ADDRESS BY THE PRESIDENT

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The economic scene

The social and economic environment in which we exercise our professional responsibilities today is a turbulent one, and we shall be judged by the constructive contribution we make towards its progress. My adult lifetime so far almost exactly coincides with a period of sustained inflation of our currency; the observation that it is now part of a world-wide phenomenon comforts me little in thinking that history will be able to identify it with my particular generation with acute precision.

Inescapably, inflation is the context of this address; its manifestation and disruption are now widespread. After I have briefly reminded ourselves of the background, I will turn to those regions of special interest to us in our professional activity. I shall not be revealing any new discoveries, still less any solutions, but I shall seek to involve you in a changing scene that may be forbidding, yet demands our full professional attention because it is.

It is not necessary to be an economist to trace the chief troubles in our recent history. Over a long period, coinciding with the Vietnam war, we witnessed a steady depreciation of the world's major currency, the United States dollar, the effects of which could not be isolated while exchange rates were fixed.

Governments elsewhere have been pursuing fiscal and monetary policies that create a high demand for goods and labour, and whenever the demand becomes excessive the rate of inflation accelerates. ⁽¹⁾ It seems that in none of the Western countries has any government yet succeeded in reconciling full employment with a reasonable degree of price stability.

Last year was dominated by a dramatic shift in the terms of trade in favour of primary producers, notably in the Middle East, and the cost-inflation that followed the rise in commodity prices. Some have now fallen, but are being offset by mounting labour costs.

These brief reflections would be incomplete if they failed to refer to Redington's elephants—the jumbo concentration of market forces into fewer and larger factors of production, both industry and organized labour, possessing more powerful economic muscle than the system can yet control. ⁽²⁾

Savings and investment

We live and work in a community which already possesses a sophisticated machinery for harnessing the nation's savings to meet its investment requirements. A few figures taken from the nation's capital account are shown in Table 1 and put the different components into perspective.

One of our most important national objectives is to increase investment (Table 1, col. (1)) and it would be tempting to dwell upon the competing demands of the nation's capital projects and how well priorities are influenced by market forces and by government intervention. Certainly real investment by industry, public or private, that improves the nation's productivity possesses the special merit of absorbing inflationary pressures by increasing the economy's ability to satisfy demand when it pays off, although the time lags are sometimes formidable. However, it is widely believed that our capital investment has long been insufficient and misdirected. In the public sector, the timing and application of investment resources can be criticized more than their overall quantum. In the

Sector	(1) Total real invest- ment within the sector Note (2)		(2) Financial money-go- round across sector boundarics Note (3)		(3) Total net saving within sector before providing for depreciation	
	1973	1972	1973	1972	1973	1972
	£M	£ M	£M	£M	£M	£M
Personal	2,528	2,444	+ 2,287	+ 1,541	4,815	3,985
Companies	6,305	4,246	-1,364	- 277	4,941	3,969
Public corporations	2,040	1,810	- 929	- 875	1,111	935
Local government	2,755	2,236	1,929	1,469	826	767
Central government	817	670	+136	+ 620	953	1,290
Overseas (Note (4))	-1,210	114	+1,210	- 114		
Residual error	-		+ 589	+ 574	589	574
Total	13,235	11,520	0	0	13,235	11,520

Table 1. U.K. Capital Account

- Notes: (1) The figures have been taken from Table 6 of the publication National Income and Expenditure 1963 to 1973 (HMSO, September 1974), and follow the same conventions.
 - (2) Col. (1) includes the physical increase in stocks and works in progress, but appreciation in value of stocks has been excluded from all figures.
 - (3) Col. (2) includes taxes on capital and other capital transfers.
 - (4) The balance of payments is treated in the nation's capital accounts as a net investment or disinvestment overseas.

