

"PROFIT"1.0. WHY PROFIT?

- 1.1. Attention has recently been focused on attitudes approaching national hostility towards profit in this country. It is conceivable that profiteering, that is, making inordinate profits from the consumer, has become confused with profiting. This poses the basic question - "when do profits become inordinate?".
- 1.2. A standard is required on which to base judgements on excessive profits. One line of argument starts from consideration of the return on the venture capital put up by shareholders. This should be at a premium over the return on that capital if put in a risk-free investment.
- 1.3. With inflation of the order of 20% p.a. it would appear that in real terms "risk-free" investments such as gilt-edged gave a negative return. Recourse to a return on capital yardstick might well set a target return seemingly ample but which does not allow for sufficient internal generation of funds to maintain the real value of the capital. The converse of this is that to generate sufficient profit to maintain the real value of capital employed, a return on that capital could be produced which could be considered inordinate by other criteria.
- 1.4. If a company seeks real growth, and real growth may be needed just to maintain its market share, and also seeks to be self-financing, its target return on capital will be even greater. Desirable profit levels are therefore dependent on the continued availability of fresh capital for a company. Is it possible that injection of fresh external capital to a non-life insurer will become regular and frequent events? Objections can be raised to self-financing. For example, current policyholders could object to providing the finance for the safety margin of the next generation of policyholders but finance ultimately belonging to the shareholders.

2.0. SOURCES OF PROFIT

- 2.1. If agreement could be reached on what the objectives of making profits are, the next question is to ask where they come from. Many analyses look at the Company Act Accounts and consider the (so-called) underwriting profits and investment income. An alternative approach is to consider the total earnings of a company, realised or unrealised. Contributions are made to gross earnings (i.e. before loan interest, minorities and taxation) from four sources.

- 1) Capital appreciation/depreciation from changing market values.
- 2) Capital appreciation/depreciation in sterling terms from fluctuating rates.
- 3) Operational surplus/deficits.
- 4) Investment income on free assets.

- 2.2. **Asset Appreciation:** On the assumption that assets are not all in short term fixed interest with little appreciation potential, the effect of inflation accompanied by restraint on dividends and rents has led to a fundamental re-appreciation of the loss/gain potential from this source. Despite the appreciation being mainly unrealised and using hidden investment reserves to smooth the release of profit, appreciation can be a source of profit/loss overshadowing all else. Unless suitable assets are available and can be purchased to match the liabilities, the unmatched position can show the same gearing effect as an investment trust with a high debt/equity ratio for its capital base. It can be argued that a rate of inflation accelerating from the current 2½% could render every insurance company at least technically, and probably commercially, insolvent. If this is so, what should be the appropriate investments for non-life insurers, bearing in mind that investment profits lost will have to be recouped from higher premiums?
- 2.3. **Exchange Fluctuations:** Although there are profits deriving from the settlement of accounts, the majority of gains/losses will be unrealised. The insurance regulations of each country in which a U.K. company operates will probably require the U.K. company both to cover all its local liabilities in local currency and to maintain free assets in that country. On devaluation of sterling, the sterling value of such free assets will increase. Where more local free assets are held than would be required by the U.K. minimum solvency margin formula, the unrealised profit generated will increase the cover available for the U.K. margin.
- 2.4. **Operational Surplus:** This is the surplus released from the excess of premium income over claim and expense outgo plus the investment income on the cash flow generated. Strains occur in the reported accounts from the over-provision for unearned premium and more arguably from over-reserving outstanding claims. There is also a case for adjusting for the strain from writing new business which has a higher expense content than renewed business. The underwriting surplus released depends on the accounting principles adopted. Conventional wisdom seems to be orientated around fixing acceptable levels for such surplus, e.g. statements to the effect that 5% is the underwriting surplus ratio each insurer should be aiming for. When investment income is added, a 5% underwriting surplus produces various operational surpluses depending on the claim ratio and time delays in receiving premium and paying claims. It also depends on the market rate of interest. With increasing rates of interest, underwriting surpluses constrained by public opinion into the range 0% - 5% become progressively less important when compared with the operational return.
- 2.5. **Investment income on free assets:** It can be argued that free assets can earn just as much when there is no insurance operation for them to back up as when there is. The argument must be modified where the free assets have been forced into low-yielding fixed interest securities by local regulations or has had to be used to finance the operational new business strain.
- 2.6. **Profitability in the next three sections** relates to the last two sources of profit described. A 'macro-view' of profits can be taken and the third section adopts this approach. Before discussing the 'micro-view' of the fifth section, some observations are made on the effects of reinsurance and problems

which arise if distinctions have to be made between random fluctuations and trends.

