TFA 37 (1979-1981) 1-23

PRESIDENTIAL ADDRESS

by

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[Delivered to the Faculty, 15th October 1979]

I.

" Am not I a Benjamite of the smallest of the tribes of Israel and my family the least of all the families of the tribe of Benjamin? "

So said Saul when approached by Samuel to be King of Israel, and if I begin my Address this evening with that quotation from Scripture it is not that I intend to deliver a sermon. Like clergymen, I have a captive audience but the analogy ends there. Nonetheless, the words are not an inappropriate expression of my own feelings when first informed that it was the intention of Council to set in train the various steps which, with the approval of members, would lead to my appearing this evening as President. Lest I am accused of false modesty, I should explain that I am deeply conscious of the fact that for the third time in succession you have elected a President from what some may consider to be the lesser centre of life assurance in Scotland and that the two Presidents so far whose careers as students and Fellows of the Faculty are wholly related to the period after the Second World War have been close colleagues during almost the whole of that period in the same life office. I realise too that, apart from the Vice-Presidency which was a preliminary to my election, I have held no high office in Council. The honour of being the titular leader of this learned profession in Scotland is not sought and is granted only to few, indeed normally to only five per decade. It is therefore all the more necessary that in thanking you for the honour I should pledge myself to endeavour to maintain the high traditions of the office.

By custom I have a free choice of subjects on which to speak this evening. Examination of past Addresses over a long period reveals no distinct pattern. Some give an insight into the minds of their authors, others into the problems of their time; some are literary masterpieces, others analyse a particular aspect of our science; some

honour of appointing me President. I can only undertake humbly to endeavour myself to the best of my ability to be a help and ornament thereunto. It was A. E. King who said that although it was not given to many to become ornaments of outstanding merit, nevertheless those of ordinary intelligence can sustain the honour and common weal by honest endeavour and rectitude of conduct!

These allusions to the well known words of Francis Bacon, regularly placed before us by the Journals of the Institute, take us back to an Age of Elegance in which privilege and protection were extended to the professions in recognition of their responsibility to society, quite over-riding their duty to their clients. Adam Smith had written in the Wealth of Nations:

> " The reward (of the members of a profession) must be such as may give them that rank in Society which so important a trust requires. . . . The public admiration which attends upon such distinguished abilities makes always a part of their reward. . . . "

It was in such a climate that the Faculty was founded and yet the original Constitution of 1856 is clearly that of a body formed to associate its members and protect their own interests. By the date of the Royal Charter in 1868 the Faculty was stated to be existing for the ultimate prosperity of the Life Assurance Institutions whose officials mainly comprised the membership. In securing the prosperity of the Institutions, the profession was acknowledged to be serving the public, but, to quote the the Charter:

> " the subject of their professional study is one with which the general public are almost entirely unacquainted and in which therefore they must be wholly dependent on the skill and integrity of the Actuary employed."

The profession was building its defences and preparing to withdraw into the decent obscurity of its own mystique.

In the course of more than a century since then, considerable progress has been achieved in lowering the drawbridge and inviting the besiegers to inspect the battlements. In considering the extent to which the profession has adapted itself to the Age of Consumerism we should beware of being lulled into complacency by the findings of the Monopolies Commission which recently reported, with just a hint of surprise and with apparent approbation:

In 1891, Charles Gordon, who had become a Fellow in 1875, went to South Africa and around the turn of the century several Fellows and students had settled in Cape Town. In the early 1890's Arthur Hunter emigrated to New York and indeed during the first 25 years of the existence of the Actuarial Society of America there were several Fellows of the Faculty resident in the U.S.A. but, surprisingly, only one Fellow of the Institute. John Young commented, however, that the Faculty structure must be

> " fairly strongly dependent at any time on the size of the actual ' Scottish home base' ".

At the time of his Address that " home base " represented almost 40% of the active membership.

While it is interesting to bring the figures up to date and to note that in 1978 the active membership totalled 437, of which 157 were resident overseas, and the home base represented 44% of the total, I feel it to be more important now to examine the level and distribution of student recruitment. The following table shows the recruitment in quinquennial years from 1958 to 1978 and the distribution of students in those years.

Analysis of student enrolments

Origin of Application	Number in year				
	1958	1963	1968	1973	1978
HOME	50	59	46	62	53
OVERSEAS					
Australia	4	7	2	—	—
South Africa	23	15	12	1	2
Elsewhere	—	3	1	3	3
	27	25	15	4	5
TOTAL	77	84	61	66	58

From the table it can be seen that the source from which the overseas " main stream " derives has diminished and has almost dried up. The percentage of students enrolled overseas in our sister body, the Institute, is much higher at 42%, but 19% is accounted for by those in Australasia. If eventually The Institute of Actuaries of Australia becomes a full examining body instead of only partly, as it will be

shortly, the student population of the Institute will also be significantly home based and if present trends continue, the overseas content will largely be in South Africa and the Indian subcontinent. While, therefore, the Faculty can be proud of the part which it has played in the development of actuarial science outwith Scotland, it cannot now be assumed that its membership will be increased by many Fellows whose origins are overseas. This does not mean that Fellows will not continue to emigrate despite the discouragement resulting from requirements now to obtain local qualifications. In my view the emigrants will eventually become the main stream rather than the tributary of Faculty overseas membership, thus reverting to the original situation. In that event the character of the Scottish home base will determine almost wholly the nature of the Faculty.