private sector, industry for many years, up to mid-1973, limited its investment plans to what has been largely financed from its own savings (Table 1, line 2). The reasons seem deep-seated and exhibit a general lack of confidence. The contemporary outlook for returns on new capital investment is made still more uncertain by the discouraging mix of cost-inflation and price-restraint, which are squeezing profits and liquidity seriously. Private industry now needs considerable finance from outside; it could total $\pounds 2\frac{1}{2}$ billion this year, and as much next. The CBI predicts an even larger figure ($\pounds 3$ billion). It is the savings side of the balance sheet to which I want to draw attention now. The net saving in any sector is a net result of aggregate saving and dissaving (or usage of saving), so the figures contain many traps. For example, dissaving includes selling securities, or borrowing from building societies, so an extra £1 million saved by some people might be dissaved by others—and doubtless would be—making no difference to the aggregate net savings of the personal sector.

A substantial part of personal net savings flows regularly across the sector boundaries, notably to meet deficits in the public sector. Within the personal sector the main savings media are those shown in Table 2, and altogether they accounted for a growth in funds of about £10 billion in 1973 (£7½ billion in 1972). Remaining sources have negligible net effect, but from the total must be deducted other net dissaving to arrive at the net figure which enters col. (2) of Table 1, and then the total in col. (3).

Table 2. Net increases in funds of main savings media in personal sector

	1973	1972
	£M	£ M
National savings, Government and Local Authority secu	rities 1,485	752
Life assurance and superannuation funds	2,817	2,455
Building societies' deposits	2,128	2,139
Bank deposits and cash	3,519	2,013
Unit trusts	156	203
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Total (No	ote (2)) 10,105	7,562
Other media (Note (3)) sa	y (net) nil	nil
Less dissaving (sales of securities, loans obtained, etc.)	7,818	6,021
Net contribution by personal sector to Table 1, col. (2), financial money-go-round	i.e. + 2,287	+ 1,541

Notes: (1) The figures are taken from Table 74 of National Income and Expenditure 1963 to 1973 (HMSO, September 1974).

- (2) The total relates to net increases in funds, and all figures are subject to the conventions adopted in the national accounts.
- (3) Other media, e.g. deposits with other institutions, are relatively small, and assumed for simplicity to contribute a nil net balance to saving/dissaving.

The overall impression of the community's saving up till now is in one sense reassuring; personal savings have done all that could be expected of them—the large and steady contribution made by the life assurance and pension funds is particularly impressive. Moreover, their gross income before deducting outgo on pensions, claims and expenses, is about twice the amount of net growth of funds.

It is worth contemplating what the nation's capital account would look like if those sources of saving were stemmed. Indeed, the figures in the top line of col. (3) of the capital account, i.e. the personal sector, could become negative. Without wishing to alarm you, I suggest it would describe a very different economic regime if they did. We may have inherited our particular systems, but they are unlikely to be preserved without being questioned closely. Now that the borrowing needs of the public and corporate sectors have broken all records, it concentrates the mind wonderfully upon such fundamental questions.

Personally, I am convinced that our particular community's problems are ill-served by any influences that jeopardize the progress of those enormous flows of saving. Our profession is closely concerned with their planning, and the stresses inflicted upon them by the decline in purchasing power of our money. I am not seeking the main causes of the decline, because it is the effects that concern us this evening.

The effects are widespread, and the more insidious when they come upon us unexpectedly. They then strike economic fear into the minds of our society, and everybody's reactions make matters worse. That goes to the heart of the matter, because I believe we first need to distinguish inflation carefully between what is predictable and what is not. If we could forecast its progress from year to year, parties to a financial contract could allow for it predictably in the terms they negotiate at the outset. The principle could be extended to all financial transactions and we would merely suffer the administrative nuisance of continually changing figures between £s of different vintages. The exchange rate movements between national currencies would, other things equal, reflect their differing pace of inflation just as the two travellators at Bank station move relative to each other every morning. Short-term capital flows would be stabilized by corresponding differences in domestic interest rates which would generally be higher in those countries whose inflation proceeded faster; and rightly so, to compensate for the steeper decline in purchasing power. But inflation must be both modest and predictable to be solved in some such fashion, though it need not necessarily be linear. It is the unpredictability of the rate of inflation that is so serious.