3.0. THE OVERALL PROFITABILITY OF AN INSURER'S OPERATIONS

- 3.1. Company Act accounts are, and might well remain, the yardstick by which the profitability of a company's operation are judged. The limitations derived from the accounting conventions surrounding it are well known. In the past DOT accounts have produced very similar transfers of underwriting profit to the profit and loss accounts, but the proposed regulations may well change this. To add to these two published versions of 'profit' a third, but unpublished, can be added, namely the accounts presented to the Inland Revenue. The question is posed, it is worth adding a fourth accounting basis in the form of 'management accounts'? For example, such accounts could show a provision for unearned premiums equal to the estimate of future claims on the unearned premium rather than equal to the unearned premium less some deduction for pre-paid expenses.
- 3.2. Even if management accounts showing the best estimate of profit from a year's activities can be produced and can also be accepted by management, it is not sufficient just to show a profit by those standards. The published accounts have to measure up to accepted yardsticks, and these yardstick also have to be met. As an alternative to such management accounts, the problem could be met by the construction of a model office which projects accounts in a Company Act format. The model may depend for its input on estimations of cash flow from the insurers activities and incorporate the appropriate reserving rules. The cash flow estimates can be based on ideas on premium writings, claims and expense ratios and time logs, or whatever breakdown of these statistics that may be available. The cash flows can be 'independently' tested for profitability using standard discounting techniques, e.g. net present values and investment rate of returns. Having received projected published accounts, management can test the accounts against the yardstick it considers desirable, and subsequently received comparison of actual against expected experience with explanation on variations.
- 3.3. A key profitability indicator which investment analysts are believed to calculate from the published accounts is of companies 'return on capital', often expressed as the product of the earnings margin and the sales ratio (premium/capital). It must remain to some extent a matter of taste how 'earnings' and 'capital' should be defined, although for a quoted company regard must always be paid to the basis used by those influencing the share price. It is

possible to make suitable adjustments to the return and the capital to form a basis for comparing the return on shareholders money locked up in the insurance enterprise with the return available if the money was shifted to another enterprise.

- 3.4. The earnings margin is the ratio of earnings to premium. Operational surplus will form the major part of the earnings with the balance coming from the investment income on the free assets and other non-operational income and outgo. The sum of the declared operational surplus and the investment income on free reserves can be easily quantified as the sum of the underwriting profits and investments income. For some companies, some expenses go directly to profit and loss, rather than to the revenue account. If allowance is made for this, then the so-called underwriting profit can be roughly equated to the transfer to profit and loss. Many public pronouncements have been made on what should be the desirable underwriting profit margin. As this not only excludes investment income but is distorted by the strain of writing various amounts of new business, is it a service to the industry to focus attention on this ratio? Should the market move towards including investment income in its revenue accounts? Should properly constructed operating indices be shown with all accounts to give a better guide to profitability.
- 3.5. The operational surplus for a year will depend on the estimates made at the year end and the accuracy of the estimates for the previous year end. This should set the scene for analysis of surplus type tabulations, analysing the surplus by class and policy/accident/treaty year. It also assumes a basis for estimating claims at the year end with a report demonstrating the veracity of the assumptions as far as possible. Are many companies making analyses on these lines?
- 3.6. "Capital" can be that shown by the CA accounts. It could be adjusted for obvious hidden reserves such as the over-provision for the outgo arising from unearned premiums. An alternative approach, useful in calculating a marginal return, is to assume the minimum capital invested as free assets that the law required.
- 3.7. Inflation accounting could make a considerable difference to the presentation of accounts if it is designed to show that money invested by and earned for the shareholders has (or has not) maintained its purchasing power. This should at least overcome the 'presentational' problems described in the first section of the note.

