow for an average NC1 tax rate of t.

## PROFITABILITY ASSESSMENT

### *Gross Office (Contd)*

The value of  $e$  should be set to zero for a true Case 1 office (see paragraph 7.3 in Appendix I) unless the office is able to generate enough investment income to prevent the loss of its I-E status. It should also be set to zero for an office which decides not to sell its excess E.

### **5. Gross, Loss-Making, Office**

For some offices, I-E and NC1 are both expected to be negative. No tax is payable but, if the office is able to sell excess E, profit-tests can incorporate a tax rate of  $e$  on product I-E. However, the implication of negative profits in the long-term is that new business is unprofitable and an open fund assessment may not be valid. An alternative approach is to assess profitability by measuring the increase in embedded value arising from writing new business. A closed fund projection can be used to categorise the office into net, I-E greater than NC1, or gross, I-E less than NC1. Profit-tests can then allow for tax according to the previous two paragraphs and for tax losses as outlined in the next paragraph.

### **6. Allowing for Tax Losses**

Some offices are expected to become net but are non-tax paying during an initial period G. If the office is not selling excess E, products can be profit-tested with no allowance for tax up to G and immediate relief for the accumulated product excess of E over I at time G (immediate taxation at G if accumulated product I exceeds E). If the office is selling excess E, presumably because the period G is such that  $b \times v^G < e$ , profit-tests should allow for an effective tax rate of  $e$  applied to product I-E up to the point when excess E is being sold, nil tax up to G and then immediate taxation of accumulated and subsequent I-E. The formulae derived in paragraphs 3 and 4 can be used but the tax rate  $t$  should be replaced by  $t \times v^{N-k}$ . Here  $k$  is the date of payment of I-E tax (or the date of sale of excess E, as appropriate) and  $N$  is the date when NC1 becomes positive.

Appendix III outlines the detailed methodology and formulae required for profit-testing for two common types of transition.

## Section D

### APPRAISAL VALUES

*Taxation plays an important role in the assessment of company value. It impinges on the selection of discount rates, the amount and timing of profit emergence as well as the value of profits to the proprietors of a company. This section examines some of the issues.*

#### 1. Definition of Appraisal Value

Possible definitions include:

- Value of future dividend payments
- Value of future distributable earnings
- Value of future cash flows attributable to shareholders
- Sum of market values or appraisal values of tangible and intangible assets belonging to shareholders.

Values can be assessed using:

- a risk discount rate applied to expected future relevant income, or
- a risk free rate applied to risk adjusted future relevant income, or
- transaction prices or market values of tradeable commodities with similar risk profiles, or
- a risk free rate applied to expected future relevant income less the cost of selling off (insuring) the risks borne.

For the purposes of this section, we define the appraisal value of a life office as the value of future distributable earnings, assessed using risk discount rates consistent with those appropriate in the valuation of other equally “risky” income streams.

However, similar tax considerations apply, implicitly or explicitly, with regard to other possible valuation methods.

#### 2. Gross or Net Investors

Tax considerations affect the supply and demand for equity capital and hence influence values.

##### 2.1 Tax Treatment of Dividends

Under the system of imputation tax introduced by FA 1972, qualifying distributions together with the accompanying tax credits (“franked payments”) are excluded from liability to corporation tax in the hands of a recipient UK resident company. UK resident individuals are liable to pay income tax on the total of the dividend received and the tax credit, but the latter satisfies their liability to basic rate income tax on the dividend. Non-taxpayers, including pension funds and charities, are entitled to reclaim the tax credit.

## APPRAISAL VALUES

### *Gross or Net Investors (Contd)*

#### **2.2 Valuation of Dividends**

In the assessment of company value it is appropriate to consider the extent to which the “value” generated by distributable earnings or dividend payments includes the tax credits attached to distributed earnings. If market or transaction prices provide a guide to the determination of appraisal values, what price is attached to a franked payment of £100? The following factors suggest that a value closer to £100 than to £75 may apply under current conditions within capital markets in the UK:

- Gross investors, such as pension funds, control a large proportion of the equity market. Direct equity investment by individuals is relatively small.
- International investors and the banking sector institutions dominate the short-term financial markets and are largely gross investors in that the bulk of the funds that they control are matched by corresponding liabilities. These institutions are taxed on profits rather than investment income, and they supply or demand funds on the basis of comparisons of gross return.
- Net corporate investors do not suffer corporation tax on franked income receipts and these receipts can be paid out in the form of dividends to their shareholders (often gross investors) without any tax penalty.
- The deductibility of interest payments against corporation taxable income leads to a relatively low reliance on, and therefore supply of, equity capital. Both factors increase the value placed on dividend payments relative to interest on debt financing.

#### **2.3 Value to a Gross Investor**

If it is the case that markets in the UK are driven by gross investors, it would be appropriate to assess appraisal values as the grossed-up value of future distributable earnings, allowing for basic rate tax in the grossing-up ratio and the corporation tax implications of full distribution. An advantage of this method is that it could be used to bring consistency of approach in cross-border comparisons of value, in the face of taxation systems which vary radically in the treatment of dividend distributions in the hands of both the recipient and the corporation making the payment. A disadvantage is that it differs from the appraisal value approach generally adopted in the UK. In practice, the effect of grossing-up would be diminished because of the higher risk discount rate likely to be required by a gross investor, as noted below. The net result, for many companies, is that the value of in-force business would increase and goodwill value would be reduced, bearing in mind that profit emergence on future new business is normally later than for existing business.

## APPRAISAL VALUES

### 3. Selection of Risk Discount Rates

Although the risk discount rate is neither a net nor a gross quantity, being simply the rate used to discount future income, the absolute level of rate selected is influenced by tax considerations.

One approach to the selection of discount rates for use in appraisal values is to consider historic or anticipated returns on investments with similar risk and other characteristics. The empirical research to date has not yet shown whether pricing models should be developed on a pre- or post-tax basis. Nevertheless, returns will be influenced by the tax status of the investor and it is appropriate to adopt a consistent approach. A net of tax asset pricing model should be used if the appraisal value is the value of future net distributable earnings and a gross model used if the grossing-up approach is used. Different models could result in a difference in risk discount rates of between 1% per annum and 3% per annum.

### 4. Allowance for Future Tax Payable

In order to assess future tax payable and the earnings stream to be valued, revenue and tax revenue accounts need to be projected into the future with full allowance for in-force business and for projected new business mix, volume and growth. The amount of tax payable can then be assessed by application of the tax rules as outlined elsewhere in this paper.

#### 4.1 Tax Losses

Sometimes the allowance for continued new business results in a permanent build-up of tax losses. In such circumstances, although apparently the tax base is such that these losses have no value - insufficient taxable income will arise to offset them - this may not necessarily be the case. Management action may be taken that will allow some value to be recognised, for example through reassurance or changes in business mix. It may be appropriate to recognise management's ability to do this.

#### 4.2 Alternative Appraisal Value Methodology

For many appraisal value calculations, a full projection of future earnings is not made. Instead, the appraisal value is expressed as the sum of:

- Value of shareholders' assets
- Value of shareholders' interest in long term business surplus assets and the estate
- Value of in-force business and existing tax losses
- Value of future new business ("existing structure value").

The first three of these, taken together, comprise the embedded value; the taxation issues of this are discussed in Section B. The taxation aspects of the fourth component, the profitability of new business, are discussed in Section C.

**APPRAISAL VALUES***Allowance for Future Tax Payable (Contd)*

It is important to ensure that the allowance for tax in each of these four components of value is internally consistent and takes account of the overall likely future tax position of the office. The provision made for tax on unrealised gains on the existing assets should have regard to the value placed on tax losses. If a closed fund approach is used to value the in-force business and the existing tax losses (see Section B), full allowance needs to be made in the existing structure value for the tax synergy arising from the volume, mix, and growth of new business implicitly or explicitly assumed. If the existing structure value is assessed as the product of the value of one year's new business and a goodwill multiplier, it may be appropriate to consider how the value of one year's business varies as the tax position of the office changes over time. An average value may then be used which differs from the value of business sold in the year prior to the valuation date.