It is necessary to look back to the 1930s to see a fall in average retail prices in the U.K.⁽³⁾ Since then, apart from two material bumps in 1940–41 and 1951–52, the index moved between about 1% and 5% a year until 1970, and then increased dramatically. It is now increasing at an annual rate between 15% and 20%.

A widespread belief exists that long-term rates of interest exceed the rate of return on real assets by a margin that reflects the expected rate of inflation, a proposition usually associated with Irving Fisher.⁽⁴⁾ How faithfully or soon long-term rates of interest adjust to changes in anticipated rates of inflation is more controversial; the recent correlations are weaker than one would expect.⁽⁵⁾

Nevertheless, the not too unsteady fall in the value of the \pounds up to 1970 could, in retrospect, be tolerated in sophisticated capital markets, however much we all disliked its existence.

We now have to face a change in dimensions. Have we moved to a new level, averaging double figures perhaps? Worse still, have we moved from the toler-

ably predictable to the intolerably unpredictable? For it is then that the unintentional changes in the relative wealth of borrowers and lenders become so severe, and start to undermine saving and investment. We are certainly witnessing the shortening of long-term debt by local authorities and private industry, which is one of the notable accompaniments of accelerating inflation. Investors search in vain for after-tax returns that can match the current rate of price increases, while borrowers decline long-term commitments at rates of interest which might ruin them if inflation subsides.

A solution advocated in several quarters⁽⁶⁾ to meet the needs of long-term funding is to issue fixed interest securities which are price-index-linked. The Government is making a modest start with National Savings; and pressure to extend it is mounting.

It must be common ground that long-term capital investment is best financed by long-term paper of some description. Equally, there are lenders like life assurance and pension funds with needs peculiarly adapted to providing it. Index-linked bonds would eliminate the major forecasting impediment in the marriage market for such mutually attracted partners.

This is not the occasion for difficult econometrics, and I hope members who have studied the subject will pursue it on another occasion. For what they are worth, my own conclusions are these:

- (1) The outcome of linking fixed-interest securities depends on the precise circumstances of the economic system into which they are introduced.
- (2) Index-linking amplifies the overall inflationary pressure in the system, because it diminishes the ranks of those who possess (unlinked) money assets and the resistance to inflation that they exert.
- (3) An additional market in index-linked paper would probably weaken the effectiveness of the Government's monetary policy, because interest rate changes would have less effect on asset values.⁽⁷⁾

There are therefore several hazards, and a move towards linked bonds must not be taken lightly—especially for a reserve currency such as ours. Though the consequences could be serious if inflationary pressures are not brought under better control, it is itself a measure that *could* serve that end. For in the last resort, there is an overriding need to bring together long-term borrowers and lenders on a basis on which both can deal.

There is the rub. Companies could incur index-linked debt only if they could meet an inflated obligation, in other words only if they could be confident that future prices and profits would be reasonably free from intervention, and profits taxed realistically. Ironically, those are the conditions which would enable equity capital to perform the same function.

Inflation accounting

That brings me to the practice of preparing statutory accounts that are blind to the course of inflation over an accounting period.

If money which is not true profit, but really represents capital, is being distributed to shareholders in dividends, or to government in tax, an accurate measurement of those diversions needs to be made by management. Conventional accounts do that accurately in times of stable money, but not when it depreciates in value; the effects are then concealed. Real earnings need to be visible if boards of management are to avoid doing, through miscalculation, what they would not do intentionally, and so that shareholders can assess the prospects of return on capital. Exposure of the way a company has taken account of inflation, or ignored it, improves investment decisions, and that brings me to the important practice standard recently proposed by the accountancy bodies.⁽⁸⁾ Members had the opportunity to study inflation accounting when Parker and Gibbs presented their paper⁽⁹⁾ here last April, and the Council of the Institute has also made representations to the Sandilands Committee.⁽¹⁰⁾ In pursuit of our responsibilities for the accumulation of long-term funds, we applaud inflation accounting, because of the light it sheds on their investment. But there are implications for us, too, in accounting for what we do. I will come back to them presently, because I need to turn attention now to those parts of our economy that are especially familiar to actuaries.

