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ACCOUNTING FOR INSURANCE

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CONTENTS

EXECUTIVE SUMMARY

The major differences in accounting for life insurance as compared with other industries derive from the long time period between receipt of premiums and the payment of claims. This gives rise to the need for actuarial estimates of the liability in order to determine both the solvency and the profitability of life business.

UK insurance companies are structured as **proprietary** or **mutual** companies and are mostly **composites** writing both **non-life** and **life** insurance. However only life insurance offers a form of **investment** as well as pure insurance against risk**.**

Life insurance **products** include **term; whole-life; endowment; maximum investment** contracts including **unit-linked** policies; **annuities; pensions;** and **permanent health** insurance. In **with-profits** insurance policyholders as well as shareholders participate in the **surpluses** arising on the business.

Premiums may be paid as **single**, **regular** or **recurring single** premiums. In setting premium rates the **actuary** must allow for **mortality**, **interest**, **expenses** and **contingencies**, as well target profit and market competition.

Accounting practices are needed for **premiums**, for **claims** on death, maturity and **surrenders** (including **bonuses**), and for **commissions** (including **deferred acquisition costs**).

Companies normally 'lay-off' a proportion of the risk by **reinsuring** with other insurance, or specialist reinsurance, companies. The accounting for the reinsurance premiums paid, claims reimbursements received and commissions paid is effectively the mirror image of the accounting for the direct insurance.

Investment return comprises **interest** and **dividends** and **gains** and **losses** from changes in the **market value** of investments. A **realised gain** arises when an investment is sold for more than its cost. **Unrealised** gains arise when investments are revalued to market value at the year end but not actually sold. UK companies normally show investments at market value in the balance sheet.

As **solvency** needs to be maintained over the very long periods for which policies are written it is necessary to ensure that not only do assets currently exceed liabilities but even more importantly that future cash inflows will match the requirements for future cash outflows. A crucial aspect of investment management is therefore to ensure adequate '**matching**' of the maturities of investments against the maturities of anticipated claims.

As there is usually a significant period between the inception of a policy and the receipt of premiums, and the final payment of benefit, it is necessary to make provision, at the end of each accounting period, for the future liability to pay the ultimate benefits to the policyholders, the amount of which will depend on a range of factors. An actuarial estimate of the '**long term business provision**' needs to be made. In the UK this is the responsibility of the company's '**appointed actuary**'. The actuarial estimate of the long term liabilities is part of both the accounting and the **regulatory** requirements for supervision of insurance business and the calculations are required both for the insurers' **annual accounts** and for the **returns** made to the **supervisory authorities** (in the UK, the returns to the Department of Trade and Industry ('DTI Returns')), to ensure the protection of policyholders' interests.

In respect of **profit calculation** the very conservative **'surplus arising'** method in the UK - **the 'statutory solvency method'** as modified under the **EU Insurance Accounts Directive** ('IAD') by the deferral of acquisition costs - is primarily designed to show the degree of **solvency** of the company rather than to measure its **profitability** in a particular year. However, it is generally accepted that, given certain disclosures, this basis is '**true and fair**' for the purpose of the annual accounts. New approaches to more 'realistic' profit measurement are currently under discussion in the UK.

The accounts required under the IAD comprise a **profit and loss** account (including a **technical account** for **non-life** insurance business, a **technical account** for **life** assurance business and a **non-technical** account), a **balance sheet** and **notes** thereto.

LIFE INSURANCE

1. TYPES OF COMPANIES (OR 'OFFICES')

UK[1] insurance companies have grown up from the early origins in 1583 to become very substantial companies. The principal types of organisation writing life insurance in the UK are:

- **Proprietary companies**, which are usually companies limited by shares where the members are investors (rather than policyholders);

- **Mutual companies**, which are usually companies limited by guarantee, the members being the policyholders; and

- **Branches of insurers** incorporated overseas.

In addition, certain **Lloyd's syndicates** underwrite short term life business.

In the majority of cases the major companies in the UK are 'composites' writing general and other insurance business as well as life business. From the policyholders' perspective general insurance is pure insurance against risk e.g. motor, fire etc. whereas life assurance may be a form of investment. We do not therefore discuss non-life insurance further in this presentation (see for example Macve, R. and Gwilliam, D., A Survey of Lloyd's Syndicate Accounts, Prentice Hall / Institute of Chartered Accountants in England and Wales (ICAEW), 1993, for a discussion of the accounting issues and the particular difficulties that arise in 'long-tail' insurance e.g. personal injury, professional liability, latent diseases such as asbestosis, and environmental pollution).

