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## A MARKETING AUDIT OF THE ACTUARIAL PROFESSION

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### ABSTRACT

This paper presents the results of research into the marketing of the actuarial profession including a SWOT analysis, public awareness and image of the profession amongst target groups (general public, undergraduates, journalists, company directors, pension scheme trustees and insurance intermediaries), and the desire to allocate more resources to the profession's public awareness and image. The paper also contains an analysis of the national press coverage achieved by the profession and reports on developments in North America where a task force on strengthening the actuarial profession has been set up.

### KEYWORDS

Marketing; Image; Public Relations; Actuarial Profession

## 1. A MARKETING AUDIT OF THE ACTUARIAL PROFESSION

### 1.1 *Introduction*

1.1.1 The Faculty of Actuaries' Marketing Research Group was set up in May 1988 to research areas of interest to that new breed of Fellow, the 'Marketing Actuary'.

In the initial meetings two general areas of interest were identified—namely the marketing of the actuarial profession, and the marketing of financial services products.

Whilst the group has spent time on both subjects this first paper is concerned with the marketing of the actuarial profession.

1.1.2 We felt that the starting point for a marketing audit of the profession was to conduct research amongst the members. In addition we have investigated the coverage achieved by the profession in the media, and looked into developments in North America, including a survey which ranked the actuarial profession against other forms of employment.

1.1.3 Selecting areas to be covered by the research questionnaire was not difficult. The biggest problem was keeping the questionnaire short enough to ensure a reasonable response rate. The finished product contained a S.W.O.T. analysis (strengths, weaknesses, opportunities and threats) of the profession,

together with questions on awareness and image. A section collecting demographic information was included to allow responses to be analysed in relation to geographical location, year examinations were completed, current employment and professional designation. A full copy of the questionnaire is reproduced in Appendix I.

1.1.4 The intention was to send the questionnaire to all Fellows of the Faculty of Actuaries and the Institute of Actuaries. This was achieved by sending the questionnaire to the normal mailing lists of both the Faculty and the Institute in February 1990. A total of 1,837 were returned, representing an overall response rate of 48.3% of those mailed. Within this, 59.5% of United Kingdom Fellows responded. We found this response very encouraging, indicating a high level of interest in this subject amongst members of the profession.

1.1.5 Research results when published can sometimes appear to be 'as expected' to those studying the findings. One technique for overcoming this problem is to have suitable groups complete additional questionnaires where they are asked to predict the overall results from the survey in advance of the results being known.

The results from these predictor questionnaires can be compared with the overall survey results and any significant differences identified. We are grateful to the Faculty and Institute Council members who agreed to complete predictor questionnaires for this purpose.

We had also intended using predictor questionnaires completed by the Institute Public Relations Committee, but we discovered that nearly all of this committee's members are also Council members.

## *1.2 Summary of Paper*

### *Section 2—Demographic Factors*

This section analyses the responses to section C of the questionnaire and compares them with statistics held by the Faculty and Institute offices.

### *Section 3—S.W.O.T. Analysis*

This section analyses the strengths, weaknesses, opportunities and threats of the profession.

### *Section 4—Public Awareness*

An analysis is given of the part of the questionnaire relating to the desired and perceived levels of awareness for the profession. For this purpose six relevant 'target' groups were identified (general public, undergraduates, journalists, company directors, pension scheme trustees and insurance intermediaries).

### *Section 5—Image*

The first part of this section analyses responses to the questions on perceived and desired images of the profession and descriptions of current employment. The second part analyses the responses to the question **How satisfied are you with the current image of the actuarial profession?**

### *Section 6—Media Analysis*

This is an analysis of the coverage achieved by the profession in the national press. Comparison is made with the coverage achieved by the accountancy and legal professions.

### *Section 7—Resources*

Responses to the question **What level of resources should the profession be devoting to public awareness and image?** are analysed.

### *Section 8—North American Developments*

This section begins with a section on a survey carried out in the United States of America which showed the actuarial profession to be 'No. 1' out of 250 occupations. It also gives a summary of developments in North America where the Society of Actuaries has set up a special committee entitled 'Task Force on Strengthening the Actuarial Profession'.

### *Appendices*

There are various appendices including details of the statistical tests carried out and a more detailed breakdown of the questionnaire results.

There is also an appendix analysing the 'additional comments' section of the questionnaire.

## *1.3 Key Conclusions*

1.3.1 There is considerable interest in the marketing of the profession amongst the membership. This was demonstrated by the high response rate and by comments made both within the questionnaire and directly to group members.

This subject was last aired in 1985 when J. Lagden presented his paper 'Marketing the Actuarial Profession' to the Institute of Actuaries and Faculty of Actuaries Students' Societies<sup>(1)</sup>. A number of Lagden's recommendations appeared to go unheeded at the time. It is interesting to note that some five years later many of them have now been or are being addressed.

Lagden's paper was wide in scope, but based on face-to-face interviews with a small number of Fellows. This paper is narrower, but based on a full survey of the profession's membership.

1.3.2 A very significant majority of respondents are positive about the future of the actuarial profession. However, an important area identified from the analysis for action by the profession would seem to be in communication. Not only is this the lowest ranked of the strengths, but it is also a crucial element in addressing the two most highly ranked weaknesses, that public awareness of the profession is too low and the profession's lack of influence on legislation.

The S.W.O.T. analysis showed the main strengths of the profession to be the specialist skills of actuaries, their high reputation and the legal requirements for Appointed Actuaries.

The small size of the profession was definitely not seen to be a weakness.

In terms of opportunities the most strongly agreed with were the higher

demand for actuaries due to the increasing complexity of the financial services market place and an increasing application of actuarial skills in other fields.

The membership perceived the greatest threat as coming from other professions taking over traditional actuarial tasks. The Single European Market turning U.K. actuaries into purely financial technicians and the problems of recruiting sufficient new entrants were also perceived as threats. Improved technology leading to a reduction in actuarial involvement was definitely not seen as a threat.

The predictor questionnaires showed that both Councils expected the small size of the profession to be seen as a weakness, whereas the membership did not. The Institute Council underestimated the members' feelings on the profession's lack of influence on legislation, whilst the Faculty Council underestimated the extent to which the membership feel the profession is too conservative and staid.

1.3.3 Public awareness is felt to be too low amongst all target groups, though the position is particularly so for the general public, undergraduates, journalists and company directors. The two Councils underestimated the gap between the membership's perceived and desired levels of awareness.

1.3.4 The membership felt that the current image of the profession is technical, complex, lucrative and dull. The desired image is for the profession to be seen as influential, challenging, respected and responsible. In general members felt that their current occupations match their desired image for the profession.

1.3.5 A significant proportion of the members are dissatisfied with the profession's image amongst the target groups. This is particularly true for the general public, undergraduates and journalists, suggesting that image and lack of public awareness are correlated.

1.3.6 The actuarial profession achieves very low coverage in the national press when compared with the accountancy and legal professions. The accountancy profession achieves over six times as much whilst the legal profession achieves twenty times as much.

There is a possible problem with the image the profession has with the national press. Of particular concern is the use of the word 'actuarial' as an adjective meaning anything from theoretical or complicated to dry or hypothetical.

1.3.7 A large majority of members feel that more resources should be allocated to improving public awareness and image, particularly amongst undergraduates, journalists, company directors and the general public.

Both Councils have underestimated the desire of the membership to allocate additional resources.

1.3.8. In most areas of the survey views differed significantly according to years of experience. In particular, the more recently qualified members of the profession were least satisfied with the awareness and image of the profession and are the keenest to allocate more resources to these areas.

1.3.9 In *The Jobs Rated Almanac 1988*, published in the U.S.A., the publishers conclude that the actuary has the 'No. 1 job'—250 jobs were evaluated taking

into account environment, income, outlook, physical demands, stress and security.

1.3.10 The North American actuarial profession is taking a serious look at its current and future status, having set up a special committee entitled 'Task Force on Strengthening the Actuarial Profession'. This task force has identified public interface as the area most in need of strengthening. It has concluded that actuaries need to comment formally and informally on proposed legislation and regulation. Legislators, regulators, and their staff, as well as the public, need to know the implications of proposed actions. The unique actuarial perspective can provide the necessary insight.

#### *1.4 Recommendations*

1.4.1 Having considered the results of research carried out to-date, the Faculty of Actuaries' Marketing Research Group puts forward the following recommendations.

1.4.2 This paper has only determined the views of the profession's members. A further stage to the research would be to undertake surveys to determine the views of some or all of the target groups (general public, undergraduates, journalists, company directors, pensions scheme trustees and insurance intermediaries).