Taxation

It seems natural first to move from the measurement of true and fair profits to true and fair taxation, if there is such a thing. The point was well made by Parker and Gibbs that a natural sequel to adjusting accounts for inflation would be to use them also for tax purposes, so as to tax real and not fictitious earnings. The interesting—and controversial—issue is how then to treat depreciation in value of a company's monetary assets and liabilities, such as deposits and fixed interest securities and loans. If depreciation of monetary assets becomes eligible for tax relief, then I think corresponding relief would have to be extended to individuals and savings institutions like life assurance funds. Indeed, the case for adjusting for inflation somehow between acquisition and disposal of investments⁽¹¹⁾ is a compelling one when inflation reaches contemporary levels.

If I were Chancellor of the Exchequer I suppose I too would resist the suggestion, made in several quarters,⁽¹²⁾ of linking income tax allowances and tax brackets to a prices-index on the lines that started to operate in Canada this year.⁽¹³⁾ The increase in income for tax purposes that merely reflects the fall in value of money produces a bonus for the Exchequer, which has been called very appropriately I think—a 'fiscal drag'! Its magnitude⁽¹⁴⁾ has reached a level which weakens overall discipline over the public purse. Not all of it could be removed if changes are made annually, but in adding my own plea to many others, I have mostly in mind the need for clear understanding of what taxation is being levied and what real changes are made from time to time. The failure to make automatic adjustment frustrates the longer-term plans of responsible citizens, including their life assurance and pension commitments.

Pension plans

These and other basic changes will be needed if inflation persists at current levels, but I think those who are concerned, as we are, with financial planning, must ask ourselves how we have been coping with the onslaught. What more should we be doing to safeguard the long-term interests for which we bear heavy responsibility?

It is neither necessary nor advisable to abandon principles that have served us well in conditions which were tolerably stable. We can profit from the same concepts but we have to reinterpret them in an environment which is on the move. In elementary terms, why did we act as we did before? When we really know the reason, we may have a better idea what to do now.

It is interesting to look in this way at some of the contemporary problems for employers in providing pensions, and preserving them. For example, a final salary pension plan is part of a remuneration package which links an employee's pension directly to his earnings at the end of his working life. Suppose the pension preserved for him on leaving service is the accrued pension related to leaving salary, and that this is the intended benefit in stable conditions. To produce the same effect when money loses value requires the preserved pension to escalate in line with retail prices after he has left; and, in my view, the cost of that escalation should be borne by the original employer, not the new one. An awareness at the time of departure that the cost is uncertain is not a very good excuse for imposing it exclusively on the new employer—or for doing nothing about it at all.

That brings me to transferability and the mixture of issues that seems occasionally to confuse public debate. The first is whether a preserved pension should be escalated during the period of deferment; the second concerns who should pay for any escalation; and the third affects what should be transferred as an asset.

I have spoken about the first two, and when they are resolved the third problem is simplified. The practical choice then lies between making a transfer payment out of the fund now, or retaining a commitment for a deferred liability. Actuaries can be expected to equate the alternatives, no doubt with an interesting variety of opinions about the basis of valuation; but the differences are financially less important if common agreement can be reached between employers to join a 'club' operating transfers either way on uniform terms. Before a final decision is made, whether to pay a transfer value or preserve a pension for someone leaving, the claims of continuing members must be weighed, so that he does not acquire unfair priority of security over those who remain. A related issue is whether to acquaint the member with the relative degrees of funding of the two schemes and, if so, how. I am certainly not the first to conclude that these problems are easier to resolve if we aim at high standards of funding pension commitments.