What then is the Scottish home base? The profession developed from the needs of life offices and despite the opportunities now open to actuaries 71% of our active Fellows practise in such institutions. In Scotland the percentage is 90 and almost all students are so employed. This means that we are now very dependent on the recruitment patterns of nine life offices which form a fairly homogeneous group, whereas at one time the group was larger and not so homogeneous. The effect is illustrated by the figures for the years 1975, 1976 and 1977 which are not contained in the table. The home enrolments in these years were only 25, 21 and 22, the drop from the previous level occurring mainly because the economic outlook at the time for the United Kingdom led to a severe contraction in the recruitment by the nine offices. The recovery in 1978 was almost as sharp as the drop had been in 1975. Nonetheless, despite the contraction of our base our Fellows and their opinions are still sought elsewhere. Our contribution to actuarial education in the United Kingdom remains as high as previously and indeed the authors of the textbooks for some of the basic examinations in both the Institute and Faculty have been and are Fellows of the Faculty. In Heriot-Watt University, with generous assistance from the Scottish life offices, there is a school of actuarial mathematics which is increasingly becoming known overseas. On the other hand, in future it may be that our knowledge of actuarial thought elsewhere in the world will not automatically be fed to us by members of our own Faculty for they will become increasingly involved in local associations. Moreover, our influence abroad will probably not be as great as it has been in the past.

Clearly, the role of the Faculty is changing. We will shortly cease to any great extent to be a body which trains students recruited overseas. In these circumstances, can we or should we use so much of our younger home-based manpower duplicating activities carried out elsewhere in the United Kingdom? Or are the activities distinctive and not duplicate? If they are the former, are they distinctive enough? Do they lead to a distinct school of actuarial mathematics, research and ingenuity here in Scotland? What is the maximum amount of examining activity which could be co-ordinated with our friends in the Institute and leave unhampered the development of a separate school of Scottish actuaries? I do not propose to answer these questions this evening but it is essential that we keep them in mind on every occasion when we are considering the development of our profession in Scotland. There is, too, another factor which will sooner or later have a bearing on our professional activities, and this could well happen sooner rather than later. A significant change has taken place in the role of the United Kingdom. On the one hand its national influence worldwide has declined while on the other it is now a member of the European Economic Community.

III. THE E.E.C.

The question of the effect on the actuarial profession of the United Kingdom's membership of the E.E.C. was referred to briefly in the Presidential Address of J. G. Wallace in 1973. Its effect on life assurance had been discussed in 1971 in a paper presented by T. H. M. Oppé to both the Institute and the Faculty, it having been mentioned previously in the Presidential Addresses to the Institute by J. B. H. Pegler and R. S. Skerman, both of whom had had a long connection with the Committee of European Insurers. In his Address in 1973, J. G. Wallace commented that membership of the E.E.C. would raise problems for the life assurance industry and he added that considerable thought would require to be given to the problems of the possible achievement eventually of common status for actuaries within the Community. In that latter connection he referred to the preliminary moves which had been made to establish an international committee to consider the problems. That was said six years ago and to most here this evening not much will seem to have happened so far to affect either the life assurance industry or the actuarial profession in the United Kingdom. For my own part, I have had the opportunity to take an interest in both aspects. On the one hand I was involved in European Life Assurance matters at a time when

the discussions on the Life Establishment Directive were coming to a conclusion and on the other hand I have been a Faculty delegate to the Consultative Group of European Actuaries, which arose from the initial steps referred to by J. G. Wallace and which was eventually formed in 1978. The stage has now been reached when developments will not continue at such a slow pace in either field and so it seems appropriate to discuss both aspects this evening in order to inform members about what has taken place and to alert them as to possible future developments. I shall deal first with the Life Establishment Directive.

The E.E.C. and life assurance

To meet the objects of the 1957 Treaty of Rome it is necessary that a common market in insurance be established. The two general programmes by which this will eventually be achieved call for:—

(*a*) freedom of establishment, i.e. the right of an insurer with its head office in one member state to establish a branch or agency in another member state on the same terms and conditions applicable to an insurer having its head office in the latter;

(*b*) freedom of services, i.e. the right of an insurer with its head office, or a branch office, in one member state to provide insurance services in another member state without establishing a branch or agency in the latter.

Originally it was intended to complete the programme for the establishment of the common market in insurance by 1969 but progress has been very slow, and for life assurance business the Directive to facilitate freedom of establishment was approved by the E.E.C. Council of Ministers only on 5th March this year. While freedom of services is still very far off, experience in dealing with freedom of establishment indicates that the life assurance industry and the actuarial profession will require to press their points of view vigorously at an early stage.