## Section E

### COMPETITIVE TRENDS

*Allowance for tax in the assessment of product profitability and of life office appraisal values needs to have regard to the possibility that competitive pressures may lead to changes in the basis of taxation. This section provides a brief overview of the fiscal treatment of other savings products and of the bases of taxation of life assurance business in the European Community.*

#### 1. Alternative Savings Products

The following table summarises the tax treatment of investment income and capital gains (net of indexation relief) for some common savings and investment vehicles:

##### Taxation of Income and Gains

Investment	Tax Rate
Qualifying Life Policies	Basic rate (with no relief for income or gains within the personal allowance limits)
Bank/Building Society Deposits TESSAs	Investor's marginal tax rate Nil
Unit and Investment Trusts	Investor's marginal tax rate
Equities	Investor's marginal tax rate
Gilts	Investor's marginal tax rate (gains are exempt)
PEPs	Nil
Property Assets	Investor's marginal tax rate
Own Residence	Nil
Occupational Pensions, AVCs	Nil
Pension Policies	Nil

The number of tax-advantaged savings schemes has been increasing in recent years. With opportunities to invest abroad also increasing, this trend is not likely to be reversed. In these circumstances, the relative advantage of pension policies is reduced and the longer-term prognosis for life business could be of slower growth, reduced profitability or of pressure to reduce distribution costs.

## COMPETITIVE TRENDS

### 2. Company Taxation in the EC

Pressure for change in the system of UK life taxation can arise from differences between UK tax rates and tax bases and those which apply in other EC countries.

#### 2.1 Tax Rates on Profits

Competitive or other pressures have led to a fairly rapid convergence (and reduction) of tax rates applied to corporate profits within the various Community member States.

The following table shows the rates of tax applied to retained and distributed profits, and the amount of gross dividend subject to tax in the hands of a local investor which can be paid from a gross profit of 100.

#### Taxation of Profits<sup>1</sup> in the EC

	Tax Rate Applied to 1990 Profits		Amount of Gross Dividend Arising from Gross Profit of 100
	Retained %	Distributed %	
Belgium	41 <sup>2</sup>	41 <sup>2</sup>	59 <sup>3</sup>
Denmark	40	40	75 <sup>3</sup>
France	37	42	87 <sup>3</sup>
Germany	50	36	100
Greece	46	0	100
Ireland	40.75	40.75	82
Italy	36	36	100
Luxembourg	34.68	34.68	65 <sup>3</sup>
Netherlands	35	35	65 <sup>3</sup>
Portugal	36.5	36.5	76 <sup>3,4</sup>
Spain	35	35	80 <sup>3,4</sup>
UK	35	35	87

#### Notes

1. The table ignores the effect of local taxes. These are payable (in addition) in Italy (16.2%), Luxembourg (average rate: 10%), Portugal (average rate: 3.65%), Spain (1.5%) and West Germany (on average 17%). They are deductible in computing income on which federal profits taxes are applied. In many countries special rates apply to capital gains.
2. The rate for income in 1991 is 39%.
3. 100 or nearly 100 for substantial permanent participations held by local corporate investors.
4. In Portugal and Spain a partial imputation system results in tax credits being deducted from an individual's tax liability. Marginal tax rates of 40% and 56%, respectively, have been assumed.

The move towards convergence has overtaken the Community aim of setting a single rate of corporation tax, as well as the work undertaken to bring rates into a 45%/55% band. Harmonisation proposals by the Commission are now focused on removing specific areas of taxation systems which have the effect of distorting competition in the Community.

## COMPETITIVE TRENDS

### *Company Taxation in the EC (Contd)*

Three effects of the decline in corporate taxes in the Community can be identified as:

- a lower level of risk that corporate tax rates will be increased
- a perception that the maximum rate to which corporate taxes may be increased has declined
- increased pressure to raise tax revenue by closing tax loopholes and widening the tax base.

### **2.2 Tax Base**

In most member States, other than Ireland and the UK, shareholders' profits are the primary base upon which tax is levied. The tax base in Ireland and the UK is life business investment income and gains less expenses, plus pension business profits. The part of such income represented by shareholders' profit is taxed at full corporation tax rates. Life policyholders' investment income and gains are taxed at lower rates, of 25% in the UK and up to 35% in Ireland (nil for pension business investment returns).

Policyholders' income is also taxed in Denmark where a real interest tax restricts the return to policyholders to the inflation rate plus 3.5% per annum. In Belgium, life policyholder dividends are taxed at the rate of 9<sup>1</sup>/<sub>4</sub>%. In Greece, policy dividends in excess of DR 15,000 are taxable.

For most countries in the Community, though, the investment income and capital gains attributable to policyholders accumulate free of tax. This statement needs to be qualified to some extent because in some countries it is not possible to recover withholding taxes applied to investment income or to fully offset these against the corporation tax bill. However, it remains true that policyholders' investment returns are given a favourable tax treatment compared with that on income derived from most other savings media. Despite the pressures for widening the scope of the tax net and creating a "level" playing field, it appears likely that this generally advantageous treatment will continue. The move by West Germany, in 1989, to tax investment income in excess of the technical rate was short-lived. Although similar proposals are put forward in other member States from time to time, none appear likely to be implemented in the near future.

In the UK, there appears little prospect of an early end to the imposition of tax on life business investment income and gains. It remains to be seen whether entry into the EMS and the possibility of reduced currency risk, and whether the ability of intermediaries and salesmen to sell overseas life policies offering gross returns to UK policyholders will lead to replacement of the current system with a greater reliance on exit taxes.



## Appendix 1

### DETAILED OUTLINE OF TAX SYSTEM

*This appendix outlines the system of taxation of life assurance business applying from 1990. For the sake of brevity, some of the transitional rules and reliefs associated with the changes introduced by FA 1989 and FA 1990 have been ignored.*

#### 1. Legislation

The principal legislation relating to the taxation of life assurance business is contained in ICTA 1988 (section 76 and sections 431 to 442), FA 1989 (sections 82 to 89 and schedule 8) and FA 1990 (sections 41 to 48 and schedules 6 to 9). Schedule 6 of FA 1990 enables the Treasury to amend any of the insurance provisions of the Taxes Acts, by order.

A number of important definitions and interpretations relating to the taxation of life assurance business are contained in section 431 of ICTA 1988, as amended in schedule 6 of FA 1989 and of FA 1990.

#### 2. Classes of Business

Although there is one overall corporation tax computation for the ordinary branch life assurance business of a life office, a different treatment is applied to each of the following:

- Pension Business (PB): Self-employed and personal pensions, exempt approved occupational pension schemes, and free-standing additional voluntary contribution plans.
- Overseas Life Assurance Business (OLAB): Life assurance and annuities written in overseas branches and agencies on the lives of non-UK residents. Reinsurance written in an overseas branch if not related to the reinsurance of policies effected on the lives of UK residents (schedule 7, FA 1990).
- General Annuity Business (GAB): Annuity business other than pension business.
- Basic Life Assurance Business (BLAB): Other life assurance business.

Industrial branch business is subject to a separate computation similar to that for basic life assurance business. The profits of capital redemption, permanent health insurance and pension fund management businesses are taxed separately under Schedule D Case I. For mutual offices the tax base for these businesses is investment income, with no offset for expenses. The profits and income from other than long term business activities are taxed separately, although shareholders' investment income has hitherto been included in the long term business computation for some offices.

## DETAILED OUTLINE OF TAX SYSTEM

### *Classes of Business (Contd)*

The taxation of Friendly Society business and of UK branch or agency business of overseas companies is not considered in this paper.

### **3. Apportionment of Income**

From 1st January 1990, new rules apply for the allocation of income and gains between BLAB, GAB, OLAB and PB (section 432A of ICTA 1988, as introduced in schedule 6 of FA 1990). These rules are required for the determination of BLAB income and gains, GAB investment income and PB franked income. Different rules are used to determine GAB, OLAB and PB profits (see paragraphs 4.1 and 4.2 below).

#### **3.1 Allocation of Overseas Business Assets**

The first stage in the apportionment process is to eliminate income and gains attributable to OLAB (schedules 6 and 7, FA 1990).