1.4.3 The S.W.O.T. analysis we have carried out should be incorporated into the 'strategy' of the profession. Suitable plans should be developed to build on strengths, address weaknesses, etc. The discussion of this paper should give considerable help in deciding what the major items are (and this should not be confused with the items which received the strongest agreement in the questionnaire responses).

1.4.4 The public awareness and image of the profession is felt to be unsatisfactory amongst various groups, particularly the general public, undergraduates and journalists. There was also a strong vote in favour of the profession allocating more resources to public awareness and image. Consideration should be given as to how this can best be achieved, given that there is obviously a limit on the profession's overall resources. The profession should consider employing external consultants in this area.

1.4.5 Given the significant divergence of views according to years of experience, the profession should seriously consider establishing a more effective forum to elicit the views of the more recently qualified actuaries. This is particularly relevant in view of the profession's need to recruit high quality undergraduates and the profession's significant dissatisfaction with its awareness and image amongst this group.

1.4.6 Based on the findings of the American *Jobs Rated Almanac 1988*, the image of being 'No. 1' should be used to promote the profession in the U.K., particularly to undergraduates seeking gainful, exciting and expanding employment opportunities.

1.4.7 The actuarial professional bodies in North America are taking a serious look at their current position and future strategy, devoting significant resources to the exercise. We believe that the profession in the U.K. should examine the North American developments and consider whether or not a similar exercise should be carried out in this country.

### *1.5 Acknowledgments*

We wish to acknowledge the considerable assistance given by the following in the preparation of this paper: Council members of the Faculty of Actuaries and the Institute of Actuaries together with the members of the Institute's Public Relations Committee; the administration offices of the Faculty and Institute, and in particular Wallace Mair and John Henty; the Faculty for their donation covering the cost of data analysis and System Makers Software for carrying out the analysis at such a reduced rate; Alistair MacKenzie and Jonathan Gordon-Till for their assistance with the press cuttings analysis; Morven Walker for patiently typing so many drafts; and Athol Korabinski of Heriot-Watt University for steering us safely through the maze of lies, damned lies and statistics.

## 2. DEMOGRAPHIC FACTORS

### *2.1 Introduction*

2.1.1 Section C of the questionnaire requested respondents to indicate the geographical location in which they live and work, their actuarial professional designations, the year in which they completed their examinations and their current employment.

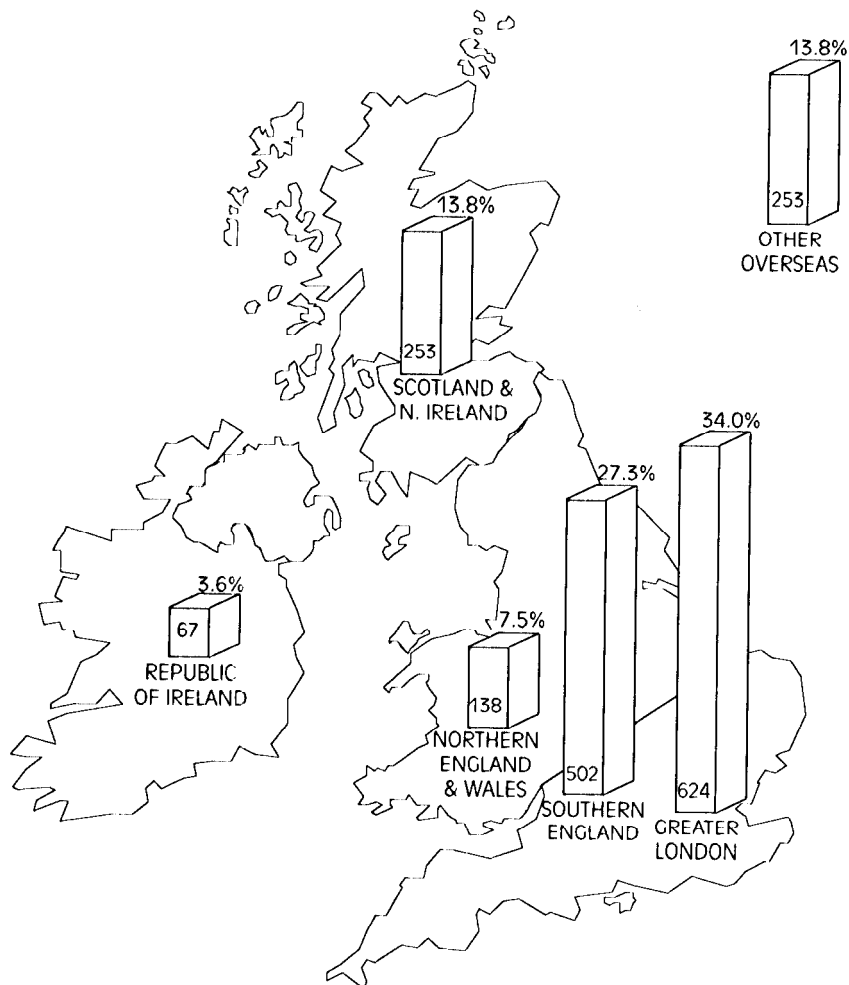
2.1.2 Analysis of these responses was carried out to assess the actual breakdown of respondents by these four features so that we could:

- (i) identify significant sub-groupings against which the responses of the earlier sections of the questionnaire could be measured,
- (ii) compare the responses with the known population of Faculty and Institute members, and
- (iii) establish interesting relationships between the sub-groups.

### *2.2 Geographical Location*

2.2.1 Table 2.1 illustrates the numbers and percentages of responses.

2.2.2 The 253 overseas respondents came from over 20 countries, the largest numbers being from Australia (64) and South Africa (52). We considered creating sub-groups of overseas respondents, but rejected this since the sub-groups would have been relatively small and, on initial inspection, the responses from the potential sub-groups were of little variation. The Republic of Ireland was included as a separate sub-group despite its relatively small size because of its similarities with the U.K.



### 2.3 Professional Designations

2.3.1 We had originally anticipated that AIAs would have been asked to complete the questionnaire, but in the event only FFAs and FIAs were mailed. The questionnaire did not make clear how Fellows should have completed question 2 of Section C if they have dual qualification. Table 2.2 tabulates the numbers and percentages of respondents.

Table 2.2.

Professional designation	Number	Percentage
(a) AIA	22	1.2
(b) FFA	413	22.5
(c) FIA	1,415	77.0
(d) Not stated	3	0.2
(e) Not stated	—	—
	1,853	100.9

2.3.2 This demonstrates that 16 respondents (.9%) indicated dual qualification; 15 of these were FFA/AIA. The remaining one claimed to be FIA/AIA. None indicated FFA/FIA despite Faculty records showing 19 FIAs and Institute records showing that 66 of their FIAs and AIAs are FFAs. Six respondents indicated only AIA.

2.3.3 The obvious confusion over dual qualification and AIAs posed a slight problem. We decided to record all responses of AIA as FIA. Those 15 who indicated dual FFA/AIA qualification therefore contribute to both the views of the Faculty and the Institute. Those six who indicated only AIA were treated as FIA. The one FIA/AIA has his views counted twice under the Institute. The treatment of these problem cases makes little difference to the overall results since the numbers involved are small.

## 2.4 *Year Examinations were Completed*

2.4.1 We experimented with various banding of the responses and settled on the five categories listed in Table 2.3. These categories are all large enough to give good sample sizes while allowing analysis of actuaries:

- (a) in or near to retirement,
- (b) with 20–30 years' experience,
- (c) with 10–20 years' experience,
- (d) with 5–10 years' experience, and
- (e) recently qualified with up to 5 years' experience.

Table 2.3.

Year examinations were completed	Years of experience	Number	Percentage
Before 1960	Over 30	201	10.9
1960–1969	20–30	267	14.5
1970–1979	10–20	589	32.1
1980–1984	5–10	296	16.1
1985–1989	0–5	454	24.7
Not stated		30	1.6
		1,837	100

## 2.5 *Current Employment*

2.5.1 Table 2.4 details the numbers and percentages of responses.



Table 2.4.

Current employment	Number	Percentage
(a) Life Office	894	48.7
(b) General Insurance Organisation	58	3.2
(c) Consultant: Employee Benefits	442	24.1
(d) Consultant: Insurance	103	5.6
(e) Government	19	1.0
(f) Retired	151	8.2
(g) Other	170	9.3
	1,837	100

The 'other' category produced 24 different employments as described by the respondents. We considered these and decided to allocate some to categories (a) to (e) since we believed they shared many common characteristics. We allocated Friendly Society (3) to category (a). Consultants assessing damages (3) and Litigation Consultants (1) were added to (b). Pension Managers (13) were added to (c). Government was combined with University/Education (14) and Regulator (2). The largest of the categories remaining were Investment Manager (34), Reinsurance (18), Stockbroker (15) and Merchant/Investment Bank (11).