The right of freedom of establishment provided for under Article 52 of the Treaty of Rome has been enforced following the Reyners case (Case 2/74 Reyners *v.* Belgian State (1974) E.C.R. 631) when Monsieur Reyners, a lawyer living in Belgium, petitioned the European Court of Justice against the refusal of the Belgian authorities to allow him to practise his profession in Belgium on the grounds that he was not a Belgian national. The Court upheld the Petition. As a result the right of establishment for professional persons and others has existed

since the end of the transitional period allowed for in the Treaty. It has, of course, always been possible to transact life assurance business in the various Community countries subject to permission being granted and to compliance with national legislation. The growing interest by British life assurers in Europe since 1973, the year of our joining the Community, is evidenced by the fact that, excluding Ireland, the European yearly and single premiums for assurances, annuities and other long-term business of United Kingdom life offices increased from £54m in 1973 to £285m in 1978, these amounts representing 14% and 36% of the total overseas premium income of all the offices. After making allowance for the depreciation of sterling against other European currencies which inflated the sterling amounts over that period, possibly by as much as 50%, the figures show that there has been an increasing awareness of the potential in Europe and that the success of those few life offices operating there has been quite significant.

What difference then will the Directive make? As the right of establishment already existed the Directive, strictly speaking, is not an Establishment Directive, but

> " a first Council Directive on the co-ordination of laws, regulations and administrative provisions relating to the taking up and pursuit of the business of direct life assurance ".

For a purely life insurer with its head office in the United Kingdom wishing to expand into other Community states the answer to the question is that there is little to be gained by the existence of the Directive for the administrative difficulty of such expansion will not be eased. However, for all life insurers, whether operating only in the United Kingdom or not, there will be new requirements, of which those relating to solvency are of greatest interest to actuaries.

To facilitate the freedom of establishment of life assurance it is necessary for there to be a common standard of solvency margin to ensure that in a member state in which an insurer operates policyholders will have the same protection irrespective of whether the insurer is controlled by the authorities of that state or by those of another member state. Clearly, establishment is not facilitated if in each member state in which it operates an insurer has to provide the same amount of " protection " capital as the home insurers of that state, for that would imply a multiplicity of margins. It follows then that there should be a common solvency margin applicable to an

insurer's whole business throughout the Community and, as the Community is not a supra-national authority, that solvency margin must be such as, by and large, can satisfy the current practices in all member states, or at least be acceptable to their governments. These practices vary considerably from state to state and generally are substantially different from those in the United Kingdom. In particular, the protection of policyholders is achieved elsewhere in the Community by rigid controls whereas in the United Kingdom the protection is afforded by a minimum amount of regulation with much reliance being placed on the actuarial profession. This arises because the profession here grew hand in hand with the life assurance industry and it is a tribute to us that that reliance has continued. Admittedly we now have the Policyholders Protection Act, and the levies associated therewith, but it seems to me that if our life assurance industry were presented with the choice between a rigid regulatory system, such as is in force in some countries on the Continent, and a continuance of most of its freedoms combined with a fall-back situation, such as now exists, it should surely prefer the latter. Given then the difference between the environment in the United Kingdom and that in the other member states it was necessary that any arrangements made to facilitate freedom of establishment should allow the different systems to co-exist and at the same time should contain common basic principles of supervision.

The Continental system of regulation generally depends on control of premium rates combined with control of valuation bases and the percentages of assets which can be invested in certain types of security. Investment policy, as well as valuation methods, are affected by the need to provide guaranteed surrender values. Solvency margins are in most cases held in an explicit form. In the United Kingdom premium rates are not regulated by Government; guaranteed surrender values are not common; there is no Government supervision of investment policy apart from the requirements of the Insurance Companies (Valuation of Assets) Regulations, and valuation methods, until now unregulated, take into account both the nature of assets and liabilities and contain implicitly the safety margins considered appropriate by actuaries. From an early stage in the discussions on the proposed Directive it was thought by the United Kingdom life assurance industry that it would be possible for these implicit margins to be counted at least in part towards the required solvency margin. In the event this proved not to be the case and although it will be possible for an implicit component to be

counted its amount will be determined by estimating the capitalised value of future profits which themselves will be related to one half of the average of the profits of the previous five years. For long-established United Kingdom life offices the immediate effect is not material in the sense that the implicit component calculated on such a basis is almost certain to be substantially more than the required solvency margin but from the point of view of the actuarial profession the outcome of the negotiations is not a happy one. There is an implication that for European solvency margin purposes the actuarial methods used in the United Kingdom are not satisfactory. If, therefore, we look ahead to the negotiations which will take place on freedom of services we can perceive that the present United Kingdom approach in general to life assurance business will be considered in the same light, and since in order to obviate distortion of competition it will be necessary to harmonise many things, including probably the methods and bases used to calculate the mathematical reserves, there is a real danger that our traditional methods will not be acceptable.

It should be noted that the United Kingdom and Irish delegates entered a reservation in the Minutes of the Council Meeting of Ministers at which the Directive was adopted, to the effect that, while they accepted that the method prescribed for the calculation of the implicit component of the solvency margin was the only method for that purpose, they nonetheless maintained

> " the firm conviction that, under their system of calculating mathematical reserves on bases which take account of the nature of both the assets and the liabilities of the particular undertaking, if the margin in the bases of calculation of these reserves were quantified this would constitute the most appropriate method of estimating the implicit component of the solvency margin ".