2. TYPES OF LIFE INSURANCE PRODUCTS

2.1 TERM INSURANCE

Term insurance[2] is designed to provide pure life cover and so will provide benefit on death **during the term of a policy**. The policy can be purchased for any selected time period. The insurer pays the policyholder's estate if s/he dies during the term of the policy, but if s/he survives s/he will receive nothing. Term insurance is a protection product, for example it is commonly written in conjunction with repayment mortgages to provide a form of repayment protection.

2.2. WHOLE LIFE ASSURANCE

A whole life policy has **no fixed term** and there will always be a benefit (contractual amount, adjusted for items such as policy loans and dividends, if any) at the death of the insured. For example: whole life policies are sometimes used to provide a benefit on death to enable beneficiaries to pay the Inheritance Tax Liability on the estate.

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[1] For the purpose of this presentation reference is made primarily to UK companies and practices, with some significant differences from practice elsewhere in the European Union being mentioned.

[2] For the purposes of this presentation the terms insurance and assurance are used interchangeably.

2.3. ENDOWMENT ASSURANCE

An endowment assurance policy will pay the policyholder a sum after a fixed period or on death before the period is completed. Unlike term assurance and whole life assurance the policyholder can receive the benefit. Endowment polices are generally used as investment/saving products. For example: repayment of the capital amount owing on a mortgage. Many whole life and endowment policies are written as 'with-profit' policies whereby the policyholders are entitled to share in surpluses arising on the business. In a proprietary company such surpluses are often divided on the basis of 90% to policyholders and 10% to shareholders.

2.4. MAXIMUM INVESTMENT CONTRACTS

Certain contracts are designed to provide minimal life cover and are principally investment products, for example, unit liked policies. Benefits may take the form of a capital sum on maturity which is often partly guaranteed (they are typically subject to market value adjusters, so that the return is reduced if the investment return obtained by the life company is not sufficient to support the guarantee) or may be paid as income through the period of the policy. As investments, these products will be in direct competition with other forms of medium term deposits, such as building society deposits or unit trusts.

2.4.1. Unit Linked Policies

With a unit-linked policy the policyholder buys units in a pooled investment fund and therefore participates directly in the investment performance of the underlying funds. The return arising from a unit linked policy is determined by reference to the value of a particular fund of investments. The performance of the contract is objectively linked to the investment performance of the fund investments rather than being at the discretion of the insurer and thus the investment risk is passed on to the policyholder.

A unit linked policy differs from a conventional policy in that:

- A guaranteed percentage of each premium is allocated to units in the life fund.

- The capital growth, and frequently the income of the fund, is re-invested in the fund, and is reflected in the increased value of the units. The policyholder benefits directly from the total investment growth and income.

- The basis of the charges by the life company is normally fixed at the outset of any policy.

Companies that write only unit linked policies tend to be subsidiaries of banks ('bancassurers').

2.5. ANNUITIES

An annuity policy provides for payments to be made at regular intervals, starting at a specified date, and usually continuing until the death of the policyholder. The amount of the payment is specified by the policy, and may be constant throughout the annuity period, or may increase at a prescribed rate.

2.6. PENSIONS

Pension policies involve paying regular or single premiums to create a stream of income (starting at retirement), usually also with the option of paying a capital sum. In essence, these policies are savings contracts, leading to a deferred annuity and a capital payment. They are distinguished from other life policies in the UK by their taxation treatment, both for the policyholder and the insurer. For example, the premiums paid and the investment income generated are tax deductible and exempt from tax respectively.

2.7. PERMANENT HEALTH INSURANCE (PHI)

A permanent health policy provides for income to be paid in the event of the insured falling ill. The sum paid depends on the particular contract, and may be either fixed or escalating, and for a limited period or paid indefinitely.

3. PREMIUMS

A premium is a sum paid to the life office to assure the benefit specified by the policy.

3.1. PAYMENT OF PREMIUMS

3.1.1. Single premium contracts

These contracts require the payment of a single amount by the policyholder at the start of the contract term.

3.1.2. Regular premium contracts

The policyholder is contractually obliged to make payments at regular periods to the insurer over the term of the policy, e.g. monthly, annually.

3.1.3. Recurring single premium

Neither the timing nor the amount is determined in advance. Pension policies are often structured in this manner so as to allow the policyholder maximum flexibility in making contributions, for example by reference to the level of his/her income in any year.