2.5.2 We have therefore based our analysis on the categories indicated in Table 2.5.

Table 2.5.

Current employment	Number	Percentage
(a) Life Office/Friendly Society	897	48.8
(b) General Insurance/Assessing Damages	62	3.4
(c) Consultant: Employee Benefits/Pension Manager	455	24.8
(d) Consultant: Insurance	103	5.6
(e) Government/Education/Regulator	35	1.9
(f) Retired	151	8.2
(g) Other	134	7.3
	1,837	100

## 2.6 Faculty and Institute Membership

2.6.1 Statistics as at 30 April from the respective offices show 687 Fellows of the Faculty and 3,249 Fellows of the Institute. Faculty records show that 28 Fellows are Associates of the Institute while 19 Fellows are also Fellows of the Institute. The Institute records show that 66 of their Fellows and Associates are also Fellows of the Faculty. The Institute did not distribute questionnaires to their 133 Fellows, mainly retired, who do not receive non-essential mail.

2.6.2 413 responses from Faculty Fellows represents a response rate of 60.1% while 1,437 Fellows of the Institute represents 46.1% of the Institute Fellows mailed. The findings of the survey are felt to be highly representative of the entire profession.

2.6.3 The Institute was able to provide us with the geographical split of membership shown in Table 2.6.

The Unspecified U.K. category represents Fellows who have only supplied a home address to the Institute. These are not allocated to geographical regions by the Institute. The figures in parentheses are calculated on the assumptions that these 320 are distributed throughout the U.K. in the same proportions as the other Fellows of the Institute, and that the 133 Fellows who were not mailed are similarly distributed throughout the world. The response rates shown are based on these recalculated numbers.

Table 2.6. *Institute membership*

Geographical location	Number		Response rate (%)
London	927	(1,039)	(54.4)
Southern England	796	(892)	(53.3)
Northern England and Wales	153	(172)	(70.3)
Scotland and Northern Ireland	22	(24)	(100.0)
Republic of Ireland	90	(86)	(60.5)
Other Overseas	941	(903)	(22.0)
Unspecified U.K.	320	(-)	(-)
	3,249	(3,116)	(46.1)

2.6.4 The Faculty were only able to supply a split of U.K. (532) and Overseas (155) Fellows. The U.K. response rate was 64.1% against 46.5% for overseas.

2.6.5 Clearly overseas Fellows' views are less heavily represented in all the replies.

2.6.6 The Faculty and Institute provided statistics of when existing members become Fellows. Unfortunately, because of the Institute's two years' post-examination experience requirement, since 1976 year of completion of examinations has not necessarily coincided with year of becoming a Fellow. The Institute provided us with the numbers becoming Fellows in each year from 1976, and from these we have estimated the number completing the examinations in our selected time periods. The Faculty figures and Institute estimates are given in Table 2.7.

We assumed that the 133 Fellows of the Institute who were not mailed all had over 30 years' experience, and the figures in parentheses represent the revised totals on this basis. The response rates have been calculated on the assumption that the 30 shown in Table 2.3 as 'not stated' were distributed amongst the five time periods in ratio to those 1,807 who did indicate when they had completed the examinations.

Table 2.7 shows that the calculated response rates increased steadily from 38.1% amongst those with over 30 years' experience to 58.1% amongst those with up to 5 years' experience.

Table 2.7.

Years of experience	Faculty	Number		Total		Response rate (%)	
		Institute					
Over 30	152	516	(383)	668	(535)	30.5	(38.1)
20-30	123	486		609		44.5	
10-20	201	1,070		1,271		47.1	
5-10	93	500		593		50.8	
0-5	118	677		795		58.1	
	687	3,249	(3,116)	3,936	(3,803)	46.7	(48.3)

2.6.7 The Faculty were able to provide the statistics on current employment tabulated in Table 2.8. The Institute provided a two-way breakdown by type of employer and area of work from which we compiled the Institute figures tabulated. We were unable to distinguish accurately between benefits consultants and insurance consultants.

Again the figures in parentheses make allowance for the 133 Institute Fellows not mailed. The response rate of retired Fellows is lower than for active Fellows. This is also true for the 'other' category though this may be largely due to the difference between the treatment of the membership statistics and that of the questionnaires.

Table 2.8.

Current employment	Faculty	Number		Total		Response rate (%)	
		Institute					
Life Office	317	1,440		1,757		51.1	
General Insurance	21	81		102		60.8	
Benefits/Insurance Consultant	141	741		882		63.3	
Government/Education	11	70		81		43.2	
Retired	120	457	(324)	577	(444)	26.2	(34.0)
Other	77	460		537		25.0	
	687	3,249	(3,116)	3,936	(3,803)	46.7	(48.3)

2.6.8 We decided to undertake the analysis of the questionnaire results on the basis of the raw findings rather than to attempt to weight the findings against the profession's population. This was for three reasons: (1) the population statistics were incomplete and subject to discrepancies; (2) the differences are unlikely to be significant; and (3) the raw findings represent the views of those Fellows interested enough to return the questionnaire.

## 2.7. Statistical Independence of Demographic Factors

2.7.1 Each of the demographic factors was cross-tabulated against each of the others, so that we could investigate whether the demographic factors were independent of each other, or related in some way.

Chi-squared tests with probability values\* were used to assess independence, and further details of these are included in Appendix II.

**2.7.2 Location v. professional designation.** As expected there was a very strong level of dependence between location and professional designation, with a much higher concentration of Faculty members in Scotland and Institute members in England.

**2.7.3 Location v. years of experience.** There is weak evidence of a lack of independence between location and years of experience (probability value 6.8%).

Looking at the individual cells from the two-way table it would appear that there is a greater concentration of those with over 30 years' experience in Scotland and Northern Ireland and a lower concentration of those with 20 to 30 years' experience in Northern England and Wales.

**2.7.4 Location v. current employment.** These two factors failed the test for independence by a wide margin.

The major areas of dependence were in London (where the actual number working in Life Offices was far less than if independent, whilst those in Government, General Insurance and both types of Consultancy were more abundant), Scotland and Northern Ireland (where there were more Life Office employees but fewer Benefits and Insurance Consultants) and to a lesser extent Southern England (where there were more Life Office workers with fewer in Government, General Insurance and 'Others').

**2.7.5 Professional designation v. years of experience.** With a probability value of exactly 5% there is evidence that these two factors are not independent.

The main cause for independence being rejected was the relatively higher proportion of Faculty members who have over 30 years' experience.

**2.7.6 Professional designation v. current employment.** For these two factors the test rejected independence quite strongly.

The main cause for independence being rejected was the relatively small number of Faculty members who are Insurance Consultants. In addition there are relatively more retired Faculty members and Faculty Life Office employees.

**2.7.7 Years of experience v. current employment.** Initially we ran the statistical test on all employment categories including 'Retired'. This, however, quite obviously displayed dependency due to the very high retired numbers who had over 30 years' experience and the fact that no retired persons had less than 10 years' experience. Thus we decided to test the data for independence after removing the 'Retired' sub-group. The factors were still, however, found to be dependent on each other mainly due to the relatively large amount of 'Other' employments and Benefits Consultants with 10 to 20 years' experience and the relatively small number of Life Office employees with over 30 years' experience.

\* A chi-squared test is used here to determine whether two factors are independent of each other by investigating how close the actual value in each cell of the cross tabulation is to the value expected if independence exists. A probability value is the probability of achieving a result or response as significant as that actually obtained, if the two factors were truly independent.

2.7.8 The results of these comparisons, and in particular the relationships between certain factors, should be borne in mind when considering the conclusions of the following sections.

### 3. S.W.O.T. ANALYSIS

#### 3.1 *Introduction*

3.1.1 The principles of the S.W.O.T. analysis will probably be familiar (determination of Strengths, Weaknesses, Opportunities and Threats).

3.1.2 M. Iqbal<sup>(2)</sup> placed the analysis in the context of a marketing audit of a company. Within this audit, he quotes H. Davidson<sup>(3)</sup> as identifying five headings:

Knowledge, Performance, Attitude, Strategy and Execution.

The S.W.O.T. analysis relates closely to the strategic element of the audit. It is concerned with the present, internal elements (in particular the strengths and weaknesses) and also the future, external influences (opportunities and threats)—though the timescale of the future requires careful consideration.

3.1.3 It is not, of course, sufficient to list a number of items under each heading. The analyst—or the person/people using the analysis—must also interpret the relative weighting of each item and assess how strengths can best be utilised; what steps are necessary to address weaknesses; how best opportunities can be exploited; and what action needs to be taken to enable threats to be overcome.