It is to be hoped that in future our country's delegates do not waver in their adherence to this conviction and that they will be able to convince other delegates of the soundness of our methods, both for protecting savings and for fulfilling better than by a rigid system of controls the reasonable expectations of policyholders.

It is also of interest to us that at this stage the system of calculating the implicit component has not yet been settled in detail. Firstly, the method of calculating the profits to be counted has still to be agreed and until agreement is reached among all the member states it

will be prescribed by the authority in each individual state. In the United Kingdom no doubt the profits to be counted will be based on what is conventionally known here as " surplus earned " but even that simple definition can be interpreted in various ways. While we can rely on the supervisory authority here to interpret it in an understanding form, it is essential that this should continue under any eventual agreement among all the states. Secondly, the factor by which the average annual profit has to be multiplied is to be based on the average length of the term to run of the existing business, subject to an overall maximum. The method of calculating this factor is yet to be determined and may require to take into account the probability of withdrawal. The Faculty has taken an interest in withdrawals and the Research Group which presented a Paper on the subject for discussion last Session is continuing its work. We are not unaware of the problem but, since for the purpose of the Directive solvency margin the profits themselves have to be reduced by 50% before applying the factor, excessive refinement related to the probability of withdrawal is surely out of place. It is to be hoped that in considering this matter proper regard will be paid to the statement, also entered in the Council Minutes,

> " that the competent authorities of the member states when they are laying down practical rules for implementing the Directive, will take account of the need to keep the administrative burden on undertakings to a minimum ".

In passing, it may be said that there would be an improvement in all our domestic legislation were heed paid to such a consideration.

A further inappropriate provision, as far as the United Kingdom is concerned, is the one relating to reassurance. The practice here of reserving on a net basis is long established and will continue to be acceptable, but for the solvency margin required by the Directive there is a limit on the percentage of business which can be counted as being reassured. This means that if reserves in excess of that limit are passed to a reassurer a solvency margin in respect of these reserves will still be necessary in the hands of the ceding office and this will be so even when the reassuring office is subject to the same control as the ceding office, as is the case in the United Kingdom, and so has also to hold a solvency margin for the business it has accepted. Further, the same situation will apply to reassurance business between a parent office and its subsidiary or between companies in the same group, thus

leading to duplication of the margin within that group. This attitude to reassurance arises from the fact that reassurers elsewhere in the Community are not generally controlled, nor indeed do the reserves in respect of the business reassured necessarily pass from ceder to reassurer. The situation where the reassuring office is subject to the same system of control as a direct writing office is entirely different and this ought to have been recognised by allowing reassurance in full in that circumstance.

The provisions relating to composite insurance companies are complicated but broadly they reflect the desire of other member states to limit the transaction of life assurance business by composites unless through the medium of separate life assurance subsidiaries. New composites will not be allowed and there is no doubt that the position of existing composites will be adversely affected. Further, the Commission is required to submit a report to the Council of Ministers on the operations of composite and specialised offices after 10 years from the date of notification of the Directive. In the United Kingdom we have for long accepted that there is no distortion of competition arising from the operation of a life assurance branch within a composite company and that the security of the life assurance policyholders is adequately protected both by the system of control and the actuarial profession. While there appears, therefore, little justification in our context for the provisions in the Directive relating to composites, we must nonetheless bear in mind that what worries some of our Continental friends is the lack of clarity in our winding-up law concerning the rights of life policyholders where a company becomes insolvent because of the failure of a non-life class of business.

I hope that I have not given the impression by these remarks that the outcome of the labours of the United Kingdom negotiators was wholly unsuccessful. Genuine efforts were made to have our methods accommodated within the Directive but in all such negotiations compromise is essential, for without it there would be no agreement, and lack of agreement in one sphere of Community matters could have damaging implications in others. We must note that our partners also made concessions, for example in the satisfactory arrangements for the solvency margins in respect of our pensions managed fund, investment-linked and short-term term insurance business. Nonetheless, it is a matter for disappointment that our earlier hopes have not been fulfilled, and in particular that our system of providing solvency margins within a valuation reserve basis which

takes account of the nature of both assets and liabilities has not won general acceptance.

There is another important point to be noted, namely that the climate in which we work will be affected by Directives not relating directly to insurers. There are many in draft form, or in the process of initiation, which will affect the rights of consumers and which will impinge on our activities. Examples, to name only a few, are those on Contracts Concluded away from Business Premises, on Misleading and Unfair Advertising, on Harmonisation of Price Display Requirements and on Standard Terms in Consumer Contracts. From time to time we complain about an environment which is becoming increasingly hostile to producers, financial institutions and professions and we tend to lay blame at the door of our own Government or the consumer lobby here. But the pressures did not originate in this country; they have been present in the U.S.A. and other countries for some time. Indeed, in making proposals for more consumer protection in various forms the Commission in Brussels is merely reacting to the situation as it is, and some would say that, in so doing, it is attempting to identify itself with and to appeal to the population of Europe over the heads of the governments of the member states. It could be argued that the legislation passed so far in the United Kingdom in this direction strengthens the hands of those whose task it is to negotiate compromises at European level by demonstrating that less restrictive legislation is possible and can be seen to work.