Each year, assets equal in amount to the sum of

- overseas branch liabilities
- the company's total investment reserve, defined as the long term assets less long term liabilities (including the cost of bonus), multiplied by the ratio of overseas with-profit liabilities to total with-profit liabilities

are identified and attributed to OLAB. Apportionment of the investment reserve is based on non-profit liabilities if there are no with-profit liabilities.

The 1990 Finance Act specifies the order in which assets are allocated, as follows:

- linked assets matching overseas branch linked liabilities
- non-linked foreign currency assets not exceeding the level required to match foreign currency liabilities
- assets held at overseas branches
- government and local government stock issued free of tax to residents abroad
- other assets
- UK equities.

The income and gains arising from the allocated assets are attributed to OLAB, separately for each fund for which separate revenue accounts (Forms 40) are prepared in the company's DTI Returns. As noted below, for the purpose of determining GAB, OLAB and PB Case VI profit only, gains on the allocated assets are not attributed to OLAB but are included in the apportionment calculation.

## DETAILED OUTLINE OF TAX SYSTEM

### *Apportionment of Income (Contd)*

#### **3.2 Identification of Linked Income and Gains**

The actual income and gains from linked assets linked solely to BLAB or PB liabilities are attributed to these categories. Strangely, there is no similar provision for GAB. Assets linked to two or more classes of business are not treated as “solely linked” for the apportionment rules.

#### **3.3 Apportionment of Other Income and Gains**

For each long term fund with a separate revenue account, Form 40, income and gains (excluding the amounts attributed to overseas or linked business and also excluding amounts attributed to capital redemption, permanent health or pension fund management businesses) are apportioned in proportion to the amount of mean non-linked policy liabilities. For this purpose, non-linked liabilities include the investment reserve - apportioned in relation to the mean of the opening and closing with-profit liabilities - and exclude the value of solely linked assets. Closing liabilities are adjusted to include the cost of reversionary bonuses declared at the end of the year. Apportionment of the investment reserve is based on mean linked liabilities if all liabilities are linked, and on mean non-linked liabilities if not all liabilities are linked and there are no with-profit liabilities.

### **4. Taxable Income (I)**

Taxable income consists of GAB, OLAB and PB Case VI profits, BLAB unfranked investment income, chargeable gains and miscellaneous profits, and GAB unfranked income. Franked income is not taxable income but is also considered in this paragraph. PB income and gains are exempted from corporation tax, although taken into account when computing PB case VI profit (section 438 of ICTA 1988). GAB unfranked income (but not gains) is subject to corporation tax and hence excluded from Case VI profit (section 437 of ICTA 1988).

#### **4.1 Pension and General Annuity Profits**

The starting point for the determination of pension and annuity profits under Schedule D Case VI for a long term fund which contains with-profit policies is “unallocated surplus” in the year, ie increase in surplus in the fund net of bonus payments and allocations but before transfer to the profit and loss account. A deduction is also allowed for increases to any reasonable expectations reserve (sections 436 to 438 of ICTA 1988, sections 82 and 83 of FA 1989, section 43 of FA 1990, and schedule 6 of FA 1990). A separate calculation is made for each fund for which a separate Form 40 is completed. The surplus is apportioned in proportion to the cost of bonus allocated to policyholders for each type of business (BLAB, GAB, OLAB and PB). It is not yet known whether such surplus is to be grossed-up to allow for tax, nor whether disallowed expenses are to be added.

**DETAILED OUTLINE OF TAX SYSTEM***Taxable Income (I) (Contd)*

A “floor” test is then applied in the GAB, OLAB and PB Case VI computations to ensure that the amount of surplus so determined is based on a reasonable apportionment of the total investment income, accrued income, gains and investment reserve transfer brought into account in each Form 40. The floor test may have the effect of reducing distortions which arise from the new method of allocating surplus in proportion to the cost of bonus, for a fund containing a substantial amount of non-profit business. The test is performed by assessing the “aggregate investment return” required, in the calculation of the Case VI profit, to disclose profit equal to the amount of apportioned unallocated surplus determined above (the “needs” basis). Aggregate investment return is then tested against a floor equal to the sum of investment return attributed to linked business plus the average non-linked liability (excluding investment reserve), multiplied by the “applicable percentage”. This percentage was specified in a Treasury Order dated 27th July 1990 to be the lower of the following two yields:

- the mean of the FT - Actuaries 15-year high coupon British Government gross redemption yield index at the beginning and end of the year, and
- the actual total investment return in Form 40 (including investment reserve transfer) divided by the mean non-linked liability (excluding investment reserve) in the year.

For a mutual, surplus is not attributed to GAB, OLAB or PB and hence Case VI profit is zero unless the floor test applies.

If the floor test bites for a particular class of business, the amount of the excess over the aggregate investment return is deducted from unallocated surplus for the remaining classes of business (in proportion to the cost of bonus). There is no provision for future recovery of excess tax payable as a result of the floor applying in any particular year.

For a long term fund where there are no with-profit policyholders, the Case VI profit is computed by apportioning income and appreciation between the different classes of business, in proportion to mean non-linked liabilities (excluding the investment reserve). Income, but not gains, from OLAB and also income and gains from linked assets are excluded from the apportionment calculation. Inclusion of OLAB gains reflects the possibility that the office may have an investment reserve. Having determined income and gains, profit is determined as total revenue less total outgo, less the increase in reserves.

## DETAILED OUTLINE OF TAX SYSTEM

### *Taxable Income (I) (Contd)*

Finally, a number of tax adjustments are made, particularly:

- Section 438(6) of ICTA 1988 allows an office to exclude from the PB Case VI computation the shareholders' proportion (see paragraph 5) of PB franked income. Tax credits on the income so excluded are irrecoverable (resulting in an effective rate of tax of 25%) unless excess management expenses arising prior to 1st January 1990 are available. The election results in an increase in shareholders' franked income and a corresponding reduction in shareholders' unfranked profit. Group income is deducted from PB Case VI profit (schedule 6 of FA 1990).
- GAB franked and unfranked income (apportioned in accordance with the method outlined in paragraph 3 above), and GAB annuities up to the level of such income, are excluded from the profit computation (section 437 of ICTA 1988). Group income is also excluded from GAB profit.

GAB and PB Case VI losses are carried forward and deducted from future profits - they may not be set against profits from other sources. By concession, a GAB loss may be offset against a PB profit in the same year, and vice versa. It is not yet known whether this concession is to continue. There are no carry-back provisions.

### **4.2 Overseas Life Assurance Profits**

OLAB Case VI profit is calculated in a similar way to PB Case VI profit (using an aggregate investment return and floor test for a fund which contains participating policies, but the actual income and gains for a non-participating fund). Credit is given for foreign profits tax. OLAB charges on income and also capital allowances are deducted within the Case VI computation. The new rules for OLAB replace the previous foreign life fund provisions (schedule 7 of FA 1990).

### **4.3 Basic Life Income and Gains**

The unfranked investment income and chargeable gains apportioned to BLAB enter the I-E computation directly (sections 75 and 76 of ICTA 1988). Tax deducted at source is offset against the company's tax liability, with any excess being repaid. Accrued interest is excluded from I. Chargeable gains are computed according to capital gains tax principles with indexation relief and exemption from tax for gilts (section 435 of ICTA 1988). Losses are carried forward and may not be offset against other income.

## DETAILED OUTLINE OF TAX SYSTEM

### *Taxable Income (I) (Contd)*

From 1st January 1990, any BLAB receipts not otherwise taxable, but excluding premiums, insurance or reinsurance claim payments, reinsurance commissions, repayments or refunds of acquisition costs, and amounts deducted from the company's management expenses, enter into the I-E computation (the BLAB Case VI charge, section 85 of FA 1989). Items included within the charge include underwriting commission, stock-lending fees and unit trust rebates.

#### **4.4 General Annuity Income**

Unfranked investment income is included directly in the main I-E computation and excluded from the GAB Case VI profit computation (section 437 of ICTA 1988).