I would therefore like to turn now to the whole question of funding, because we must be watchful in conditions that can undermine the case for accumulation.

Those conditions occur when the real rate of return on the invested assets falls to an unacceptably low level, especially when it becomes negative.⁽¹⁵⁾ A recent review⁽¹⁶⁾ of the investment experience of some 300 approved funds over the 10-year period 1963–72 showed an average annual rate of return of $9\cdot1\%$, compared with an inflation rate of $4\cdot6\%$ over the same period. That review was conducted over a period that was still relatively favourable for equity investment; it stopped short of the period of rapidly accelerating inflation and declining equity values that we have experienced recently. Looking to the future, the funding problem becomes part of the much wider issue of whether the structure of society is changing so radically that in the long run, the real rate of pre-tax return on investment in general is likely to fall to much lower levels than we have come to expect, or even to disappear altogether.

Professor H. B. Rose recently estimated,⁽¹⁷⁾ on a rough extrapolation, that within 20 years some 75% of the equity of British industry might be held by life assurance and pension funds, a figure which emphasizes how much the merits of funding pensions in advance will depend upon the long-term profitability of industry in real terms. So do a lot of other things, but, that apart, a pension scheme is a long-term arrangement, and all the other arguments for funding it are largely unaffected, such as the discipline it gives to charging pension costs at the time obligations are accruing. In a real world, it is not practicable for an employer to switch to 'pay-as-you-go' temporarily, even if he could judge the right moments to do so. Furthermore, such a switch defers the financing problem, but does nothing to solve it, unless the employer is confident that the additional resources retained in his business can be developed to meet the increased pension liabilities of the future. In conditions where the employer does not expect to secure a real return by investing in the equity of other companies. it is difficult to see why in general he should be more confident of the return he can secure within his own business.

His employees have another point of view, and it underlies the Government's request to the Occupational Pensions Board to consider and report on the financial security of the benefits which schemes have undertaken to provide. The U.S. has just enacted most elaborate supervision⁽¹⁸⁾ and so has Canada.⁽¹⁹⁾

Up till now, the case for funding private pension plans has been appealing, and explains much of the flow of saving I mentioned earlier. It would indeed be tragic if a financial environment were allowed to develop which put that case in question. Conversely, if conditions are fashioned to protect and promote real funding, then it is reasonable to expect industry, as a *quid pro quo*, to fortify its pension obligations with suitable disciplines of disclosure and supervision.

Overshadowing almost all other pension problems is the future of co-existence between the state and occupational sectors. We can start from the widely held—and welcome—social aim to provide earnings-related pensions for those not yet covered satisfactorily. It is also common ground among the major political parties to try and do it without diminishing the role of occupational schemes, which already embrace over half the employed population. Covering the other half—the pension-underprivileged—has absorbed political energies for a decade.

Our professional interest has focussed especially upon the means of enabling occupational schemes to contract out of whatever the State wishes to do for the remainder. For contracting-out to work, the necessary and sufficient conditions are that State scheme contributions and benefits foregone by members and employers with adequate schemes should be commercially related one to the other, and that the occupational sector should be confident that the relationship will be inviolate. Failure to observe either condition will result in wholesale transfer of membership to the State scheme, and thus defeat the objective.

We have been exposed recently to two alternative solutions for interpreting commercial equivalence:

- (1) The creation of a funded reserve scheme⁽²⁰⁾ so constituted as to ensure equivalence between contributions and benefits for those who are not covered by suitable occupational schemes.
- (2) A system of abatement of the kind described in last month's White Paper.⁽²¹⁾

The White Paper proposals envisage abatement of contributions to the State from members covered by adequate schemes of their own. The rate of abatement is uniform for men and women, and at all ages of membership, although it should reduce over the years.