#### 3.2 *S.W.O.T. Analysis of the Actuarial Profession*

3.2.1 While the normal context of the S.W.O.T. analysis is in assessing the strengths and weaknesses of a company and revealing the opportunities and threats that it faces, there is nothing in the analysis that intrinsically restricts it to corporate matters.

3.2.2 In undertaking our 'Marketing Audit' of the actuarial profession, it seemed appropriate for us to incorporate a S.W.O.T. analysis of the profession, within the questionnaire issued to the membership.

The purest research would have been to allow each respondent to provide their own S.W.O.T. analysis for the profession. However, as well as being impractical in terms of the subsequent analysis, it is unlikely that this approach would have produced a high response. To this end the members of the Marketing Research Group each prepared their own S.W.O.T. analysis. These were then amalgamated after discussion to provide a combined S.W.O.T. analysis comprising 8 Strengths, 9 Weaknesses, 5 Opportunities and 6 Threats.

3.2.3 There is clearly the potential for some bias on our part in the selection of the items offered and so we gave respondents the opportunity to identify other items—which they took with alacrity!

Thirty-four additional Strengths were identified, receiving a total of 305 'mentions'. Fifty-five additional Weaknesses were identified gaining a total of

400 'mentions'. Forty-three additional Opportunities were noted, though with a total of only 178 'mentions'. The additional Threats numbered 53 although these were again rather more sparsely spread with the 'mentions' totalling 222.

Examples of the more frequently mentioned items are given in Sections 3.4–3.7.

3.2.4 Of course the same item can appear under opposite headings. For example the size (i.e. smallness) of the profession can be both a strength and weakness and the European dimension can be seen by some as an opportunity and by others as a threat.

Indeed, it is perfectly reasonable for someone to see Europe as both an opportunity and a threat—depending, for example, on which aspects are considered or, perhaps, on the reaction of the profession to the challenges being faced.

### 3.3 *Analysis of Results*

3.3.1 The results under each of the four sections of the S.W.O.T. analysis were analysed as follows:

The percentages agreeing strongly, agreeing, disagreeing and disagreeing strongly with each Strength, etc. were determined. An overall weighted average of these percentages was then calculated giving weights of +3 to agree strongly, +1 to agree, –1 to disagree and –3 to disagree strongly. Thus each Strength, etc., has been given an index figure varying between +3 (all agree strongly) to –3 (all disagree strongly).

Variations in views between different groups of the profession were also analysed to determine if there were significant differences of opinion within the profession. The results were analysed according to the demographic criteria detailed in Section 2.

### 3.4 *Strengths*

3.4.1 The profession's view of its strengths are indicated by Table 3.1. Overall, there was support for all of the suggested strengths, but the depth of feeling varied from very strong agreement for specialist skills of actuaries (index figure +2.36) to very weak agreement for good communication within the profession (+0.12).

Other strengths which received a significant number of mentions were flexibility (53 times), integrity (42), and analytical ability (30).

3.4.2 Overseas actuaries more highly regarded the discipline of the studying process (index figure 0.90 against the overall index of 0.55).

There were no discernible differences between the views of members of the Faculty and the Institute.

The extent to which actuaries regarded both the discipline of the studying process and good communication within the profession as strengths produced some interesting results when analysed according to number of years' experience, as shown in Table 3.2.

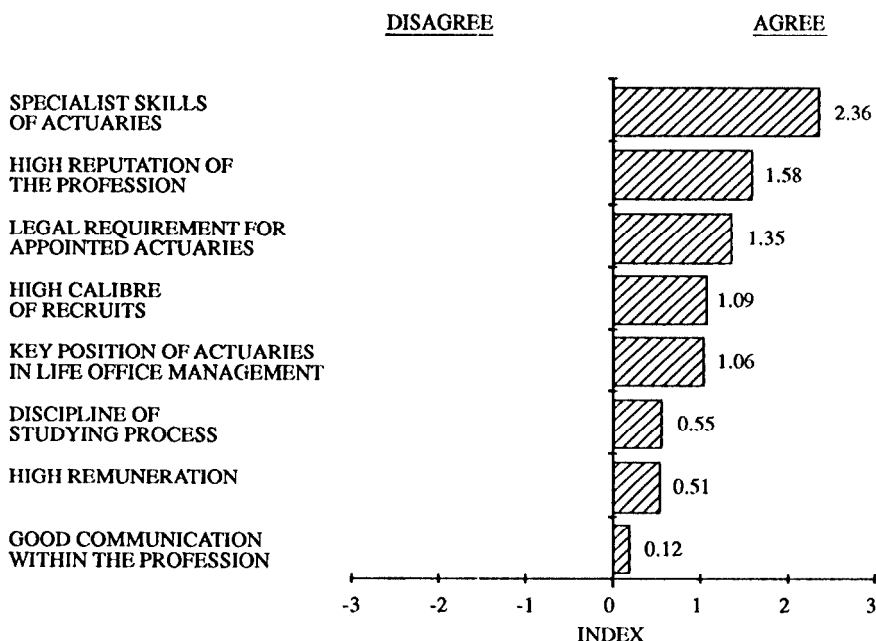
Table 3.1. *Strengths*

Table 3.2.

Years of experience	Discipline of studying (Index)	Good communication (Index)
All	+ 0.55	+ 0.12
Over 30	+ 1.17	+ 0.77
20-30	+ 0.87	+ 0.28
10-20	+ 0.54	+ 0.03
5-10	+ 0.15	- 0.15
0-5	+ 0.34	+ 0.02

The depth of feeling falls noticeably as experience reduces, but with the notable exception of the most recent qualifiers.

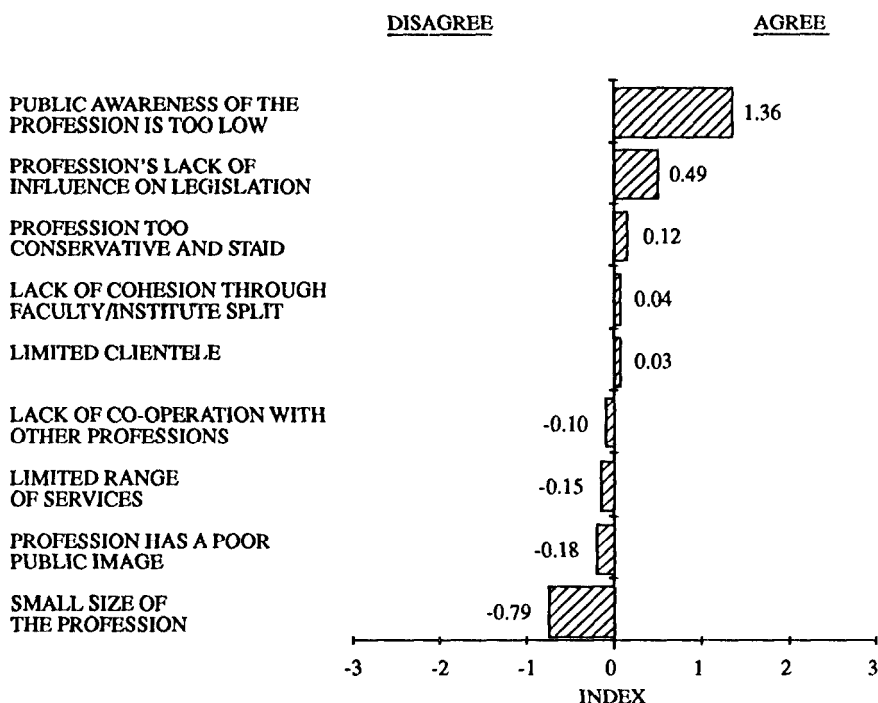
Opinions also differ according to employment. Those working in life offices attach more weight to the key position of actuaries in life office management (1.34 cf. 1.06). Benefits consultants gave less weight to the legal requirement for Appointed Actuaries (1.14 cf. 1.35), good communication (-0.20 cf. +0.12), the profession's high reputation (1.04 cf. 1.58) and the key position of actuaries in life office management (0.55 cf. 1.06).

Those actuaries who have retired gave more weight to the key position of actuaries in life offices (1.45 cf. 1.06), good communication (0.82 cf. 0.12) and study discipline (1.32 cf. 0.55), these last two reinforcing the correlation with experience.