#### **4.5 Franked Investment Income**

Franked income, dividend income from UK equity and preference shares, is not taxable income and is excluded from the I-E computation. The excess of franked income over franked dividend payments can, however, be treated as taxable profit if there are excess management expenses (section 242 of ICTA 1988). From 1st January 1990, unit trust distributions ceased to be treated as franked income (they are now treated as annual payments and received by unit holders after deduction of basic rate income tax).

The tax credits associated with franked income attributed to BLAB and GAB cannot be recovered except through the utilisation of any excess management expenses (excess E). Recovery is limited if franked dividend payments are made. The tax credits associated with franked income attributed to OLAB and PB can be recovered. An election to exclude the shareholders' part of PB franked income from the Case VI profit (section 438(6) of ICTA 1988) results in the associated tax credits becoming irrecoverable, unless through the utilisation of excess management expenses (see paragraph 4.1)

### **5. Relief for Expenses and Charges (E)**

Basic life expenses including acquisition costs spread over a period of up to seven years, excess E brought forward and charges on income are deductible within the I-E computation (section 76 of ICTA 1988, sections 86 and 87 of FA 1989 and section 44 of FA 1990).

#### **5.1 Amount of Expenses**

Most expenses and commissions of an office are deductible in the computation of profits or, if attributable to BLAB, are included in E and available for offset against taxable income.

## DETAILED OUTLINE OF TAX SYSTEM

### *Relief for Expenses and Charges (E) (Contd)*

Exceptions include business entertainment expenses for non-overseas customers, capital expenditure and depreciation. Stamp duty and commissions paid on the purchase or sale of investments are included in the cost or sale price of the investment and are not a part of management expenses. Capital allowances are included.

#### **5.2 Charges on Income**

Interest payments, other than short interest, and GAB annuity payments are treated as charges on income and are deductible separately from other expenses in the I-E computation, and after all other reliefs (sections 338 and 437 of ICTA 1988). Charges not able to be relieved in a period can be surrendered by way of group relief to another group company but, if not, are added to excess management expenses and become indistinguishable from other excess E. There are no carry-back provisions for charges.

Short interest (interest on a loan of less than one year's duration), unless paid to a bank, may not qualify for relief. In practice, negotiations with the Revenue often result in short interest being included within management expenses.

#### **5.3 Ring-Fencing**

The amount of basic life expenses (after allowing for spreading of relief for acquisition costs) which may be deducted from taxable income is limited to the amount of basic life investment income, chargeable gains and Case VI profit (section 87 of FA 1989). For this purpose, franked income is treated as BLAB taxable income if an election under section 242 of ICTA 1988 is made to obtain relief for excess management expenses.

Expenses attributable to pension and annuity funds are deductible in full in the profit calculation for those funds. Prior to 1990, all expenses were deductible in the overall I-E computation and not in the calculation of profit.

#### **5.4 Spreading of Life Acquisition Costs**

Relief for basic life acquisition costs is spread over a period of seven years, with one-seventh of such costs entering into the I-E tax computation in each year, commencing with the year in which payment is made. Transitional rules apply so that the proportion relievable immediately amounts to five-sevenths for 1990 costs (with one-seventh in each of 1991 and 1992), four-sevenths in 1991 (with one-seventh in each of 1992, 1993 and 1994), and so on, up to 1994 when full spreading applies (section 86 of FA 1989).

## DETAILED OUTLINE OF TAX SYSTEM

### *Relief for Expenses and Charges (E) (Contd)*

For this purpose, basic life acquisition costs include all basic life commissions, renewal and initial, and acquisition expenses including, possibly, a share of overhead expenses. Collecting commissions paid by industrial branch offices to their agents are not included. No spreading is applied to commissions arising in respect of policies effected prior to 14th March 1989, unless there is a policy variation (or exercise of any rights under a policy) after that date. Acquisition costs incurred in 1989 are not subject to spreading.

The Inland Revenue has issued a draft guidance note to local inspectors with a view to helping in the determination of BLAB acquisition costs. Some points arising from the note are:

- Expenses wholly attributable to BLAB should be so apportioned.
- Salesforce expenditure, advertising expenditure, costs of new product launches and underwriting expenses are wholly acquisition costs. They should be apportioned between businesses, where not wholly attributable to a particular business, in proportion for example to the number or “value” of new policies sold in the period.
- Expenditure on the processing of new business once acquired is not an acquisition cost.
- Generally, acquisition costs are those incurred for the purpose of acquisition of business, and include an appropriate proportion of those partly incurred for this purpose and partly for other purposes.

Spreading of acquisition expenses does not apply other than for BLAB and does not apply in the computation of NC1 profit, to excess E brought forward, nor to capital allowances nor the denominator of the ratio used to determine the shareholders’ share.

Basic life acquisition costs are calculated net of reinsurance commission income (section 44 of FA 1990) and refunds of acquisition costs.

### **5.5 Apportionment of Expenses**

The Finance Acts have not given any guidelines for apportioning expenses between BLAB, GAB, OLAB and PB and between acquisition and other costs. In the absence of such guidelines, the apportionment method will presumably be a matter for negotiation between the office and its inspector. A number of possibilities suggest themselves:

## DETAILED OUTLINE OF TAX SYSTEM

### *Relief for Expenses and Charges (E) (Contd)*

- mean fund apportionment
- allocation of direct costs and commissions and mean fund apportionment of the balance of expenses
- apportionment based on expenses split disclosed in DTI Returns
- apportionment based on expenses disclosure in company booklet
- “proper” attribution according to a detailed expense investigation.

In the authors’ experience, the majority of offices conduct a more or less detailed expense investigation. The results of this analysis, with suitable modifications, are used for disclosure in the DTI Returns, in the with-profit guide and also in the tax computations. The apportionment requirements introduced by FA 1989 are likely to result in increasingly detailed and “proper” attribution becoming the norm.

### **5.6 Excess Expenses Carried Forward**

Basic life assurance business relievable expenses in any year include amounts brought forward unutilised from previous years. The amount of such expenses which may be utilised by deduction against taxable income in any year is restricted to the amount of BLAB taxable income (including the new BLAB Case VI charge on miscellaneous profits). Any expenses not so utilised are carried forward (excess E) and are available for future relief (section 76 of ICTA 1988 and section 87 of FA 1989).

Excess E brought forward at 31st December 1989 is available for relief against all taxable income arising, not just that attributable to BLAB. Pre-1990 excess E forms a separate pool from post-1989 excess E, and is more valuable to offices because the latter is unavailable for relief against GAB, OLAB or PB profits and also because the effect of the tax computation is to restrict relief on post- 1989 excess E to the basic rate.

## **6. Shareholders’ Profit**

From 14th March 1989, shareholders’ profit, (NC1 profit), is based on profit disclosed in the DTI Returns (net of bonus allocations or reservations for policyholders) rather than on transfers to profit and loss (section 82 of FA 1989 as amended by section 43 of FA 1990). NC1 profit is nil for a mutual office.

## DETAILED OUTLINE OF TAX SYSTEM

### *Shareholders' Profit (Contd)*

#### **6.1 Definition of Profit**

NC1 profit is the increase in long term surplus, plus transfer to profit and loss, less losses brought forward. Since this is a net figure, an allowance is made for shareholders' tax by adding back the tax charge and deducting policyholders' and foreign tax. Other adjustments include the addition of depreciation and disallowed expenses and the deduction of capital allowances. A deduction is also allowed for the increase in any reasonable expectations reserve. Transfers to or from the profit and loss account do not now trigger NC1 profits or losses.

Shareholders' profit is apportioned between shareholders' franked income, defined below, and unfranked profit, being the remaining balance.

There is no definition of policyholders' tax in the legislation. The Revenue has indicated that it prefers policyholders' tax to be taken as the difference between the total amount of tax provided for in the accounts and shareholders' tax equal to tax on NC1 profit. An alternative approach would be to calculate policyholders' tax directly, as basic rate tax applied to the policyholders' share of I-E and policyholders' franked income in charge.

#### **6.2 Reservations of Surplus**

The ability of offices to make reservations for policyholders and exclude the amount of such reservations from profit was limited from 14th March 1989. An office may establish a "reasonable expectations" reserve out of unappropriated year-end surplus, but such a reserve is reduced by the amount of all past unutilised reservations for policyholders. Unit-linked offices are no longer able to reserve pension profits to defer tax. The ability of with-profit offices to hold an investment reserve restricts the impact of the changes for such offices.