Even if selection against the State can be limited by the practical arrangements for contracting-out, the benefit and contribution abatements cannot be put to any practical test of overall equivalence of the kind that would have disciplined a funded reserve scheme.

If, for one reason or another, relatively few are contracted-out, the rates of contribution required to meet the State scheme benefits are easier for our generation to bear. But that relief derives from lesser funding of benefits through occupational schemes, and our children will reproach us, with some justification, for promising ourselves benefits which we have not even tried to pay for.

The new proposals thus lay bare the conflict of interest between members of the State scheme and members of occupational schemes, and between one generation and the next. If real increases in earnings do not reach the projected level averaging 3% a year, our children will have good grounds to rewrite what we are trying to promise ourselves.

There are some ingenious features included in the new proposals, but they lack the financial discipline one would like to see. It is not possible to cure such a fundamental weakness, although I can suggest three prescriptions:

(1) The central objective in turning the proposals into law and settling terms of abatement must be to maximize the numbers contracted-out, so that their pensions are funded through their own schemes.

- (2) Since the terms for abatement are fixed prospectively from time to time by one of the parties to the contract, the Government Actuary should be invited to say what he considers neutral terms to be.
- (3) To avoid equal and opposite dissaving by the community equal to the additional funding that results, there needs to be corresponding additional real investment of the same order.

A diversion of resources of the magnitude that ought to be saved requires the will and the compulsion to bring it about, and it would be idle to suppose that such a change in attitudes will be achieved quickly or easily. Yet it is crucial to support the promises of future pensions in real terms.

Life assurance

I now turn to life assurance, and a review is made much easier for me by a paper presented last February to the Students' Society by D. R. Linnell.⁽²²⁾ He examined the effects of inflation on life office practice, including past results of with-profit contracts, and his figures show how improved investment returns have compensated for the decline in real values, although by no means uniformly. If tax relief on premiums is taken into account, the claim to have countered inflation thus far has been substantially justified. Many alternative contracts have been designed during the last decade, the most notable being equity-linked. The results of these contracts, including property bonds, fluctuate with market prices and so accordingly does their success in combating inflation.

Although past achievements of traditional business have been creditable, and new ideas adventurous, there are no grounds for complacency. Our techniques must be up-dated to solve new problems. A major objective must be to provide benefits for policyholders which provide a positive real return on any investment element after taking all taxes into account. There are two aspects to this: the first concerns policyholders' expectations, and the second the life funds and methods of financial reporting on them---the 'micro' and 'macro' finance of U.K. life assurance.

So far as the policyholder is concerned, only today's terms of investment are known. Although we know, for example, today's net redemption yield on longterm 'gilts'—about 10% incidentally—we do not know the average rate of inflation over the same period. Nor, for that matter, do we know the terms on which future premiums or income accumulations will be invested. But any comparison should recognize some expected benefit from a wide choice of investment, profits from other sources, and normal tax relief on premiums. Remembering that expenses of management are also relieved of tax, a comparison of numbers still looks tolerable. It is the unpredictability of the outcome that is so frustrating, as I remarked earlier.

To cope with the uncertainty of purchasing power, attempts have been made in several countries⁽²³⁾ to design contracts linked in various ways to a price index. Where the insurer, as distinct from the insured, assumes a significant risk by indexing benefits, there is a matching problem unless reserves can be invested in index-linked securities. Moreover, if the insurer cannot be certain that such investments will continue to be available as future premiums are received, an escape clause in the policy seems essential. Where, as in this country, indexlinked securities are not yet available to insurers, it may be possible to make more use of the principles of revalorization—the up-rating of benefits and premiums to offset the decline in money value.⁽²⁴⁾ But an altogether superior range of solutions becomes available if only premiums could be invested in index-linked securities; a new dimension would indeed be added to the savings media.