### 3.5 Weaknesses

3.5.1 The weaknesses suggested did not receive such unanimous support as the strengths and there was not generally such depth of support. The results are summarised in Table 3.3. Public awareness being too low is most strongly regarded as a weakness with an index of 1.36, the next highest being lack of influence on legislation (0.49). The strongest disagreement however ( $-0.79$ ) was with the small size of the profession, being listed as a weakness. Indeed, 27 respondents specifically mentioned this as a strength. There was a slight disagreement that poor public image ( $-0.18$ ), the lack of co-operation with other professions ( $-0.10$ ), and the limited range of services ( $-0.15$ ) could be considered weaknesses.

Table 3.3. *Weaknesses*





Other weaknesses mentioned were the education system (58 votes), the inability to communicate effectively (53), complacency/narrow outlook (41) and lack of management training/skills (30).

3.5.2 Overseas respondents disagreed less strongly with the small size of the profession being regarded as a weakness ( $-0.48$  cf.  $-0.79$ ). The same group also felt the lack of cooperation with other professions to be more of a weakness ( $+0.16$  c.f.  $-0.10$ ).

Differences of opinion regarding whether the profession being too conservative and staid is a weakness also occurred according to experience. As for certain strengths, depth of feeling progresses with number of years experience as shown in Table 3.4. The index for the retired group ( $-0.40$ ) reinforces this feature.

Table 3.4.

Years of experience	Too conservative and staid (Index)
All	+0.12
Over 30	-0.48
20-30	-0.15
10-20	+0.16
5-10	+0.23
0-5	+0.33

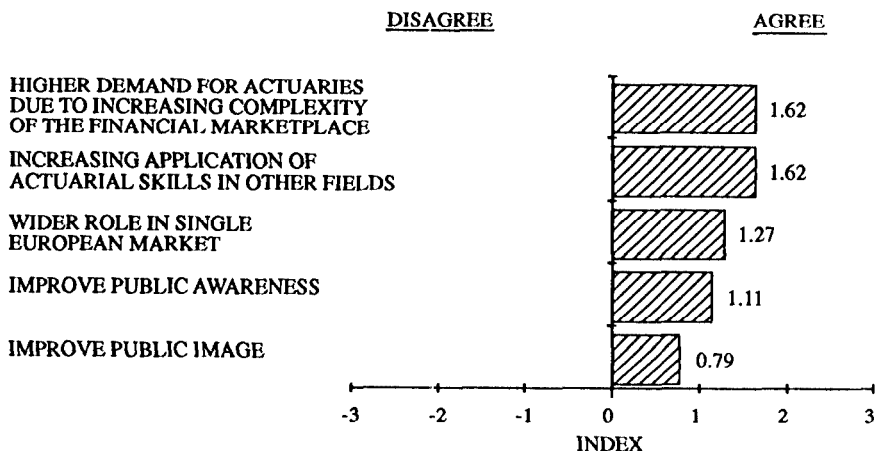
The lack of cohesion resulting from the Faculty/Institute split was the most significant area giving rise to differences of opinion between Faculty and Institute members. Institute members only just regarded this as a weakness ( $+0.11$ ) whereas Faculty respondents disagreed that it was a weakness ( $-0.24$ ).

Benefits consultants felt low public awareness to be more of a weakness (1.59 cf. 1.37) together with lack of influence on legislation (0.74 cf. 0.49). They did, however, disagree that limited clientele should be regarded as a weakness ( $-0.23$  cf.  $+0.03$ ). Actuaries with up to five years' experience felt the small size of the profession to be less of a weakness ( $-1.01$  cf.  $-0.79$ ). The retired members stood out as being the only occupational group not considering the Faculty/Institute split as a weakness ( $-0.30$  cf.  $+0.04$ ).

### 3.6 Opportunities

3.6.1 The respondents generally agreed with all of the suggested opportunities. The index figures varied from 1.62 for both the increasing complexity of the financial marketplace increasing the demand for actuaries and for the increasing application of actuarial skills in other fields down to 0.79 for improving public image. The full results are given in Table 3.5.

Other opportunities mentioned were 23 votes for general management, 22 for general insurance and 20 for giving financial advice.

Table 3.5. *Opportunities*

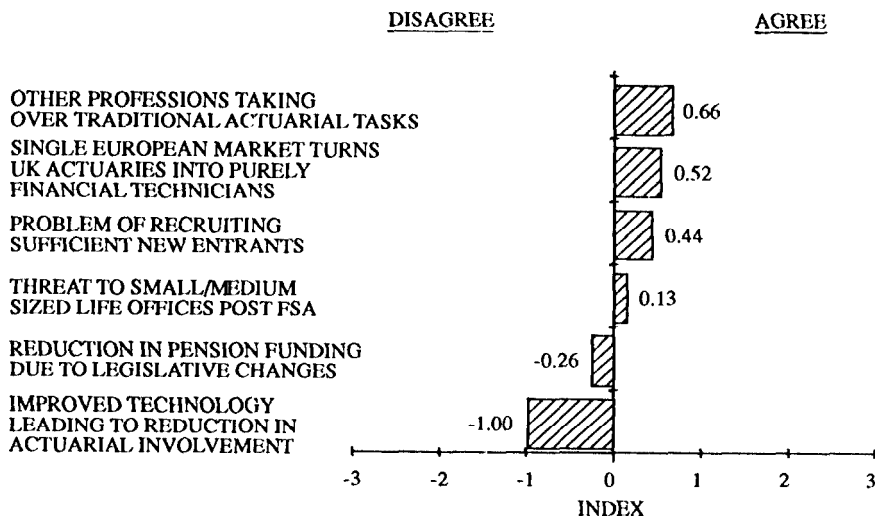
3.6.2 Actuaries in the Republic of Ireland saw more opportunity arising from the increasing complexity of the financial marketplace (2.13 cf. 1.62) and the application of actuarial skills to other fields (2.19 cf. 1.62). As might be expected this was also regarded as more of an opportunity by the 'other occupations' group (1.98 cf. 1.62). However it was seen as less of an opportunity by actuaries working in Scotland and Northern Ireland (1.39 cf. 1.62). Improving public awareness and improving public image were both seen as greater opportunities by benefits consultants (1.36 cf. 1.11 and 1.01 cf. 0.79 respectively).

### 3.7 Threats

3.7.1 None of the suggested threats gave rise to significant concern amongst the profession with the highest index figure of 0.66 being given to the threat from other professions, followed by the threat of being turned into financial technicians by the Single European Market with an index figure of 0.52. Improved technology is not generally regarded as a threat (-1.00) nor is a reduction in pensions work arising from legislative changes. The full results are given in Table 3.6.

Other threats mentioned were the lack of being in touch with new developments (24 votes) and retaining new entrants (16), though these seem more like weaknesses than threats. Restrictive legislation also received 16 votes.

3.7.2 Overseas respondents regarded the European market as less of a threat (0.21 cf. 0.52) (perhaps more of an opportunity?) as did benefits consultants (0.20 cf. 0.52). Those working in life offices however felt this to be more of a threat (0.70 cf. 0.52). Only in the Republic of Ireland was the problem of

Table 3.6. *Threats*

recruiting sufficient new entrants not regarded as a threat ( $-0.24$  cf.  $+0.44$ ). Actuaries in government service and education felt more concerned than average about other professions ( $1.00$  cf.  $0.66$ ).

The threat of improved technology was dismissed more strongly by new qualifiers with less than 5 years' experience ( $-1.20$  cf.  $-1.00$ ) and this reduced progressively with increasing experience so that for those with over 30 years' experience the rating was  $-0.52$ . Not surprisingly, a similar rating of  $-0.57$  applied for retired actuaries.

### 3.8 Comparison with predictor questionnaires

3.8.1 The members of the Faculty and Institute Councils were asked to produce a ranking of the strengths, weaknesses, opportunities and threats listed in the questionnaire, based on their prediction of members' responses. These predictions were then compared with the actual results produced by the survey. Rank correlation co-efficients (RCC)\* were used to quantify the agreement/disagreement between the actual and predicted results.

3.8.2 *Strengths*. In the case of strengths there were only small differences in respect of the Faculty and Institute Councils with RCCs of 0.81 and 0.90

\*A rank correlation coefficient shows the correlation between the relative orders of a set of data pairs. It can have a value between  $-1$  and  $+1$ ,  $+1$  indicating perfect agreement between the two rankings. It has been used in this paper to show the degree of correlation between the rankings of the various Strengths, Weaknesses etc. produced by the survey and those predicted by the Faculty and Institute Councils.

respectively. The main difference between the actual and predicted results was that both Councils predicted that the key position of actuaries in life office management would rank higher than the legal requirement for Appointed Actuaries and the high calibre of recruits whereas the actual results rank it lower.