#### **6.3 Shareholders' Franked Income**

Shareholders' franked income is defined as unrelieved franked income excluded from the PB Case VI computation, plus other unrelieved franked income of the office multiplied by the ratio of

- NC1 profit, to
- total office investment income, realised and unrealised gains and transfers from investment reserve, less expenses and interest paid, as stated in Forms 40 of the DTI Returns.

## DETAILED OUTLINE OF TAX SYSTEM

### *Shareholders' Profit (Contd)*

The ratio is limited to a maximum of one and a minimum of zero (sections 88 and 89 of FA 1989 as amended by section 45 of FA 1990). Franked income is defined as unrelieved if it has not been excluded from charge to tax, the tax credit has not been refunded and no relief has been allowed against it.

### **6.4 Grossing-up Ratio**

The average tax rate used for grossing-up NC1 profit is equal to the weighted average of basic rate tax on total unrelieved franked income in the company and corporation tax on the balance (if positive) of total revenue account investment income, gains and investment reserve transfer less expenses and interest paid (see also paragraph 6.1). In some circumstances, an election to exclude shareholders' PB franked income is not made or the amount of the election does not equal shareholders' PB franked income. In these circumstances the grossing-up ratio does not correctly allow for shareholders' tax and an adjustment to the ratio may presumably be required.

It is general practice not to gross-up NC1 losses.

Appendix II contains a worked example of the method of calculating NC1 profit.

## **7. Tax Payable**

Companies are normally assessed for tax on the basis of taxable investment income less relievable expenses, subject to operation of the NC1 minimum test. The Revenue can elect an alternative, of taxing the office on the basis of shareholders' profit.

### **7.1 I-E Tax**

The amount of corporation tax payable is calculated by applying the corporation tax rate to shareholders' unfranked profit (up to the level of I-E) and applying the basic rate of income tax to the remaining balance of I-E (sections 88 and 89 of FA 1989, as amended by section 45 of FA 1990). In addition, tax deducted at source from BLAB and GAB franked income and from shareholders' franked income excluded from the PB Case VI profit is irrecoverable unless through utilisation of excess E. Tax deducted at source in respect of other income is generally recoverable.

In the calculation, I-E is equal to

“P”

- BLAB unfranked income, chargeable gains and Case VI profit, plus
- GAB unfranked income and Case VI profit, plus
- PB and OLAB Case VI profits, less

## DETAILED OUTLINE OF TAX SYSTEM

### *Tax Payable (Contd)*

#### **“E”**

- BLAB relievable expenses, GAB annuities excluded from GAB Case VI profit, excess E brought forward, and interest paid.

The amount of expenses deductible in the I-E computation is limited to the amount of BLAB taxable income and also by the effect of the NC1 minimum tax test, as noted in paragraph 7.2 below. Any excess can be carried forward as excess E, or is available to recover tax credits

- on franked income attributable to BLAB, plus
- for excess E which arose prior to 1st January 1990, franked income attributed to GAB and franked income excluded from PB Case VI profit, less
- franked payments (see paragraph 8).

Any subsequent excess of franked payments over franked income results in a repayment to the Revenue of credits previously recovered and a corresponding increase in excess E.

### **7.2 Minimum Tax Test**

For a proprietary office, expenses deductible in the I-E tax computation are restricted to ensure that tax payable is at least equal to tax applied to shareholders' profit (the notional Case I or NC1 minimum tax test) (section 76 of ICTA 1988). This minimum level of tax is equal to basic rate tax on shareholders' franked income and corporation tax on shareholders' unfranked profit and is compared with the sum of I-E tax and tax credits not recovered on franked investment income (excluding OLAB franked income, schedule 5 of FA 1990). The Revenue has been known to argue that only shareholders' franked income should be included when applying the test.

The amount by which expenses are restricted by the NC1 test is carried forward as excess E, and is available for future relief against BLAB I in the I-E tax computation.

### **7.3 True Case I**

Occasionally, the level of NC1 profit exceeds I and an expenses restriction in the I-E computation is unable to bring the level of I-E tax up to the NC1 tax level. The Revenue can elect to tax the office under Schedule D Case I (“true” Case I) and if so the office will lose its existing excess E, although negotiations with the Revenue may enable excess E to be preserved for a period (section 76 of ICTA 1988). Franked income is excluded from NC1 profit in a true Case I assessment (sections 208 and 434 of ICTA 1988).

## DETAILED OUTLINE OF TAX SYSTEM

### 8. Dividend Payments

Dividend payments by a company trigger a liability to make an advance payment of corporation tax (ACT) to the Revenue equal in amount to basic rate tax applied to the gross dividend payment (section 14, ICTA 1988). A net dividend payment, grossed-up by the rate of ACT applicable to the payment, is known as a franked payment. ACT paid, up to a limit of basic rate tax applied to taxable profit (unfranked shareholders' profit) in the year, is offset against the company's total tax liability in the year (sections 244 and 434 of ICTA 1988). Excess ACT can be carried back for six years or carried forward.

Shareholders' franked income is generally available to be offset against franked payments by the life office, thus reducing the amount of ACT payable. Surplus franked income can be carried forward for use against future distributions.

Appendix II contains an example illustrating the impact of the ACT and franked income rules.

### 9. Group Reliefs

A number of reliefs may be available to companies within a group (sections 402 to 413 of ICTA 1988):

- Dividends paid within a group need not trigger an ACT charge and do not then carry a tax credit. The dividend is not treated as franked income and is not taxable profit. Section 247 of ICTA 1988 effectively restricts this relief to exclude payments to a life company.
- Interest paid within a group (but not to a life company) can be paid without deduction of tax (section 247 of ICTA 1988).
- A part or all of trading losses can be set against profits (including I-E) of another company (section 403 of ICTA 1988). A payment made to compensate the company surrendering the loss is not taxable income (section 402 of ICTA 1988).
- ACT paid may be surrendered to a subsidiary company (section 240 of ICTA 1988).
- Asset transfers may be treated as acquired and sold at cost for capital gains tax purposes (section 273 of ICTA 1970).
- Excess charges and also capital allowances, but not life company excess E, can be surrendered to other group companies (section 403 of ICTA 1988). Arguably, NC1 profit should be increased by the amount of the surrender, as the charge surrendered is no longer available as a deduction in computing NC1 profit.

## DETAILED OUTLINE OF TAX SYSTEM

### *Group Reliefs (Contd)*

- A life office for which the NC1 restriction applies can normally negotiate group relief against unfranked income uncovered by the NC1 test. No relief is allowed against franked income.
- NC1 losses can be surrendered. If they are, the Revenue often argues that management expenses should be reduced by the same amount on the basis that these expenses qualified as a deduction in ascertaining the NC1 loss.

Case VI profits and losses are not available for group relief. From 1st January 1990, loss and group reliefs are not available against policyholders' taxable income (schedule 8 of FA 1989).

### **10. Shareholders' Investment Income**

Shareholders' income, gains and expenses, ie items credited directly to profit and loss, are not normally included in the main I-E computation of an office. The Revenue is challenging precedents where these items are so included.

Shareholders are taxed at the corporation tax rate on the amount of the income and gains, with no allowance for deduction of expenses except where incurred in the collection of the income and gains or by concession.

### **11. Other Aspects**

A number of other matters may affect the tax liability of an office.

#### **11.1 Reassurance**

Ring-fencing and the amended rules for apportionment have reduced uncertainties over the treatment of reassurance in GAB, OLAB and PB. Reassurance profits are taxed to the extent that these contribute to Case VI profit.

Reassurance commission receipts attributable to BLAB are offset against BLAB acquisition costs for the purposes of spreading of relief (section 44 of FA 1990). Since reassurance commission receipts are excluded from the new Case VI charge, any excess of such receipts over BLAB expenses may not be brought into the tax net. Reassurance interest receipts are generally included with other investment income. Reassurance interest payments are deducted separately in the I-E computation (see paragraph 5.2) unless of a short-term or fluctuating nature, in which case it may be possible to treat them as a management expense.