Turning to the macro-finance of U.K. life assurance, there is much research to be done about financial reporting. I referred earlier to the advantages we seek as investors in welcoming inflation-adjusted accounts from others. Current proposals incorporate adjustments to historic costs; the approach is essentially retrospective. It places us in a dilemma, because life assurance business needs a comparison of prospective cash flows. Current value accounting, therefore, seems conceptually better suited to a comparable disclosure of results in real terms.

In the case of existing business, renewal expense ratios have been increasing in spite of considerable advances in data-processing. The effects on full-premium policies have been more than offset by excess investment returns, and it is legitimate to recognize that in valuing net liabilities. A slightly different solution may also be available indirectly for equity-linked contracts if the management of the unit trust is in the same group as the life office. Failing that, there is no alternative but to reserve adequately for the contingency of increasing expenses.

We should not, however, overlook one asset that is singularly well matched to the liability for future expenses, namely the property that houses the insurer's head office and branches.

The need to match assets and liabilities has been a cornerstone of life assurance planning, which is now recognized in our statutory supervision. Changes in mean terms have been going on, three operating in one direction and one in the other. Those which lengthen the liabilities or shorten the assets are:

- (1) the shortening of fixed interest securities available generally in the market;
- (2) higher long-term interest rates now prevailing;
- (3) considerable increases in new business.

The combination of these trends would normally preclude the immunization of anything longer than the paid-up policies. However, an important process has been working in the opposite direction. Equity shares and property are valued by the market on the assumption that future dividends will increase. Assuming they do, their mean term is longer than for a fixed interest irredeemable, so that helps to maintain a better long-term balance. It is the fluctuation of market values of equity investments, independently of interest rate changes, which frustrates satisfactory matching; dividend income has, in the aggregate, progressed relatively smoothly over the years and maintained a tolerably good match long-term with the prices index,⁽²⁵⁾ in spite of the levelling-off during the past decade.

These seemingly disconnected thoughts lead to the suggestion that our valuations for bonus distribution might be more easily handled if we valued future dividend income, as many do in pension fund valuations, on a basis consistent with the valuation of liabilities. It is not difficult to envisage the snags, especially at the present time; there will be statutory rules for valuation to watch, and any smoothing process in addition will, sooner or later, conflict with our endeavour to convey a fair slice of the estate to the policyholder at the time he leaves the fund.

There are other problems, brought by high rates of return on investment, and which we have not yet solved satisfactorily; for example, the tyranny of the bonus illustration in quotations for new business. They arouse heady expectations in the mind of the policyholder, but they are based effectively on someone's estimate of the future rate of inflation.

Another problem caused by high interest rates is typified by negative values, which we habitually exclude by one means or another; and the result is that the margin between assets and liabilities gets squeezed too much. Net premium valuations at suddenly increased rates of interest cause similar difficulties.

Financial stability of life offices

By all accounts these effects have been widely misunderstood; so we have a special duty at the present time to explain realities. When a long-established life office, typically marketing traditional business, experiences a fall in the value of its assets, solely because long-term interest rates have risen, it cannot be said too often that the security of the life fund is not significantly affected, so long as the assets are reasonably matched by length of term to its liabilities. Moreover, the higher returns earned on new money improve the prospects of the office and therefore its ability actually to increase bonuses to policyholders.

The difficulty currently facing the large majority of life offices is one of presentation of their financial position, not of the underlying strength of that position; and it should be capable of solution without withholding surplus unfairly from policyholders. This has an important bearing on the regulations we can expect to underpin the valuation of assets and liabilities of long-term business. A joint working party of the Institute and Faculty is already researching into the wellknown six principles⁽²⁶⁾ for valuing net liabilities, so that our members can examine the problem in depth.

Paradoxically, the very circumstances which enable the traditional office to declare record bonuses can create financial difficulty for other offices. Our final thoughts this evening must therefore turn to the serious events of recent months: the rescue of certain other life funds, markedly different in composition, from the threat of insolvency. For all manner of reasons, it would be improper to

comment now upon particular examples; it is instead an occasion to stand back and take a hard look at an appointed actuary's responsibilities and his statutory obligations.