**3.8.3 Weaknesses.** The deviation between actual and predicted results for weaknesses is much more pronounced with RCCs of 0.28 and 0.29 for the Faculty and Institute Councils respectively. The actual rankings and those predicted are shown in Table 3.7. In order to compare the predictions with the relative memberships, the actual rankings for Faculty and Institute respondents are also given.

The major differences that apply for both Councils are:

- (i) the small size of the profession was predicted to be a greater weakness than given by the actual results, and
- (ii) the lack of cohesion with the Faculty/Institute split was predicted to be less of a problem than the results indicate.

In addition the Faculty Council also expected the profession being too conservative and staid to be less of a weakness. The Institute Council expected the profession's lack of influence on legislation to be less of a weakness and the profession's poor public image to be more of a problem than the actual results indicate.

The correlation between predicted and actual results is improved slightly if we compare separately the predictions by the Faculty Council with the actual Faculty responses and similarly compare the Institute Council prediction with the actual Institute responses. However the RCCs are still fairly low at 0.38 and 0.31 respectively.

Table 3.7. *Weaknesses—comparison with predictors*

Weaknesses	Survey rank			Predicted rank	
	Combined	Faculty only	Institute only	Faculty Council	Institute Council
Public awareness of profession is too low	1	1	1	1	1
Profession's lack of influence on legislation	2	2	2	2	7
Profession is too conservative and staid	3	3	3	9	2
Lack of cohesion through the Faculty/Institute split	4	7	4	8	8
Limited clientele	5	4	5	3=	3
Lack of co-operation with other professions	6	6	6	3=	9
Limited range of services	7	5	8	7	5=
Profession has a poor public image	8	8	7	6	4
Small size of the profession	9	9	9	3=	5=

**3.8.4 Opportunities and threats.** In the case of both opportunities and threats the actual rankings agreed exactly with those predicted by both Councils.

3.8.5 These comparisons show that in general the Faculty and Institute Councils are in tune with their membership. However, there are differences of opinion as highlighted in Table 3.7 regarding the perceived weaknesses.

### 3.9 *Conclusions*

The key conclusions from the S.W.O.T. analysis are:

- A very significant majority of respondents are positive about the future of the actuarial profession. All the Strengths and all the Opportunities were rated positively—in all the 13 categories available there was a majority of respondents who agreed/agreed strongly over those who disagreed/disagreed strongly.
- There was much less consistency in relation to the Weaknesses and Threats with 8 out of the 15 categories recording an overall majority of respondents disagreeing or disagreeing strongly (though in 2 of these 8 the overall index figure was, in fact, slightly positive).
- A significant number of respondents, without prompting, identified complacency as a Weakness. Complacency can be seen as a failure to recognise weaknesses or threats, so the results of the S.W.O.T. analysis may be evidence to support these views. Further research into the reasons for particular responses having been given would be required before conclusions could be drawn with any confidence.
- Communication would seem to be an important area identified for action by the profession. Not only is this the lowest ranked of the Strengths, it also is a crucial element in addressing the two most highly ranked Weaknesses, that public awareness of the profession is too low and the profession's lack of influence on legislation.

## 4. PUBLIC AWARENESS

### 4.1 *Introduction*

Section B of the questionnaire looked at the public awareness and image of the actuarial profession. Question 1 assessed the members' views on how aware different groups of people should be of the actuarial profession. Question 2 assessed the perceived actual awareness.

### 4.2 *Results*

4.2.1 The figures in Table 4.1 represent the percentage of respondents who answered very aware or fairly aware to the above questions (as opposed to not really aware or unaware) and clearly demonstrate that perceived actual awareness falls short of desired levels for all six groups.

Table 4.1. *Awareness of the actuarial profession*

	Should be very/fairly aware (%)	Are very/fairly aware (%)
General public	60.3	2.3
Undergraduates	97.8	39.1
Journalists	97.2	55.0
Company directors	98.8	66.8
Pension scheme trustees	99.4	93.8
Insurance intermediaries	96.4	83.7

4.2.2 We have used the same technique as in Section 3 to convert the various percentages into a single index. We have allocated a score of +3 for very aware, +1 for fairly aware, -1 for not really aware and -3 for unaware. These indices are shown in Table 4.2.

Table 4.2. *Awareness of the actuarial profession*

	Desired level of awareness index	Perceived level of awareness index
General public	0.22	-2.15
Undergraduates	2.05	-0.28
Journalists	2.01	0.11
Company directors	2.38	0.45
Pension scheme trustees	2.77	1.73
Insurance intermediaries	2.19	1.17

### 4.3 Predicted Results

4.3.1 Separate comparisons were made between the actual results and those predicted by both the Faculty and Institute Councils. The results are shown in Tables 4.3. and 4.4.

In order to test the predictor results against the survey results, a number of *t*-tests\* were performed. These showed that for desired awareness the Faculty and Institute Council predictions were significantly lower than the survey results in all cases (probability values less than 5%) apart from the Faculty predictions for pension scheme trustees and insurance intermediaries.

For the perceived actual levels of awareness the Institute predictions were all significantly different from the survey results. This was also true for the Faculty Council predictions for general public and pension scheme trustees.

\*In the context of this section *t*-tests were used to compare the predictor results and the survey results. The tests were applied using the indices and probability values were calculated. A probability value less than 5% implies a significant difference between predictor and survey results at the 5% level.

Table 4.3. *Q1 desired levels of awareness (%)*

	Survey results	Predicted results	
		Faculty Council	Institute Council
General public	60.3	45.0	36.9
Undergraduates	97.8	52.5	61.2
Journalists	97.2	79.6	68.5
Company directors	98.8	76.3	81.3
Pension scheme trustees	99.4	95.4	92.7
Insurance intermediaries	96.4	93.8	80.4

Table 4.4. *Q2 perceived levels of awareness (%)*

	Survey results	Predicted results	
		Faculty Council	Institute Council
General public	2.3	11.7	18.0
Undergraduates	39.1	35.8	30.7
Journalists	55.0	51.3	37.6
Company directors	66.8	62.1	52.2
Pension scheme trustees	93.8	80.8	75.4
Insurance intermediaries	83.7	81.7	59.8

4.3.2 It is interesting to look at the difference between perceived actual awareness and the desired levels of awareness (the 'gap') and compare the survey results with the predictions of both Councils. These figures are given in Table 4.5.

Table 4.5. *Difference between desired and perceived awareness (%)*

	Survey results	Predicted results	
		Faculty Council	Institute Council
General public	58.0	33.3	18.9
Undergraduates	58.7	16.7	30.5
Journalists	42.2	28.3	30.9
Company directors	32.0	14.2	29.1
Pension scheme trustees	5.6	14.6	17.3
Insurance intermediaries	12.7	12.1	20.6

Awareness levels fall well short of the desired levels for all groupings except pension scheme trustees and insurance intermediaries. This reflects the fact that these two groups tend to have active involvement with the profession because of the nature of their work, whereas the first four groups do not necessarily have any involvement.

For the first three groups it is interesting to note that the Councils' prediction of 'the gap' falls significantly short of the perception of the survey respondents.

This suggests that both Faculty and Institute Councils underestimate the gap between actual and desired levels of awareness.

4.3.3 We can conclude that the predictor results do not produce an accurate representation of the overall survey response. One can also conclude that the response from each Council suggests that they underestimate the profession's views of ideal awareness and actual awareness in almost all categories.

#### *4.4 Demographic Analysis of Survey Results*

4.4.1 Each set of survey responses was further analysed by the various demographic factors. In order to assist in this analysis, we have used the same technique as in Section 4.2 to convert the various percentages into a single index (see Appendix III).

4.4.2 There were few significant divergences from the overall indices when looking at desired awareness levels. This is not particularly surprising since the mean number responding either very aware or fairly aware lies between 95% and 100% for 5 out of 6 groups.

4.4.3 Significant divergences were observed for retired members' perception of desired awareness levels for the general public (0.54 cf. 0.22) and members working overseas view of the general public (0.49 cf. 0.22). In addition, significant divergences were observed regarding perception of desired awareness levels for insurance intermediaries by three sub-groups: insurance consultants (1.80 cf. 2.19); Fellows resident in Scotland/N.I. (2.44 cf. 2.19) and FFAs (2.36 cf. 2.19).

4.4.4 There was more significant divergence from the mean when actual awareness levels were investigated. Those retired and those with over 30 years' experience have a perception of general public awareness that is higher than the perception of other members (figures of -1.36 and -1.53 respectively against the mean of -2.15). The overlap between these two groups is significant, so the answers demonstrate a consistency that might have been expected. At the other end of the scale, those most recently qualified have a low view of general public awareness (-2.45).