So far, I have said nothing about national or occupational pensions in the E.E.C. No doubt they will receive increasing attention from the Community institutions. Even at present much discussion takes place in bodies such as the Committee of European Insurers on the relationship between the basic state benefit, the additional component within the State system and on the pension provision beyond that in the various countries. While integration of national pension systems must necessarily be far off, involving as it would do a surrender of national sovereignty to an extent not at present generally contemplated, it is possible to foresee much more rapid integration in the field of occupational pensions. This will be necessitated by the creation of Community companies and by the mobility of labour both within and without such companies.

The E.E.C. and the Professions

Our interest in events arising out of our membership of the E.E.C. is not limited only to matters connected with the life assurance and

pensions industries. We must be concerned with the status of our profession itself in Europe. The Consultative Group of European Actuaries, to which I referred earlier, has already begun its work. Contact has been made with Commission officials in Brussels and various subjects are being investigated, such as the duties and responsibilities of actuaries within each country. Indeed one of the sub-Committees is investigating the education and examination system of the various constituent Associations with a view to suggesting the extent to which exemptions from examinations in one Association in the E.E.C. might be granted as a result of qualifications obtained as an actuary in another and to encouraging the Associations towards a gradual harmonisation of study and examination standards in basic actuarial techniques. At the present time such a possibility seems remote and difficult to achieve but this does not mean that we neglect it for we must be prepared for the eventual integration of financial services within the Community with all that that implies for our profession. Quite apart from consideration of common actuarial status, it is necessary that European actuarial bodies ensure that they have influence on Community decisions on matters of concern to them. We are fortunate in this country in being consulted frequently by Government but this is not the general practice in other countries in the Community. With our satisfactory experience we should be taking the lead in ensuring that our profession is similarly consulted by the various Community organisations.

At present the Community is organised on the basis that the Commission proposes particular policies and the final say in their acceptance or rejection lies with the Council of Ministers. There are, in addition, two main representative bodies, namely the European Parliament and the Economic and Social Committee and while these are consulted by the Commission, concern has been expressed that the present consultative processes may not take into account fully the interest of the professions. Further, the situation in relation to any individual profession and also in relation to any industry may change considerably over the next few years for in June this year we have had the first direct elections to the European Parliament. Until now, this Parliament has had very limited powers, the main power lying with the Council of Ministers, or rather with the member states through the Council of Ministers. The veto in that Council gives to each individual member state almost absolute power, at least in a negative sense. In addition, the Parliament's composition until June reflected the power of the member states—

the members, being the delegates of national Parliaments, did not derive their mandate from the constituencies within the member states. It is interesting that the opposition to direct elections came from certain quarters in two countries which were most jealous of their national sovereignty and that these quarters were unable to block the process of direct election. This fact is perhaps the best indication of the prospect of a political Europe. From this year the European Parliament will derive its mandate directly from the electorate of Europe and with that derived authority it could well be that it will not be content in the long run with its present limited powers. The history of Western parliamentary legislatures suggests that if in their evolution they do not cease to exist altogether they are committed to the progressive extension of their own powers. This is in the very nature of the parliamentary animal and there are some who believe, with justification, that the direct European elections are the thin end of a very long wedge. In such conditions it does not follow that the professional or technical excellence achieved within one member state will lead to the practices within that state being accepted as the most suitable for the whole Community. Acceptance could be governed by some form of supra-national authority and the practices within one member state may not be protected via the channel of its particular national government. This is not to say that our practices are superior, and so should prevail, but it does imply that we as a profession should take every opportunity to learn about our brethren in Europe and about how they organise their affairs and also at the same time to inform them of our own methods and attitudes.

As far back as 1948 Sir George Maddex suggested in his Presidential Address to the Institute that it would be a most interesting experiment if one of the younger Fellows spent some time in a country or group of countries studying the actuarial profession there, its organisation, its methods of training, the extent of its curriculum, its place in the insurance industry and in the Government services. He contemplated that such a study would provide material for an interesting and illuminating paper to the Institute. At professional level very little happened until the formation of the Consultative Group. It is timely that the Group is now functioning and that in another context the National Reports to the 21st International Congress in Switzerland next June will be dealing with the training, education and duties of the actuary in the different countries of the world. We must pay particular attention to those from Europe. I

hope, too, that the Working Group being set up by our own Research Committee to study life assurance and pensions in Europe will receive support and interest from our younger Fellows.

IV. PENSION SCHEMES AND FUNDS

I now propose to discuss some aspects of pensions and their funding, with particular reference to the United Kingdom.