The responsibility for managing the company and investing its assets falls squarely on the directors. The actuary's responsibility is to ensure that they are fully advised about the consequences of different action plans; he has long been able to judge if a life fund is insufficient a considerable time before the last remaining policyholders are left to suffer the consequences.

It has to be accepted that the actuary, and in turn the profession, is unlikely to escape criticism—and indeed has not escaped it—when an office has become insolvent. Yet it is not the actuary who determines the proceeds of investments ultimately available to meet policyholders' claims; it is the investments themselves, and the markets for their disposal. Some investments can fail altogether. Therefore the possibility is inescapable that an insurer may fail. An actuarial valuation is, in effect, a probability statement about its unlikelihood; it would be totally impracticable to strengthen it to a level which excludes failure completely.

How then do we avoid a percentage of potential insolvencies? How do we keep at bay the unfairness of industry-wide guarantees which would underwrite adventures on the part of some offices with policyholders' bonuses of more prudent offices? Clearly we must design an early warning system that really works, so that remedies can be taken in good time.

I believe it is crucial and practicable to devise such a system; and that it can be operated by setting not only statutory but also professional standards of valuation and procedure for the appointed actuary to uphold.

The statutory standards will shortly appear as regulations, and Council welcomed the opportunity it was given to assist in their preparation. But the regulations cannot stand alone. The actuary also has a professional responsibility to assess the reserves needed to cover the risks in any situation that confronts him—on both sides of the balance sheet.

Recent experience has reminded us afresh of the elementary dangers of guaranteed surrender values; not all liabilities can be matched by investment, and investments of equal value can be very different in vulnerability and volatility. The greater the speculative position, from whatever cause, the greater the possibility of loss, and therefore the reserves required. If capital is not forthcoming, other remedies must be sought, like limiting new business or exchanging assets, to make the risk of failure insignificant.

Not only must the actuary judge his reserve requirements, he must alert his Board, and if necessary the supervisory authorities, at any time he considers resources insufficient.

As a measure of the importance Council attaches to supporting statutory requirements by setting adequate professional standards, a special Joint Committee has been established, in conjunction with the Faculty, to give guidance to our members in carrying out their responsibilities.

Conclusion

Now to conclude. I started with an equation between saving and investment. Both are imperilled by the onslaught of inflation, and well-thought-out measures are needed to defend them. Indexation is not itself a cure, but it can help to restore fairness and security where both are endangered.

Pensions are for promises; I have spoken of the link between funding future obligations and the reality of the investment required to meet them. Peaceful co-existence between state and private pensions could be crucial.

Life assurance business has stood its ground, and more. Its blemishes are a tiny part of the whole, and I have suggested how they should be climinated—and they must.

Saving, investment, pensions, life assurance—they all hang together and rely absolutely upon the prosperity of industry; not only that, the mechanisms I have discussed will further that prosperity; or seriously endanger it, if they are just not allowed to work.

I am deeply conscious that my remarks have touched only the surface of our professional interests. It would have been possible, I am sure, to have uncovered as many problems in non-life insurance, social insurance, assessing damages or apportioning trust funds, problems which torment others more qualified than I am to speak of these things. But after looking briefly at our economic misfortunes and anxieties, I have sought your interest tonight as investors, as taxpayers, as advisers to pension funds and life offices, in short, as financial planners with responsibilities affecting millions of people and running into billions of pounds.

The views I have expressed are personal ones, not the Institute's. My chief purpose has been to remind ourselves that the environment has changed, that restlessness is better than complacency, and that our professional vision is sharpened more by challenges than comfort. Above all, I believe that actuaries can contribute uniquely to analysing—and solving—some of the difficult longterm problems that face our community.

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