4.4.5 Looking at actual awareness of undergraduates (mean of -0.28), those with over 30 years' experience had a mean response of +0.12 and those with up to 5 years' experience, a response of -0.53.

Given that those with between 20 and 30 years' experience also had a response rate in excess of the mean, there is an interesting divergence between older and younger actuaries (see Table 4.6).

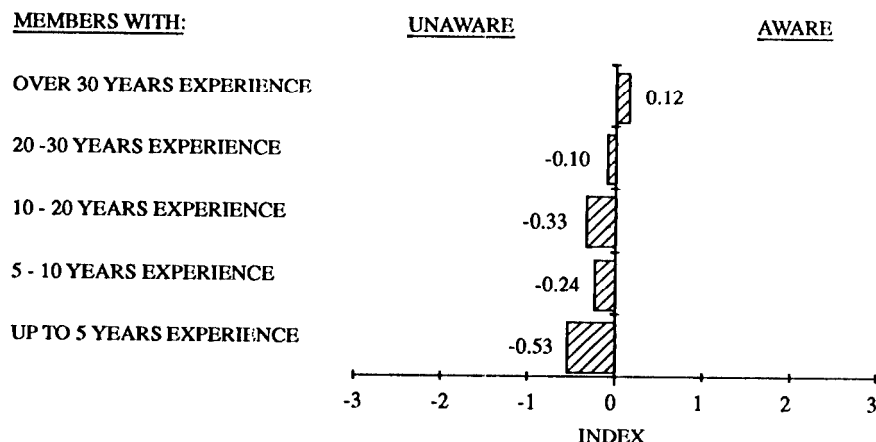
On the assumption that one might expect the more recently qualified actuary to be more in tune with undergraduate awareness, it would suggest that those who qualified more than 5 years ago quickly lose touch with the actual awareness levels of undergraduates.

4.4.6 In looking at awareness levels of journalists, company directors and trustees, the only sub-group to diverge significantly was in the overseas members' perception of journalists (-0.17 cf. 0.11).



4.4.7 Greatest divergence occurred when looking at insurance intermediaries (mean of 1.17). The difference between Faculty members (1.45) and Institute members (1.08) reflects the different levels of contact generally experienced by members of the two bodies. This is borne out by the results analysed by geographical location where Scotland/Northern Ireland had a mean score of 1.56. It is interesting to note that the view of members working in life offices (1.41) was dramatically different from those in other employment. Other significant divergences for insurance intermediaries were observed for those members with 20–30 years' experience (1.48), those with less than 5 years' experience (0.91), benefit consultants (0.83) and those working in London (0.93).

Table 4.6. *Undergraduates' actual awareness*



#### 4.5 Key Conclusions of Section 4

- There is a significant gap between perceived and desired levels of awareness, particularly with regard to groups of individuals who have no day-to-day contact with actuaries. Both Councils underestimate the size of this gap.
- There are a number of specific instances where indices diverge significantly from the mean, with the most striking of these being the different perception of intermediary awareness. This perception tends to be dependent on the amount of day-to-day contact. Those members most likely to have contact tend to have a higher opinion of intermediaries' actual awareness than those with less contact.
- The perception of undergraduate awareness changes with experience, the tendency being to over-estimate awareness levels the longer the period since the member was an undergraduate himself.

## 5. IMAGE

5.1 *What is the Image of the Profession?*

In his paper to the Birmingham Actuarial Society, B. R. J. Brown<sup>(4)</sup> considered the image of the profession both internally and externally, and suggested that some changes are required. In particular he felt we need to improve our position by being seen as leaders in industry. In his summary of the paper and the discussion<sup>(5)</sup>, M. Packham reported that the debate raised more questions than answers and that this would be continued elsewhere. This section of the paper gives some further answers and the wider opportunity for debate.

5.1.1 Section B, question 3 of the questionnaire requested respondents to pick three adjectives, from a given list, which:

- (a) they felt most aptly describe the general image of the actuarial profession,
- (b) they would most like to describe the image of the actuarial profession, and
- (c) most aptly describe their current employment.

This section was included to try to obtain some subjective comments from members as to how they felt the current image of the profession matched their aspirations for it and how their aspirations for the profession reflected their views of their own occupations.

The list of adjectives provided was chosen in the following way. An extensive list was developed and reviewed by the Research Group for completeness and to eliminate adjectives with similar meanings. The resultant list was then tested for appropriateness on a few members of the profession unconnected with the Group. As a further precaution, respondents were prompted to reply using any adjectives which they considered more appropriate than those provided.

5.1.2 A divergence exists between the perceived current image of the actuarial profession and its desired image. This was measured by ranking the responses to the adjectives for both questions and calculating the rank correlation coefficient (RCC) for the rankings; an RCC of  $-0.40$  was calculated. A similar divergence occurs between the current image of the profession and members' current occupations (RCC  $-0.43$ ). However, a significant correlation exists between members' desired image for the profession and their current occupations (RCC  $+0.51$ ).

The adjectives considered to be most apt by members are shown in Table 5.1.

Table 5.1.

Most apt adjectives to describe:

The current image of the profession	The desired image for the profession	Members' occupations
(1) Technical	(1) Influential	(1) Challenging
(2) Complex	(2) Challenging	(2) Responsible
(3) Lucrative	(3) Respected	(3) Interesting
(4) Dull	(4) Responsible	(4) Diverse

Table 5.2. Percentage of members who considered each adjective apt to describe:

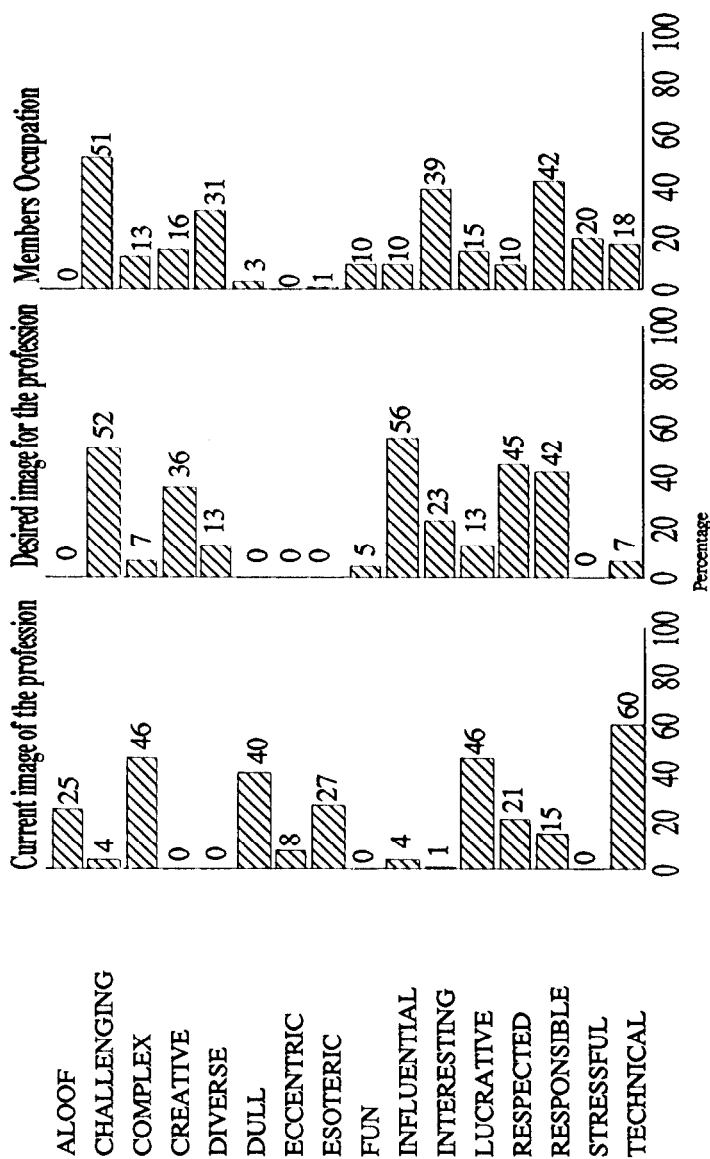


Table 5.2 illustrates the relative response rates for each of the adjectives.

In addition some members chose adjectives outside the list supplied to describe the profession or their aspirations for it. Obscure and boring were the most common adjectives used to describe the image of the profession from outside the supplied list, whereas a few actuaries would like the profession to be described as progressive and/or helpful. A few members admitted to their occupations being frustrating.

5.1.3 There is a very high correlation between the results from Faculty members and those from Institute members. For all three questions the RCC between the results of members of the two bodies was in excess of +0.96.