3.2. THE CALCULATION OF THE PREMIUM

Insurance companies need to set a price for the cover given which is sufficient to pay:

a) the cost of any benefits which may be paid to the policyholder,
b) the commission paid to salespersons or intermediaries,
c) the costs of administering the policy, and
d) the target profit.

Calculating the level of premium for a particular type of policy involves the expertise of a company's actuary. There are four main factors the actuary must consider when setting the level of premium:

- Mortality
- Current and Future Investment Income ('Interest')
- Current and Future Expenses

- A Contingency Factor

3.2.1. Mortality

The actuary will refer to 'mortality tables', and from these, on the basis that the policy will be sold to a sufficiently large number of policyholders, the actuary can determine the appropriate premium to be charged to someone of a given age, sex and state of health. For example: statistically women have a higher life expectancy and generally pay lower premiums for life cover.

Thus for a person aged 55 who requires £2,000 cover for a period of one year, the premium required for purely mortality risk might be £23. However for a person aged 25, the premium required might be only £4. Thus the 55 year old policyholder pays a higher premium because of the increasing probability of death with advancing age.

So if life assurance was taken out an annual basis, premiums would have to increase year by year as the risk of the policyholder dying increases. In practice such a system would be unworkable since a) as the policyholder gets older the annual increases in premiums would get greater and greater until they eventually became prohibitive; and b) in order to assess accurately the life assured's risk of dying in the next year other factors would be relevant, for example: the general health of the policyholder. Thus the insurance company would have to require the policyholder to submit to a medical examination prior to yearly premiums being set. This would substantially increase the costs of administering the policy and premiums would have to be boosted still further.

Thus life assurance companies have generally adopted the practice of writing long-term contracts whereby a level premium is paid throughout the duration of the policy. The premium paid in the early years is therefore higher than is needed to cover the cost of a claim in those years. The balance at the end of the year is kept in a fund in order to meet the cost of claims in the later years when the premiums will be lower than required to cover the mortality risk.

3.2.2. Investment Income

Premiums received by the company earn investment income in the form of dividends and interest from the shares and other investments owned by the company and additional profit may result from eventually selling the shares at a higher price than they originally cost. Thus the actuary will need to consider likely future rates of interest and allow for this within the calculation of the premium.

3.2.3. Expenses

Some margin must be added to cover the life assurance company's future expense levels to be experienced in administering the policy. These include: agents' and brokers' initial and renewal commissions, overhead expenses, staff salaries, advertising, etc. The expense loading to a premium is not simply a matter of sharing out the total expenses to each policyholder since each policy does not give rise to the same types or amounts of expenses. Therefore the expense loading must reflect in some equitable manner the expenses the particular type of policy gives rise to.

3.2.4. Contingency Factor

Actuaries are very conservative in their assumptions on mortality, interest and expenses and include a contingency factor to give a safety margin to meet any unforeseen results. They also allow for the probable rate of lapses or early surrenders of policies before their term.

3.2.5. Summary

In determining premium rates the actuary will consider, *inter alia*:

1) the sum assured;
2) the age of the policyholder, his/her general health and life style e.g. smoker/non-smoker;
3) future investment returns;
4) future expense levels in administering the policy;
5) allowance for contingencies given the uncertainties involved;
6) the target profit;
7) the price at which similar products are being sold by other companies.

4. ACCOUNTING

4.1. PREMIUMS

4.1.1. Regular Premiums

The accounting entries to recognise a £50 renewal premium on a regular premium policy in the month in which the premium **falls due** would be:

Dr	Policyholder/Intermediary Debtor (Balance sheet)	50	
Cr	Premiums Written (Technical Account)		50

When the premium is actually received the following entries will be made:

Dr	Cash	50	
Cr	Policyholder/Intermediary Debtor		50

If a debit balance remains on the policyholder/intermediary debtor account this will indicate that a premium has not be received and either the policy may have lapsed or the intermediary has not yet settled the account.

4.1.2. Single premiums and initial premiums

Under these cases the cash is usually required when the policy proposal is made and the accounting entry would be:

Dr	Cash	50	
Cr	Premiums Written		50

4.2. CLAIMS

The amount of claim that is paid to the policyholder depends the type of policy written, and in particular whether it is without or with profit. It is paid either on death or on the maturity of an endowment type policy.