## **DETAILED OUTLINE OF TAX SYSTEM**

### *Other Aspects (Contd)*

#### **11.2 Unit Trusts**

The 1989 and 1990 Finance Acts introduced a number of changes specifically relating to the attractiveness of holding unit trust investments:

- Rebates of unit trust management charges to the life office now fall within the new Case VI charge on BLAB miscellaneous profits.
- The status of unit trust income has changed from franked to unfranked (section 78 of FA 1989). Income is received net of basic rate tax deducted at source. The income tax is repaid if not offset against the corporation tax liability.
- Unit trust holdings (other than those linked solely to OLAB and PB), and also holdings in off-shore funds, are treated as being notionally sold and re-acquired at the end of each accounting year beginning after 31st December 1990 (or a later day, to coincide with the abolition of stamp duty). The BLAB proportion of the notional chargeable gain or loss is brought into the tax computation in seven equal instalments over seven years, starting with the year of notional sale. Sale of a holding during a year gives rise to a gain, but only in respect of the period between the date of sale and the previous year-end. Various rules have been introduced to enable capital losses to be offset against gains or to be carried forward. Offices may elect to roll-over gains and exchange linked holdings for other assets. They may also elect that the new rules should not apply to linked assets held to match liabilities for policies issued prior to 1st April 1990 (sections 46 and 47 of FA 1990).

#### **11.3 Transfers of Assets**

The 1990 Finance Act (schedule 6) introduced “ring-fencing” rules in order to treat different categories of business as separate entities for capital gains purposes.

Five categories of assets are defined:

- a) Linked assets linked solely to BLAB - securities for which virtually all of the policies to which they are linked are BLAB
- b) Linked assets linked solely to PB - securities for which virtually all of the policies to which they are linked are PB
- c) OLAB assets - holdings identified as backing OLAB for the purpose of the apportionment of income and gains

## DETAILED OUTLINE OF TAX SYSTEM

### *Other Aspects (Contd)*

- d) Other long term fund assets (including assets backing mixed linked funds, GAB, capital redemption, PHI and industrial branch business)
- e) Other assets - shareholder assets.

Holdings were divided into four categories - (a), (b), (c) and other - with effect from 31st December 1989; categories (d) and (e) were differentiated with effect from 20th March 1990 (Budget Day 1990).

Transfers of assets between these categories, after the initial allocations, are deemed disposals and reacquisitions at market value and may generate a charge to tax within the I-E computation. CGT rules apply when BLAB or shareholder assets are involved. The gain arising from a transfer from GAB, OLAB and PB will not be taxed since Case VI profits already include both realised and unrealised gains brought into account.

### **11.4 Transfers of Long Term Business**

Schedule 9 of FA 1990 contains three main provisions which facilitate the ability to transfer long term business between companies under section 49 of the 1982 Insurance Companies Act:

- confirmation of an extra statutory concession of roll-over relief on unrealised capital gains on the investment portfolio of the life office
- carry-forward of excess E, Case VI losses, and also acquisition costs not yet relieved under the spreading rules
- carry-forward of capital allowances and balancing charges, with no allowance or charge arising on transfer.

There is no provision for notional Case I losses to be transferred, although there is such provision within ICTA 1988 if there is no change in ownership. There is no provision for CGT losses to be transferred.

### **11.5 Stamp Duty**

Stamp duty for life policies was removed from 1st January 1990 (schedule 17 of FA 1989).

**DETAILED OUTLINE OF TAX SYSTEM***Other Aspects (Contd)***11.6 Tax Repayment**

Life offices typically lodge a provisional claim for repayment of income tax deducted from unfranked investment income and tax credits on pension business franked income, less the income tax due on annual payments made by the office. A proportion, for example 75%, of the amounts due is often repaid by the Revenue soon after the office's accounting year end.



## Appendix II.1

## NC1 COMPUTATION

	Example A		Example B	
	£	£	£	£
Increase in long term surplus	100		100	
Net transfer to profit and loss account	800		800	
Shareholders' net profit		900		900
Tax adjustments:				
Capital expenditure, depreciation	100		100	
Disallowed entertainment costs	100		100	
Capital allowances	(100)		(100)	
NC1 profit arising, net of tax		1,000		1,000
NC1 loss brought forward		(2,000)		(665)
NC1 profit, net of tax		(1,000)		335
NC1 tax		-		165 <sup>1</sup>
NC1 profit		-		500
NC1 loss carried forward		1,000		-
Shareholders' franked income	-		100 <sup>2</sup>	
Balance of unfranked profit	-		400	
NC1 profit		-		500

## Notes

1 NC1 tax is calculated as follows:

Total office franked investment income	1,000
Revenue account investment income and gains, less expenses	5,000
Franked income proportion: 1,000/5,000	0.2
Average tax rate: 25% x 0.2 + 35% x 0.8	33%
NC1 tax: 335 x .33 / (1 - .33)	165

2 Shareholders' franked income is calculated as:

Shareholders' proportion: 500/5,000	0.1
Shareholders' PB franked income excluded from PB Case VI computation	50
Other unrelieved franked income multiplied by shareholders' proportion	50
Shareholders' franked income	100

3 As noted in Appendix I, paragraph 6.4, it may be necessary to adjust the grossing-up ratio if not all shareholders' PB franked income is excluded from PB Case VI profit.

## Appendix II.2

I-E COMPUTATION<sup>1</sup>

	Example C £	Example D £	Example E £
<b>Assumptions</b>			
Taxable income <sup>2</sup> (I)	2,000	2,000	2,000
Relievable expenses <sup>3</sup> (E)	1,000	3,000	2,000
FII in charge <sup>4</sup>	600	600	0
Shareholders' unfranked profit	400	400	400
Shareholders' FII	320	320	0
<b>Summary Tax Computation (Pre-NC1 test)</b>			
Corporation tax liability <sup>5</sup>	290	0	0
Unrecovered tax credits on FII <sup>6</sup>	150	0	0
Total tax	440	0	0
Excess E carried forward <sup>7</sup>	0	400	0
<b>Summary Tax Computation (Post-NC1 test)</b>			
NC1 minimum tax	220	220	140
Total tax	440	220	140
Unrecovered tax credits on FII <sup>8</sup>	150	150	0
Corporation tax liability	290	70	140
Excess E carried forward <sup>9</sup>	0	1,200	400

## Notes

- 1 The numbers in this table differ from those used in Examples A and B in the NC1 computation.
- 2 BLAB unfranked income, chargeable gains and Case VI profit, plus GAB unfranked income and Case VI profit, plus OLAB and PB Case VI profit.
- 3 Pre-1990 excess E brought forward plus post-1989 excess E brought forward and BLAB relievable expenses in the year limited to the amount of BLAB taxable income and franked income in the year. E also includes GAB annuities paid up to the level of GAB franked and unfranked income, and interest paid or other charges.
- 4 FII in charge equals unrelieved BLAB and GAB FII plus shareholders' FII excluded from the PB Case VI computation.
- 5 The (pre-NC1 test) corporation tax liability is 35% of shareholders' unfranked profit up to the level of I-E and 25% of the balance of I-E.
- 6 Tax not recovered on franked income is equal to 25% of FII in charge if I-E is positive. If I-E is negative, relievable expenses can be offset against surplus FII and tax not recovered equals 25% of the excess of FII in charge over expenses offset against surplus FII. Surplus FII is equal to franked income less franked payments. In these examples, franked payments have been assumed to be nil.
- 7 Excess E carried forward equals E-I minus the amount of expenses utilised against surplus FII otherwise in charge (see note 6).
- 8 After operation of the NC1 test, tax not recovered on franked income is equal to the amount before application of the NC1 test plus the increase in tax payable as a result of NC1 minimum test. This sum is limited by the amount of total surplus FII in charge.
- 9 Excess E carried forward after operation of the NC1 test is equal to:
  - Excess E carried forward (pre-NC1 test), plus
  - FII brought into charge as a result of the NC1 test, plus
  - the increase in unfranked profit brought into charge from the NC1 test (equivalently, the increase in the corporation tax liability divided by 0.35).