That it was possible for the pensions industry to negotiate satisfactory terms with Government to enable schemes to be contracted out of the additional component of the State system was an indication of the desire of most politicians to foster a genuine partnership between State and private pension schemes—a partnership which is not often evident in other countries. This is surprising when one considers that at the time when the ultimate discussions were taking place serious doubts were being expressed in some quarters about the efficacy of funded pension schemes in an environment so inflationary that it was impossible to obtain a real return on fund assets. One prominent Bank Chairman, in relation to the scheme for the bank's own employees, questioned how long an employer could continue to pour money into " a leaky barrel ". In the event, employers did pour money into the barrels which turned out not to be so leaky as had been feared would be the case, for the inflation rate fell and a real positive return could be obtained again on the contents. Also, coinciding with the start of the new State arrangements, employers were prepared to make substantial improvements in their schemes and so confound the pessimists who had forecast a sharp contraction in private provision. The question being asked now about funded pension arrangements is not whether the funds are capable of performing their function but rather whether their success in acquiring the ever-increasing quantity of assets to enable them to do so has not placed too much power in the hands of relatively few people. A vast amount of evidence has been submitted to the Wilson Committee, set up by the previous Government to review the workings of the Financial Institutions, and I will not repeat any of it here. But, no matter how well the trustees and managers defend the role of their institutions in the financial system and no matter how responsible their actions are deemed to be in furthering the interests of those whose savings are entrusted to them, there will be an increasing problem for actuaries in attempting to forecast long-term trends of interest rates and capital markets. By applying

the same growth rates to the economy as a whole as those used in the assumptions related to the growth of U.K. long-term insurance funds and funded non-insured pension schemes some projections produce a figure of the total funds of those institutions of only 6% of GNP by 1985, and that is not an excessive percentage. Nonetheless, the relative decline of the private investor continues and fears have been expressed that we are moving to what The Economist magazine described as a " private corporate state ". If so, pressure will mount to make the trustees and managers of such institutions accountable to or controlled by persons other than the members, policyholders or shareholders. If that pressure succeeds there will be an entirely different environment from that of the " mixed economy " to which we have become accustomed over the last few decades. It will be one in which the laws of supply and demand for capital will not apply in the same manner as in the past and in which forecasting will be extremely difficult. To avoid the inevitability of such an environment it is essential that the recent efforts to lessen the crushing burden of personal direct taxation succeed. It may not appear to be in the short-term interests of institutions whose growth has relied on the fact that in recent years almost the only method by which executives and professional persons could save was through the medium of these institutions. In the long term, one of the necessary concomitants of an efficient corporate savings sector is a large and active personal sector. Without it the capital markets will lack the necessary liquidity to enable them to function properly. The danger is that attempts may be made to limit or control the corporate sector by the reduction of its tax advantages, or otherwise, without at the same time continuing the process, so recently restarted, of creating the conditions under which a private personal sector can grow.

Apart from the consideration being given by the Wilson Committee to the role of financial institutions there are at present, in relation to pension schemes:

" two questions in the air: the solvency of private pension schemes and the preservation of pension rights on change of employment ".

The words are those of F. M. Redington in his Presidential Address to the Institute of Actuaries 21 years ago and they are still topical today. Both subjects could form the main part of any Address but Council, and that of the Institute, have already submitted evidence on them to the Occupational Pensions Board; the evidence on

solvency was supplementary to that submitted in late 1974 and highlights the difficulty, particularly in an inflationary climate, of determining a standard of solvency which is independent of the solvency of the employer. As Redington pointed out, solvency is a subject which

" should be approached with a gentle tread ".

There are no absolutes, no matter how desirable they may be from the point of view of the members or the employer. Whether a scheme can fulfil its main purpose of providing for the members on retirement, a standard of living reasonable in relation to that enjoyed prior to retirement depends not only on the scheme's current state but also on its future progress, and that latter aspect is almost entirely dependent on the success of the employer. Undoubtedly it is desirable that schemes should be able to provide at least the accrued benefits to date of pensioners and existing employees but it is difficult to define what exactly are these accrued benefits and to decide whether their value should be determined on a basis which takes into account future changes in the value of money.

Solvency and the preservation of pension rights are inter-related, for solvency depends on the benefits provided, and the cost of any improvement in the benefits available on termination of employment must necessarily affect the finances of the scheme either in its degree of solvency or in the limitation of future improvements or in increased cost to the employer. F. M. Redington was speaking only one year after a Joint Working Party of the Institute and Faculty under the Chairmanship of F. A. Spratling had reported on the problem of preservation of pension rights. At that time there were few privately administered schemes which granted preserved pension rights or transfer values for periods of service under 15 years. Thereafter, an increasing number of schemes were amended to ensure some preservation of accrued pension rights and eventually the Social Security Act 1973 was enacted. The problem is not now the lack of preservation but rather its amount. Largely because of inflation, the benefits, when paid, do not conform with the members' expectations in deferment. It is only to a limited extent an actuarial matter—it is primarily one of cost and the distribution of available resources among the continuing members, the early leavers and the vested pensioners. The " transfer club " may be appropriate to the public sector, where schemes are either unfunded and guaranteed by the taxpayer, or, if funded, there is an implied guarantee by the taxpayer

or a monopoly employer. In the purely private sector resources are limited and in the case of any one employer they cannot be guaranteed.