4.2.1. Without-profit Policies

The only benefit derived by the policyholder (or his/her estate) is payment of the sum assured. This amount is determined by the original terms of the policy.

4.2.2. With-profit Policies

This term is used to describe policies where the policyholders are eligible to participate in the surpluses established. Thus the claim amount is dependent on:

1) the investment performance;
2) the expenses;
3) the mortality experience;
4) the rate of lapses or surrenders of policies; and
5) taxation.

The policyholder therefore bears much of the risk and only a small proportion of the claim is represented by any guaranteed sum assured.

4.2.3. Unit-Linked Policies

The claim amount is determined by reference to the value of the specified fund of investments.

4.2.4. Reversionary and terminal bonuses

Apart from the guaranteed death benefits assurance companies give the 'with-profits' policyholders bonuses during the policy period which are allocations of surplus arising from the life fund (see 8. below). There are usually two types of bonuses: reversionary bonuses and terminal bonuses. Reversionary bonuses are declared, often annually, during the policy term, normally as a proportion of the sum assured (simple reversionary bonuses) or as a proportion of the sum assured and previously declared bonuses (compound reversionary bonuses). They increase the policyholders' claim entitlement but are actually paid only when a claim arises. Terminal bonuses are paid in addition to the ordinary reversionary bonuses and are allocated only to policies becoming claims by death or maturity.

Some assurance policies include what are known as 'guaranteed bonuses', which form part of the contractual obligations that are allowed for in determining the original premium and are not strictly bonuses at all. Outside the UK, these additional payments to policyholders often primarily represent refunds of premiums where these have traditionally been set at levels in excess of those required to cover expected costs and claims.

4.2.5. Surrenders

Since many of the assurance policies are used, in part or whole, as a savings vehicle, policyholders may wish not to continue with premium payments, so the insurer builds into the contract a provision for its surrender for a cash sum prior to the end of the policy term. The amount payable will generally be less than the total premiums already paid by the policyholder.

4.2.6. Accounting For Death Claims

Notification of the death of a policyholder will be received by the assurance company. For example if the sum assured is £2,000, the insurer will immediately set up a provision for this amount.

Dr	Claims Paid (Technical Account)	2,000	
Cr	Claims Outstanding (Balance Sheet)		2,000

The company will then require a death certificate prior to paying the beneficiaries. Once this is received the following entries will be made:

Dr	Claims Outstanding (Balance Sheet)	2,000	
Cr	Cash		2,000

4.2.7. Accounting for Surrenders/Maturities

For surrenders or a maturity no accounting entries will normally be made until the payment is authorised. For example: a £1,000 surrender or maturity would be:

Dr	Claims Paid (Technical Account)	1,000	
Cr	Cash		1,000

Although the maturity could be previously foreseen, no entry for the liability is made in the accounts as the amount will have previously been allowed for in the actuarial estimate of the 'technical' provision for the long term business (see 7. below)

4.3. COMMISSIONS

Commissions are paid to brokers or agents ('intermediaries') as an incentive to sell policies and maintain and expand the life company's business. They are usually at very high levels ranging from 5% to over 100% of the premiums paid. Commission can therefore amount to a very considerable expense in the technical account of the life company.

There are two types of commission: initial commission on new policies and renewal commissions for subsequent periods. The commission paid to the agents arises in the form of a large initial payment but the insurer generally has the right to recover some of this money if the policy lapses within the period over which the commission is earned.

4.3.1. Accounting Treatment for Initial Commissions

Example: A policy is sold by an agent and the monthly premium payments for the policyholder are £25 a month. The agent receives commission at a rate of 115% of the annual premium value. The policyholder pays the first month's premium and thus the accounting treatment for the commission is:

Dr	Deferred Acquisition Costs (Balance Sheet)	345	
Cr	Due to intermediaries (Balance Sheet)		345

The asset for the commission would be written off to the technical account over an appropriate period. Traditionally in the UK the write off would be over 12 months, so the monthly entry required would be:

Dr	Acquisition Costs (Technical Account)	28.75	
Cr	Deferred Acquisition Costs		28.75

When the agents are paid the entry is as follows:

Dr	Due to intermediaries	345	
Cr	Cash		345

Following the implementation of the EU Insurance Accounts Directive companies are now required to defer acquisition costs over the term of the policy, so the charge to the technical account will be more gradual.

5. REINSURANCE

Companies normally ‘lay-off’ a proportion of the risk by reinsuring with other insurance, or specialist reinsurance, companies. The accounting for the reinsurance premiums paid, claims reimbursements received and commissions paid is effectively the mirror image of the accounting for the direct insurance.