## Appendix II.3

## EFFECT OF DIVIDEND PAYMENTS

	Example C £	Example D £	Example E £
<b>Assumptions</b>			
Taxable income less expenses	1,000	(1,000)	0
FII in charge	600	600	0
Shareholders' unfranked profit	400	400	400
Shareholders' FII	320	320	0
Gross dividend payment	640	400	640
<b>Summary Tax Computation (Pre-NC1 test)</b>			
Corporation tax liability	290	0	0
Unrecovered tax credits on FII <sup>1</sup>	150	100	0
Total tax	440	100	0
Excess E carried forward	0	800	0
<b>Summary Tax Computation (Post-NC1 test)</b>			
Total tax	440	220	140
Unrecovered tax credits on FII	150	100	0
Corporation tax liability	290	120	140
Excess E carried forward	0	1,143	400
ACT paid <sup>2</sup>	80	20	160
ACT offset against CT liability <sup>3</sup>	80	20	100
Balance of CT liability	210	100	40
Surplus ACT (for carrying back or forward) <sup>4</sup>	0	0	60

## Notes

- 1 In example D, 200 of relievable expenses can be offset against the excess of FII in charge less the franked dividend payment.
- 2 ACT payable equals basic rate tax (25%) applied to the excess of the dividend payment over the sum of surplus franked income brought forward (assumed nil) and shareholders' franked income in the year.
- 3 ACT offset against corporation tax is limited to the lesser of basic rate tax applied to shareholders' unfranked profit in the year and the amount of the corporation tax liability.
- 4 The excess of ACT paid over the amount of ACT set-off can be carried back against corporation tax liabilities for up to six years, or carried forward.



## Appendix III

### ALLOWANCE FOR TAX IN PROFIT-TESTING

*In this appendix we develop the open fund methodology and formulae outlined in Section C, for an office which moves from one tax position to another. The formulae shown below are those required for a unit-linked office and differ from those appropriate for a with-profits office, as noted in Section C. The formulae allow for taxable income of a product to be taxed at the time when such taxable income enters the tax base of an office.*

#### 1. Definitions

k	:	Time
O to X	:	Period during which an office is selling excess E
O to G	:	Period during which an office is gross (I<E)
O to C	:	Period during which pension Case VI profit is below zero
O to N	:	Period during which NC1 profit is below zero
b	:	Basic rate of income tax
t	:	Average NC1 tax rate
v	:	Discount factor used to value tax payable
e	:	Excess E selling rate
t <sup>1</sup>	:	Effective rate of tax on NC1 profit, allowing for the effect of deferral:
		$t \times v^{N-k} \quad k < N$ $t \quad k > N$
P	:	Gross profit emerging on the product, before any allowance for tax
I-E	:	Taxable investment income less relievable expenses generated by the product

#### 2. Notes

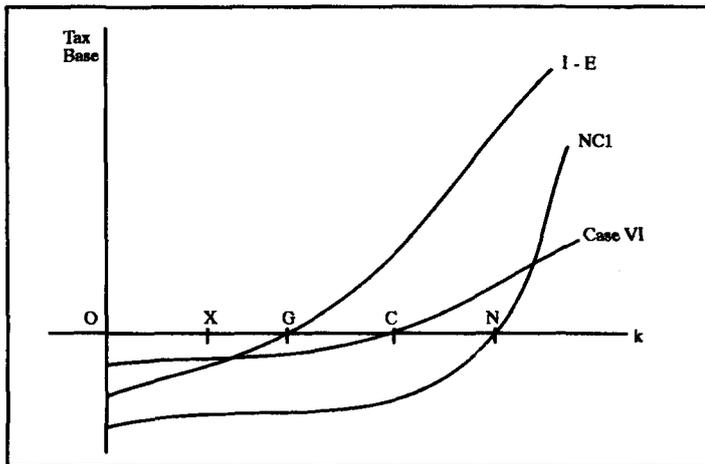
1. The graphs in this appendix refer to the overall corporate tax environment; the formulae to the allowance required for tax at the product level.
2. The period O to X during which an office is selling excess E is likely to differ from the period during which sale of excess E should be considered, that is whilst the following equation holds:

$$b \times v^{G-k} < e$$

3. The effect of pre-1990 excess E on value generated has been ignored.

## ALLOWANCE FOR TAX IN PROFIT-TESTING

### 3. A Non-Tax Paying Office Turning Net



This office is excess E for an initial period O to G and this excess E is being sold for the first part of the period, O to X. NC1 profit turns positive at N but the NC1 minimum test does not bite. The next two paragraphs consider the tax formulae required to profit-test life and also pension products. For the latter it is assumed that the office has a Case VI loss for an initial period O to C which is shorter than the period of NC1 loss.

#### 3.1 Life Products

- **Tax Formulae**

<i>Period</i>	<i>Allowance for Tax</i>
O to X	$e \times (I-E) + \frac{(t^1 - e) \times (0 - e \times (I-E))}{(1 - e)} = e \times \frac{(1-t^1) \times (I-E)}{(1 - e)}$
X to G	Nil
From G	$b \times (I-E) + \frac{(t^1 - b) \times (P - b \times (I-E))}{(1 - b)}$

- **Comment**

During the period O to X, allowance for tax reflects the office's policy of selling excess E. Profits arising are not taxed in this period because the office has accumulated NC1 losses. Between X and G, product I-E is being accumulated. At G, the office becomes net and tax is payable on the amount of I-E accumulated during the period X to G, and tax at the higher effective rate of tax on NC1 profit is applied to the gross product profit accumulated between O and G. The same formula applies to I-E and gross profit emerging after G.

## ALLOWANCE FOR TAX IN PROFIT-TESTING

### *A Non-Tax Paying Office Turning Net (Contd)*

#### 3.2 Pension Products

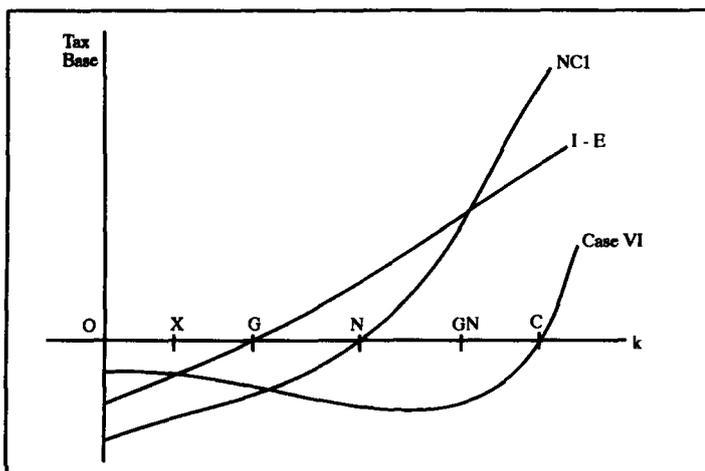
- **Tax Formulae**

<i>Period</i>	<i>Allowance for Tax</i>	
O to C	Nil	
From C	$b \times (I-E) + \frac{(t^1 - b) \times (P - b \times (I-E))}{(1 - b)}$	= $t^1 P$

- **Comment**

During the period O to C, Case VI profit for the office is below zero, and product Case VI profits and losses accumulate with no tax allowance required. At C, the office's Case VI profit turns positive and, unless there is pre-1990 excess E available to offset this, I-E tax becomes payable on the accumulated product Case VI profit, and on subsequent profit. Since, for pension products, the contribution to I-E and to gross profit are similar the expression has been simplified to  $t^1 P$ .

#### 4. A Net Office Turning Gross Profitable



This office is in an excess E position up to G and again after GN when the NC1 minimum test starts to bite. Excess E is being sold in the period O to X and from GN. Tax is payable on an I-E basis for the period G to GN and on an NC1 basis from GN. The following two paragraphs show how tax can be allowed for in profit-tests. For the pension profit-test formulae it is assumed that the office has Case VI losses during the period O to C which extends beyond time GN.