It is hardly surprising that there should be mounting interest in the preservation in real terms of pension rights obtained in previous employments. The point has already been conceded in public sector schemes and the second pillar benefit in the State Scheme escalates in deferment according to the rate of increase of earnings. What started as an attempt to protect pensioners in retirement against the erosion of benefits earned during their working lives has developed to such an extent that there is an ever growing amount of benefit entitlement to which the protection applies. The situation now is that first pillar State pensions are price-protected (and until recently, earnings-protected as well), second pillar State pensions are earnings-protected in deferment and price-protected in payment and public sector occupational pensions, whether in deferment or in payment, are price-protected. The amount of these entitlements is liable to grow to such an extent that the guarantees could well become insupportable in the event of an economic downturn. No State, or agency of the State, can possibly protect a large section of the community in such conditions. It is difficult to see why any but the poor should be protected against an exchange rate depreciation which could be one of the symptoms of economic decline, and this calls into question the nature of the index on which price-protection should be based. It is also difficult to see why pensioners should have been price-protected when the rate of earnings increase was less than the rate of price increase and then the protection switched to earnings when the reverse was the case. Quite apart from a decline in the standard of living of the nation as a whole, there are circumstances when it may be thought desirable to make a substantial switch from direct to indirect taxation. Indeed the present Government has started on such a course and are committed to further action. Should those " protected " in this way receive additional benefit to enable them to pay less direct tax? This also suggests that the nature of the index to be used should be investigated. The recent interest in alternative forms of indices measuring changes in real standards of living, taking into account the amount and form of taxation, should not pass unnoticed in this connection. What too is the position if prices fall and then rise? Such questions raise doubts about the mandatory upward indexing of pension benefits, and pension benefits only. Suggestions have been made from time to

time that despite these doubts the process should be encouraged for occupational pension benefits in the private sector by the issue of index-linked securities in which approved pension funds or the pension business funds of life offices could be invested. The argument runs that if Government so orders the economic affairs of the nation that inflation persists then they are duty bound to provide a vehicle by which those who are saving, or have saved, for their old age can protect themselves in real terms. But the restriction of the use of such an investment medium can be criticised on the grounds that it provides yet another benefit or protection to those who save through institutions and this criticism can be met only by making the index-linked securities available to all investors.

One of the deterrents to the introduction of index-linked securities is the fear of its catastrophic effect on the market for Government fixed interest securities. But that market is already sophisticated and investors may still prefer the higher immediate income available under fixed interest securities to the presumably lower immediate income from index-linked securities. The real problem lies in the serious effect which their introduction would have on the equity and property markets. In a country such as Brazil, where indexation of financial transactions is general, even to the extent of those relating to " money on the street ", an equity market exists and competes with the indexed securities market but the political conditions there are entirely different from those in this country and it is difficult to conceive of a Government here which could create conditions under which investors could afford to ignore the advantage of the guaranteed protection of their savings in all conditions. This in my view is a strong argument against general indexation. There is one form of indexation which should not be confused with that based on a general price or other general index, namely the form where the indexation is based on the value of the commodity in which the issuing enterprise trades. In that case matching by the enterprise is possible and that is something which is close to our philosophy. There are risks involved for the investor which must be taken into account when he considers the attractions of that form of investment in relation to other forms.

It is interesting that the demand for indexation has arisen as conditions have become increasingly unstable and unpredictable, and if they continue so it is unlikely that it will be possible to fulfil the guarantee of complete protection. If inflation had remained stable and were to do so in future, protection is possible from the high yields

obtainable from fixed interest securities but unfortunately the income resulting from these yields is often used as current income and not in the early years as payment in advance for future inflation. Prudent reinvestment of the part of the income in excess of that necessary to provide a small positive yield would protect the position of a non-taxpayer or gross fund, both as to income and capital. In the same stable conditions protection could be obtained from increases in dividends and rents on equity shares and property. But, by its very nature, inflation leads to conditions which are unstable and unpredictable and so I do not follow the logic of economic reports or of actuarial estimates or valuations which are based on perpetual rates of inflation of, say, 10% per annum. These are now quite common and they assume that stability can be achieved at 10% inflation when it has not been achieved at a lower percentage. I have heard it said with great conviction that we should have to accustom ourselves to an average long-term rate of inflation of 10% per annum with variations from time to time about that mean, depending on whether the monetary or fiscal " brakes " were on or off. Such an attitude is indicative of a failure to appreciate the true nature of inflation and its causes.