6. INVESTMENT RETURN

Insurance companies in the EU are required to carry investments in their accounts at market value or, if carried at cost, to disclose the market values. This means that, when purchased, an investment will originally be entered into the accounts at cost. At subsequent year ends, adjustments will be required to the accounts if they are to reflect the change in the market values of the investments.

Investment return comprises the following:

- Interest and dividends
  These are shown in the accounts as income in the period to which they relate. Adjustments are made at the year end for income relating to the year but not actually received.

- Gains and losses arising from changes in the market value of investments
  A realised gain arises when an investment is sold for more than its cost. Unrealised gains arise when investments are revalued to a higher market value at the year end but not actually sold. Under the EU Insurance Accounts Directive all realised gains (or losses), and all gains and losses on unit-linked insurance whether realised or unrealised, pass through the 'life technical account' and therefore are reflected in the profit and loss account. Member states may also allow unrealised gains and losses on other life assurance business to pass through the technical account but if the investments are accounted for at cost the market values must be disclosed. UK companies normally show investments at market value in the balance sheet.

Conceptual issues relating to accounting for investments will be discussed further in the presentation on banks.

A major reason for using market valuation both in the accounts and in returns to supervisory authorities is in order to monitor the solvency of insurance companies. Correspondingly this requires that the estimate of long term liabilities (see 7. below) is also based on current rates of interest. However, as solvency needs to be maintained over the very long periods for which policies are written it is necessary to ensure that not only do assets currently exceed liabilities but even more importantly that future cash inflows will match the requirements for future cash outflows. A crucial aspect of investment management is therefore to ensure adequate 'matching' of the maturities of investments against the maturities of anticipated claims. In the early days of UK insurance this was achieved by selecting suitably dated long-term fixed-interest investments. However increasingly, and particularly to deal with inflation, insurers now include substantial holdings of property and equity investments in their portfolios, in the expectation that their values will, over the long term, continue to increase.

7. LONG TERM BUSINESS PROVISION

The revenue items entered in each year's life technical account do not in themselves match, and in order to give a proper view of the financial position of the company an adjustment is needed for the long term liabilities, as there is usually a significant period between the inception of a policy and the receipt of premiums, and the final payment of benefit.

The cost of providing the benefit has to be allocated to a number of accounting periods. It is therefore necessary to make provision, at the end of each accounting period, for the future liability to pay the ultimate benefits to the policyholders As this is a long term liability, the amount of which will depend on a range of factors, an actuarial estimate of the final amount to be paid needs to be carried out. In the UK this is the responsibility of

the company's 'appointed actuary'. In some other European companies the amounts are largely determined by formulae specified by the regulatory/supervisory authorities.

7.1. STATUTORY VALUATION AND THE ACTUARY: ACCOUNTING AND REGULATORY REQUIREMENTS

The actuarial estimate of the long term liabilities is part of both the accounting and the regulatory requirements for supervision of insurance business.

The valuation of assets and determination of liabilities have to be made in accordance with applicable regulations, including the various EU Directives relating to insurance as well as any guidance issued by actuarial professional bodies, e.g. in the UK the Institute and the Faculty of Actuaries, which amplifies the professional responsibilities and duties of the actuary.

In determining the amount of the long term liabilities (also referred to as 'mathematical reserves') various matters have to be taken into account (see e.g. Auditing Guideline, No. 311: Life Insurers in the United Kingdom, Auditing Practices Board, 1991 and Article 18 1.F. of the EU Third Life (Framework) Directive).

These calculations are required both for the insurers' annual accounts, in computing the 'long term business provision' in the balance sheet, and for the returns made to the supervisory authorities (in the UK, the returns to the Department of Trade and Industry ('DTI Returns')). The supervisory authorities, on the basis of these returns and other specified information, are responsible for the authorisation of, monitoring of, and, where necessary, intervention in the affairs of insurance companies in order to ensure the protection of policyholders' interests.

8. BASIS OF PROFIT CALCULATION

The current method employed by UK companies in their profit and loss accounts is the very conservative 'surplus arising' method, which was established by the 1870 Life Assurance Companies Act (see Horton, J. and Macve, R., 'The Development of Life Assurance Accounting and Regulation in the UK: Reflections on Recent Proposals for Accounting Change', *Accounting, Business and Financial History*, 4(2), 1994, pp. 295-320). Life assurance business is accounted for on a fund basis.