3.8. 'Profitability' as described in this section has mainly related to historic descriptions by which management, rightly or wrongly, is judged. For a decision to be reached based on the varying profit potential of various courses of action, cash flow projections can provide a useful basis. Given the ability to project cash flows on an expected basis, it is possible to project a momentum cash flow. A standard is then available for comparison with alternative cash flow deduced by varying the product mix, rating levels etc. With the right model the consequential accounting presentations should also be available. This method would allow for the expense outgo to be input to reflect the real staffing and capital expenditure levels rather than hypothetical apportionments of premium allocated towards expenses. The next stage would be to apply sensitivity analysis to the assumptions made. The stage after that can begin to attach (subjective) probabilities to the various assumptions. How much progress has been made on these lines? In the original model it should be possible to work out the profit required for different solvency requirements, premium growth, interest rates and new capital injections.

4.0. REINSURANCE AND SMOOTHING THE CLAIM EXPERIENCE

- 4.1. The objective of reinsurance has been variously described. High in the list of objectives is that it smooths the emergence of underwriting surpluses. Some doubt has been voiced that the reinsurance arrangements of many companies have not achieved this objective.
- 4.2. Profits declared net of reinsurance can mask losses passed on to reinsurers which may or may not be recovered by the reinsurers through changing reinsurance premium/commission terms. Should underwriting success be based on gross or net results?
- 4.3. Internal reinsurance can be effected explicitly through claims equalisation reserves and weather provisions or more stealthily by 'over-reserving' outstanding claims. Has any science yet been introduced in this country to the calculation of such reserves? Should backing be given to supporting the introduction of claim equalisation reserves operating on formal rules but gaining tax relief.
- 4.4. Premium income is the normal yardstick by which a salesman is judged, but, at least in theory, it is desirable to judge him on profit. What system have been devised for forming profit judgments on the business introduced by salesmen? How is it possible to distinguish between what may be bad experience due to an unfortunate incidence of 'random' claims and genuinely

undesirable business.

5.0. PROFITABILITY OF INDIVIDUAL PRODUCTS

- 5.1. It has been argued that a company can always make a 'long term' profit in a market where losses made in one year can be subsequently recovered in the years following. This argument tends to be consistent with a market in which no new rate-cutting companies can enter. Is such a market in the best interests of either insurer or insured?
- 5.2. To what extent are cross-subsidies between classes or risks permissible? One argument has been put forward that a market can be profitable if all rates are inequitable but in the aggregate cancel out to provide an overall profit.
- 5.3. The profitability of a product can be calculated from projected cash flow, but it is often shown through an operating index - mainly because such an index is often easier to produce. In either case the expense element plays a not inconsiderable role. It is often assumed that 'overhead' expenses must be apportioned to gain some idea of the relative profitability of each class. Many companies may spend considerable time on such apportionments, and indeed government regulations make it necessary. Should it be necessary? An alternative is to look at the contribution (including 'variable' expenses) which a class of business makes towards defrayment of overhead expenses. This in many ways attractive approach has not met with universal appreciation.
- 5.4. The rate of interest to be used in the cash flow situation can be the average on all investments on the rate obtainable on new money, depending on context. However, cash flow can vary considerably for identical products depending on whether the agent is cash or credit. When calculating the ratio of investment income to premium, due allowance ought to be made for non-interest earning assets enforced by operational circumstances.
- 5.5. There can be more variation of profit potential from risks with identical rating features than from the average profit of different products. Have any incentive schemes been introduced on the relative profitability of products.
- 5.6. The almost universal acceptance of accommodation risks distorts profit statistics. Can systems be devised to allow for this sort of cross subsidy
- 5.7. Reciprocal reinsurance business is generated by outwards reinsurance on certain products. The net profit recorded for that product does not reflect the additional profits on such reciprocity.