V. INFLATION

The subject of inflation has been discussed by previous Presidents of both the Institute and the Faculty, generally in the context of the damage which it does to the savings of millions of innocent people. Many actuaries are advisers to those to whom a great amount of savings is entrusted and the matter is of paramount concern to our profession. Governments have been blamed for their ineptitude in the handling of our economic affairs but I am not convinced that the citizens of our country are necessarily innocent parties in the process. In December last, Harold Macmillan reminded us that Bagehot wrote about " political economy " not "mathematical economics " and that economics was about " the possible ". One has only to remember the events of last winter in the United Kingdom, when many groups of workers considered that they were underpaid and demanded more with extreme pressure, knowing full well that the benefits of any success in their campaigns would be short-lived, to realise that the fault does not lie wholly at the door of Government. Insofar as the implementing of sound economic policies in a democracy requires in large measure the consent of those governed, the policies themselves tend to be a reflection of the consensus. Inflation

will not be cured by the actions of those many millions of people who condemn it by mouth but continue to enjoy its effects, which to many are quite pleasant in the early and middle stages of its development. Nor will it be cured by any actions of Government which require the willing consent of such people. And yet, efforts must be made to contain it, not mainly because it is unfair or unjust to the weaker sections of the community, though that is bad enough, but because if left to grow the consequences for all will be disastrous. The nature of inflation is that it begins in small doses and at that stage there are many who profit from the distortions which it creates. These distortions very shortly require correction and in order to mitigate the unpleasant consequences of the corrections further doses are injected into the system by Government with the consent of the people. The subsequent distortions require even greater corrections and so on until the system is in such a state of disequilibrium that spontaneous deflation is inevitable. All severe inflations in recorded history have eventually led to depressions with most disagreeable consequences, economically and socially. The history of deflations is that their time-scales are normally much shorter and their effects more acute than those of the preceding inflations. I can see no signs that the present inflation is any more stable than previous ones—indeed the monetary system worldwide is becoming increasingly and alarmingly unstable.

Where does this lead us in our profession, which is one of the few whose main function is to provide long-term forecasts? In his Presidential Address in 1945, J. G. Kyd, in dismissing the mystery which appeared in certain quarters to surround the profession, stated that the actuary's work

> " is mainly the application of reason in estimating the trend of future events from observations of the past ".

We still apply this rigorously to the mortality element in our forecasts, but our view of the other elements, those of interest and expenses, has become more and more conditioned by the recent past which covers a shorter time-span than that over which the forecasts extend.

It may well be that conditions could change dramatically, leading to a rapid lowering of the rate of inflation and eventually to deflation and depression. To those whose professional careers have spanned only the period after the Second World War this possibility may seem remote but it is one which should not be ignored. Further, the remarkable growth in pension and life assurance funds brought

about by inflation and the tax incentive to individuals to accumulate a large proportion of their savings within them has meant that these funds are now very "young". As such, they require relatively stronger reserves than was the case when they were more mature and when the parameters on which forecasts could be based were more stable. Moreover, the reserves must be accumulated at a time when there is pressure on institutions from consumers for higher benefits and distributions. While, therefore, the concerns and problems in our work in recent years have been those associated with inflation in its effect on pension and life assurance benefits and their funding, on the maintenance of the real value of savings and on the solvency of financial institutions in general, we should also now be making a start to a consideration of the problems which will arise should a sudden change in the financial environment take place. Even the favourable, and most desirable, scenario of a steady and continuous fall in the rate of inflation would have a significant effect on savings institutions and on the benefits paid to their beneficiaries. It need not follow that during the period of transition the "real money" benefits will be more advantageous than under the preceding conditions. Indeed, we may face as many problems under the new environment as under the present.

VI. CONCLUSION

I have now come almost to the end of my remarks. There is, I hope, a common thread throughout by which I shall endeavour to draw them together. It is, I suppose, normal for the incoming holders of the office which I now hold to feel that they are standing on the threshold of change, and to hope that they will be able to respond adequately to the needs of any new situations. At the completion of my term of office the Faculty will have then been in being for 125 years—a grain of sand in the ocean of time but a significant proportion of the period of Western industrial and financial civilisation—and who can deny the changes that have taken place in that period. I do believe, however, that, whether we are considering our own role here and abroad or the position of financial institutions in the E.E.C. or the present inflation, which is but a symptom of worldwide financial instability, the decade which we are about to enter will produce changes as dramatic as in any during the first 125 years of the Faculty's existence. While I express the hope that my own responses will be adequate, I am sure that the Faculty as a whole will not be found wanting.

Mr. R. E. Macdonald.—It is my privilege to render the first loyal address to our new President and it is a particular pleasure for me to do so for a colleague with whom I have worked closely for most of our business lives.

It seems to me especially appropriate that in the year when the E.E.C. Council of Ministers finally approved the Life Establishment Directive, we should elect as President one who has long been involved in international actuarial activities and who in addition is currently a life office representative in the negotiation of the Directive.

Much of his address was devoted to the E.E.C. and we are grateful to him for the elucidation of some of the European problems both in the life assurance field and in our own professional sector. These are problems to which we shall require to devote much thought in the near future. Mr. McKinnon is a man of strong convictions and distinctive opinions, and if, in the remainder of his address, there appeared to be more questions than amswers, it is in the nature of a President that in controversial matters he can best lead by asking appropriate questions.

His reference to the Institute of Actuaries of Australia prompts me to comment that tomorrow I shall be travelling to New Zealand to attend the Joint Convention of Australian and New Zealand Actuaries. I hope I shall have the opportunity to discuss with the Australian actuaries some of the implications for Faculty members of their intentions with regard to examinations. No doubt you will wish me to convey warmest greetings and good wishes from the Faculty.

We congratulate you on an excellent address and we hope it will inspire many of our Fellows into research activity. We wish you a very happy and successful term of office.