## ALLOWANCE FOR TAX IN PROFIT-TESTING

*A Net Office Turning Gross Profitable (Contd)*

### 4.1 Life Products

- **Tax Formulae**

<i>Period</i>	<i>Allowance for Tax</i>
O to X	$e \times (I-E) + \frac{(t^1 - e) \times (0 - e \times (I-E))}{(1 - e)} = e \times \frac{(1 - t^1) \times I-E}{(1 - e)}$
X to G	Nil
G to GN	$b \times (I-E) + \frac{(t^1 - b) \times (P - b \times (I-E))}{(1 - b)}$
From GN	$e \times (I-E) + \frac{(t^1 - e) \times (P - e \times (I-E))}{(1 - e)}$

- **Comment**

For this office, the treatment required is similar to that shown in paragraph 3 up to the point GN when NC1 profit exceeds I-E. If the office then starts to sell excess E generated by operation of the NC1 test and is likely to continue to do so, allowance for tax at the profit-test level can incorporate a conservative assessment of the excess E selling rate. If excess E is not being sold, full tax at rate  $t^1$  needs to be applied to gross profit emerging from the product.

## ALLOWANCE FOR TAX IN PROFIT-TESTING

*A Net Office Turning Gross Profitable (Contd)*

### 4.2 Pension Products

- **Tax Formulae**

<i>Period</i>	<i>Allowance for Tax</i>
O to GN	Nil
GN to C	$e x (0) + \frac{(t^1 - e) x (P - e x (0))}{(1 - e)} = \frac{(t^1 - e) x P}{(1 - e)}$
At C	$e x (I-E) + \frac{(t^1 - e) x (0 - e x(I-E))}{(1 - e)} = \frac{(1 - t^1) x e x (I-E)}{(1 - e)}$
From C	$e x(I-E) + \frac{(t^1 - e) x (P - e x (I-E))}{(1 - e)} = t^1 P$

- **Comment**

For this office, the period when Case VI is negative extends beyond the point when NC1 turns positive and starts to exceed I-E. Tax is payable on accumulated NC1 profit and NC1 profit arising (with no allowance for I-E tax) during the period GN to C. At C tax is payable on accumulated I-E and subsequently full tax, at rate  $t^1$ , is applied to gross profit emerging.



## Appendix IV

### IMPACT ON POLICYHOLDERS AND SHAREHOLDERS

*To illustrate the effect of taxation, we consider a unit-linked flexible mortgage plan and a conventional with-profit low cost endowment assurance policy. We assess the impact on profitability and on maturity proceeds of the taxation of policyholders' income and compare the position of a net office with that of a gross office.*

#### 1. Methodology and Assumptions

Revenue accounts were projected using profit-testing techniques. These revenue accounts show the progression of premium income, investment return, expenses, tax, surrender, mortality and maturity benefits as well as the balance of profit for each period during the policy term. The projections incorporated allowance for decrements by death and voluntary discontinuance. The present values of the profit streams arising for the benefit of the shareholders were determined using a 12% per annum discount rate.

For the low cost with-profit endowment assurance, surpluses in the long term fund are used to meet the cost of bonus allocations to policyholders and to make transfers to shareholders. The balance of any profit is set aside for subsequent use or distribution, with any deficiency being met by transfers from investment reserve. Shareholders' transfers were assumed to equal one-ninth of the cost of bonus allocations. Bonus rates were assessed such that the present value of net surplus accruing to the long term fund was equal to zero. For this purpose an earned rate of 14% per annum was used, approximately equal to the rate needed to support current reversionary bonus levels for a typical with-profit proprietary office. One-third of the earned rate was assumed to be capital gains covered by indexation relief. For the gross office, the excess E selling rate was assumed to equal 10%. The ratio of shareholders' franked income to total shareholders' profit was taken as one-sixth. The rate of corporation tax assumed was 35%; basic rate of income tax was taken as 25%.

#### 2. Results of Mortgage Plan Analyses

A policyholder aged 35 effects a 25-year policy for a premium of £64.50 per month, providing mortgage cover of £50,000. Initial costs were assumed to equal 190% of the old undiscounted LAUTRO Maximum Commission Agreement scale, plus a fixed expense of £100 per policy (total initial cost: 163% of one year's premium).

## IMPACT ON POLICYHOLDERS AND SHAREHOLDERS

### *Results of Mortgage Plan Analyses (Contd)*

#### Comparison of Maturity Proceeds and Profitability

	Unit-Linked Mortgage Plan <sup>1</sup>			Low Cost Endowment	
	Projected Maturity Proceeds	Profitability <sup>2</sup>		Projected Maturity Proceeds <sup>3</sup>	Profitability <sup>2</sup>
		Low Lapses	High Lapses		
<b>Pre-1990 Tax Basis</b>					
Net office <sup>4</sup>	74,545	83	95	62,041	414
Gross office <sup>5</sup>	74,545	297	124	65,214	438
<b>Post-1989 Tax Basis</b>					
Net office <sup>6</sup>	74,545	74	36	59,427	395
Gross office <sup>5</sup>	74,545	311	115	63,838	428
<b>Profits Tax Basis<sup>7</sup></b>					
Current Reserves	88,433 <sup>8</sup>	311	204	63,838	428
Lower Reserves <sup>9</sup>	—	—	—	73,500	432

#### Notes

- 1 A front-end loaded plan with reduced allocation rates in the first two policy years.
- 2 Profitability was assessed as the present value of future net of tax transfers to profit and loss, using a risk discount rate of 12% per annum. The "low" lapse projection assumed lapses and surrenders of 5% in policy year one, 10% in policy year two and 5% per annum thereafter. The "high" lapse projection assumed lapses and surrenders of 20% in policy year one, 15% in policy year two and 10% per annum thereafter.
- 3 Projected maturity proceeds are based on the level of reversionary bonuses which can be supported if a gross investment return of 14% per annum is achieved. The rate of return required by the estate on capital needed to support new business was also assumed to equal 14% per annum gross (net of tax, approximately 12% per annum for the net office, 13.1% per annum for the gross office and 14% per annum for the profits tax only basis).
- 4 Tax rates assumed were 35% on unfranked income, 30% on realised capital gains and 25% on franked investment income. Tax relief for expenses was assumed to equal 30%.
- 5 The excess E selling rate assumed was 15% (pre-1990) and 10% (post-1989).
- 6 Full spreading of first year acquisition costs is assumed.
- 7 Tax on NC1 profit only, with no tax on I-E.
- 8 For the unit-linked plan, tax deductions from the unit funds have been set to zero. Unit charges have been increased to the level required to maintain profitability equal to the gross office low lapse level.
- 9 Higher net investment returns could lead to an increase in the interest rates used to calculate reserves and cash values (an increase of one-third is assumed) and in the net of tax allowance needed for expenses (the Zillmer adjustment for initial costs has been increased in the ratio 1:0.85). No account has been taken of the possibility that, in practice, premium rates would also change if tax was levied on a profits rather than I-E basis.

## **IMPACT ON POLICYHOLDERS AND SHAREHOLDERS**

### **3. Comment on Results**

- The higher proceeds projected for the unit-linked contracts arise because the unit-linked contract has a lower level of profit margin than the low cost endowment.
- Higher profitability and/or maturity proceeds for the gross compared with the net office arises because of the lower tax rate applied to investment income and chargeable gains. The improvement in profitability is less if lapse rates are increased.
- The new tax basis generally results in lower profitability and/or maturity proceeds because the reduced effective rate of tax relief for acquisition costs more than offsets the reduced rate of tax applied to policyholders' income and gains.
- The increase in maturity proceeds arising if a profits-based tax system is introduced is less than might be expected. This is because expenses tax relief significantly reduces the overall burden of taxation of investment income under the current tax system.

**BIBLIOGRAPHY****1. Various Taxes Acts, in particular:**

**Income and Corporation Taxes Act 1970 ("ICTA 1970")**  
**Capital Gains Tax Act 1979 ("CGTA 1979")**  
**Finance Act 1985**  
**Income and Corporation Taxes Act 1988 ("ICTA 1988")**  
**Finance Act 1989 ("FA 1989")**  
**Finance Act 1990 ("FA 1990")**

**2. European Taxation:**

**1990 International Bureau of Fiscal Documentation.**

**3. Taxation of Insurance Business:**

**James S. Macleod and Arthur Levitt, Butterworths, 1988.**