Into the fund flow:	**Out of the fund flow:**
- *premiums;*	- *policyholders' benefits;*
- *annuity considerations*	- *management expenses;*
- *investment income; and*	- *commissions and other acquisition costs; and*
- *investment gains*	- *investment losses*

At the end of the financial year life companies test the life fund for adequacy in terms of regulatory minimum solvency requirements by comparing it with the actuarial valuation of the long term business liabilities, in order to determine any 'surplus'. Life assurance companies are required by the supervisory authorities to maintain at least prescribed minimum levels of solvency, but subject to this, any surplus arising is available for allocation to policyholders' bonuses and for distribution to shareholders, in predetermined proportions.

Any surplus attributable to shareholders may be wholly or partly transferred from the life fund to the profit and loss account and distributed as dividends, at the discretion of the directors, on the advice of the appointed actuary who must have regard to any excess of assets over liabilities, the required solvency margin, and the need to provide against adverse future developments.

This 'surplus arising' method in the UK - the 'statutory solvency method' as modified under the EU Insurance Accounts Directive by the deferral of acquisition costs - is primarily designed to show the degree of solvency of the company rather than to measure its profitability in the particular year under consideration. In practice the profit figure reported by life insurers has been based on the transfer made from the long-term fund. The amount of this transfer is not, and was never intended to be, a measure of annual profitability. Profitability under this method represents the results of activity in prior years as well as activity in the year under consideration. However, it is generally accepted that, given certain disclosures, this basis is 'true and fair' for the purpose of the annual accounts.

New approaches to more 'realistic' profit measurement are currently under discussion by the leading listed UK proprietary companies and the Association of British Insurers ('ABI'), to find ways of reporting profits which are more comparable to the annual accounting conventions for non-financial companies (see Horton, J. and Macve, R., Accounting Principles for Life Insurance, ICAEW, 1995). Thus the Prudential's 1995 accounts include supplementary statements on the 'accruals' basis.

9. THE ACCOUNTS (see Example taken from the 1995 accounts of Prudential Corporation plc)

A life assurance company, like any other body incorporated under the Companies Acts, is required to publish statutory accounts annually. In a life assurance company the interests of the shareholders and policyholders are in potential conflict because profit to one group may represent a loss to the other and vice versa. It is the actuary's responsibility to monitor the split of profits and losses between shareholders and policyholders. Therefore the statutory accounts have to be for the benefit of both groups. These accounts comprise a balance sheet and profit and loss account together with notes and other statements required by Accounting Standards. The profit and loss account has three sections; a technical account for non-life insurance business, a technical account for life assurance business and a non-technical account .

The EU Insurance Accounts Directive has introduced these standardised formats for the accounts, based on the Fourth Directive formats but adapted to the special circumstances of insurance companies. As under the Fourth Directive, the accounts are now required to give a 'true and fair view' (see Horton, J. and Macve, R., Accounting Principles for Life Insurance, ICAEW, 1995). The ABI is currently developing a revised Statement of Recommended Accounting Practice ('SORP') to reflect the changes introduced by the Directive.

9.1. PROFIT AND LOSS ACCOUNT

The profit or loss of a proprietary company is mainly comprised, *inter alia*, of the underwriting results (being the balances of the life and non-life technical accounts), the income and expenditure relating to shareholders' other business, and the investment income on both shareholders' funds and non-life insurance funds, dividends paid to shareholders and the balance of unappropriated profits which is added to the retained profits and reserves. The taxation relating to the shareholders' profits is shown as the tax charge in the non-technical section of the profit and loss account.

9.2. BALANCE SHEET

The balance sheet of an insurance company will include, *inter alia*, the investments (which in the EU can either be stated at market value or at original cost); amounts receivable and payable; deferred acquisition costs and technical provisions for insurance liabilities - for example unearned premiums, outstanding claims, and life business technical provisions. In UK balance sheets the 'Fund for Future Appropriations' is included so that UK companies, in particular in respect of with-profits business, can largely continue with their traditional 'surplus arising' approach to profit calculation. Included in this account are the amounts in the life fund whose allocation to shareholders or policyholders has not yet been determined.

10. CONCLUSIONS

The major differences in accounting for life insurance as compared with other industries derive from the long time period between receipt of premiums and the payment of claims. This gives rise to the need for actuarial estimates of the liability in order to determine both the solvency and the profitability of life business.