5.1.4 The analysis by experience of members showed some divergence, with the group comprising actuaries in or near to retirement showing most divergence from the others. Actuaries in or near to retirement considered it less important that the profession be seen to be challenging, but more important that it be seen to be creative.

The perceived image of the profession seemed to vary by experience, this being most noticeable in replies to the adjectives—dull, esoteric, lucrative and responsible, as shown in Table 5.3.

5.1.5 The members' image of the profession did not differ significantly by occupation. However, those working in government and education consider the current image of the profession to be more lucrative and less respected than other members, and general insurance practitioners saw the profession as being highly technical.

The major difference in the desired image of the profession lay between differing occupations. Those members of the profession working in insurance consultancy want the profession to be seen to be more challenging and responsible with less emphasis on being respected; general insurance practitioners also want the profession to be seen as responsible and to emphasise the diverse nature of the work, more so than their colleagues in other occupations. Members working in government and education place relatively greater weight on emphasising the interesting nature of the work. It is perhaps because the role of the actuary in general insurance and insurance consultancy is less well established that the image required from members working in these areas is different to that required by their colleagues in the more established areas of life insurance and pensions.

Members with differing occupations represent the area where there is greatest divergence between the actual and desired images of the profession. Those members working in insurance consulting found the image of the profession most at odds with their desired image (RCC - 0.56) whereas benefits consultants found the image least at odds with their desired image (RCC - 0.25). The average RCC for the profession was -0.43.

The adjectives used by members to describe their occupations varied between differing occupations. Table 5.4 shows any significant differences between the

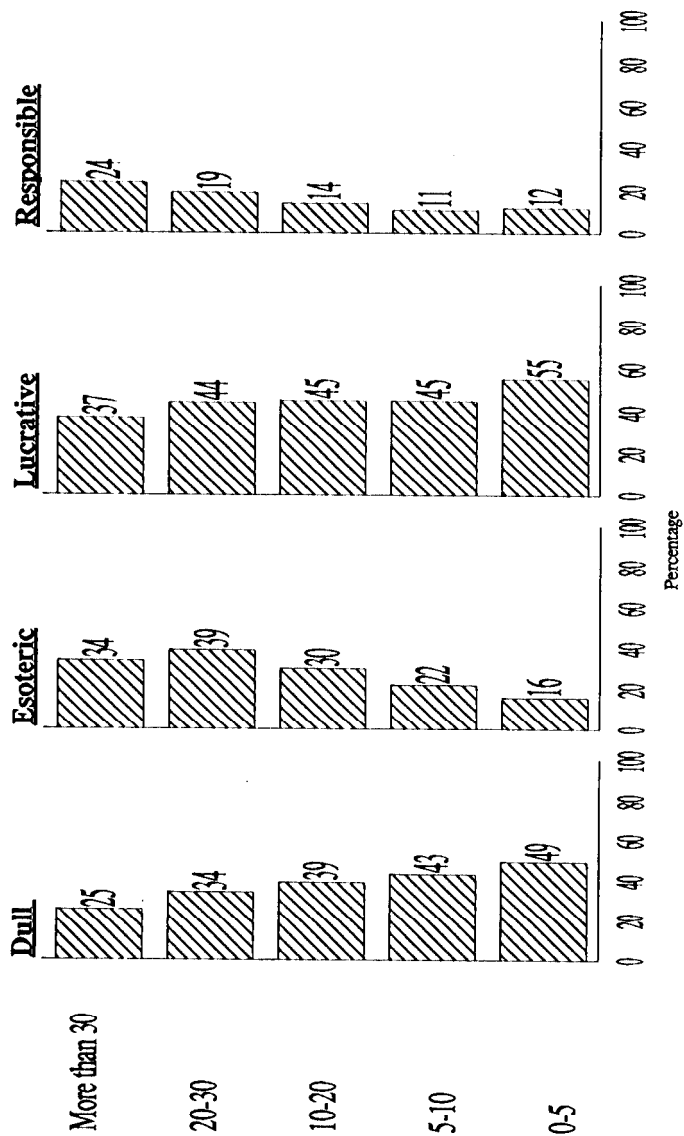
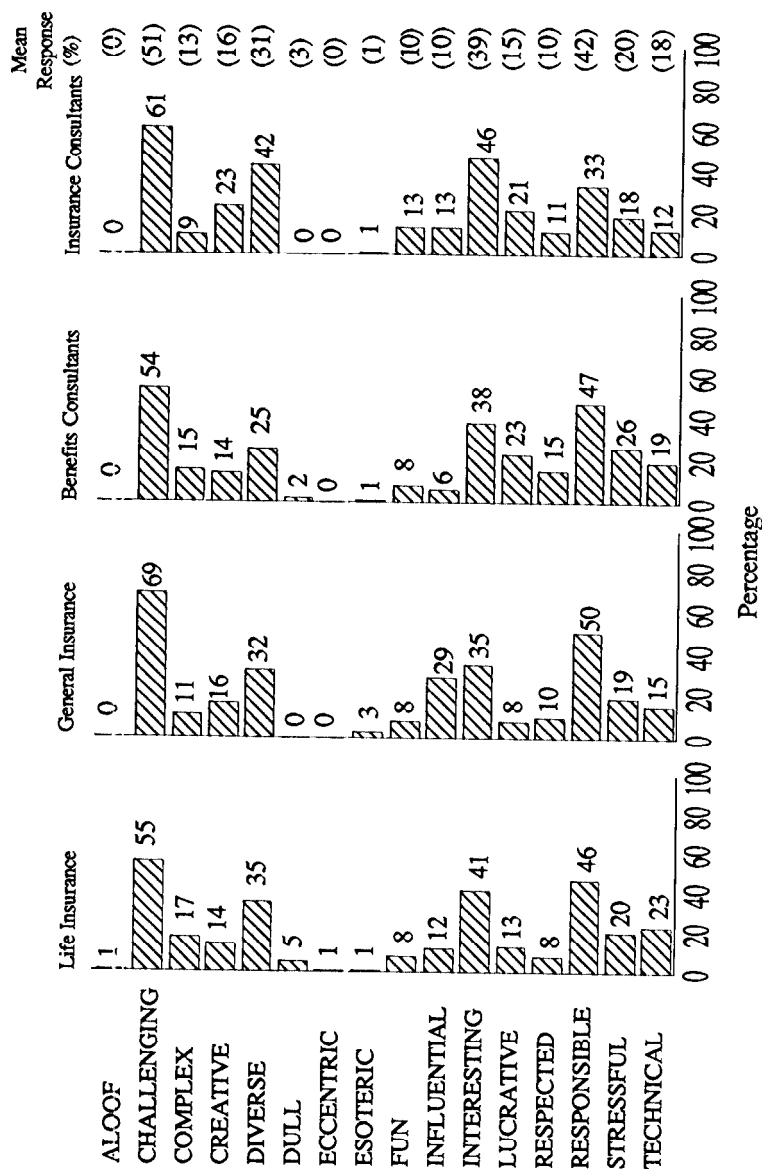
Table 5.3. *Image of profession according to years of experience*

Table 5.4. *Description of occupations*

adjectives used by members to describe their occupations. The figures in parentheses give the mean response for each adjective.

It is again in the non-traditional areas for actuaries that there is greatest correlation between the desired image of the profession and their occupations: for both general insurance and insurance consultancy the RCC is approximately +0.72. In the more traditional area of pensions the RCC is +0.42.

5.1.6 There is very little variation in the difference between members' current and desired views according to where they are located.

There was some diversity, according to location, in the adjectives used to describe members' occupations. Those members living in the North of England wanted to emphasise the responsible and respected nature of their job and to play down its challenging nature. Those living in Scotland consider it less important to emphasise the respected nature of their occupations.

5.1.7 There is very close correlation between the results of the survey and the results as predicted by the Faculty and Institute Councils. The results are as shown in Table 5.5.

*Table 5.5. Rank correlation coefficients of  
the survey and predicted results*

	Faculty Council	Institute Council
Image of profession	+0.91	+0.91
Desired image of profession	+0.91	+0.94
Occupations	+0.89	+0.88

The main areas where the predictor questionnaires differed were as follows.

Members consider the image of the profession to be less responsible than the Institute Council predicted, and to be less fun than predicted by the Faculty Council. Generally, members want the image of the profession to be less dull compared to both of the predicted results. In addition both predictors anticipated members' occupations to be more complex and less diverse than was the case and in addition, the Institute predictor anticipated members' occupations to be less creative than members indicated. Nevertheless the results seem to indicate that both Councils are closely in touch with the views of the members in this area.

5.1.8 Key conclusions to be drawn from the responses to Section B, question 3 are:

- The current image of the profession does not match either the members' desired image or their occupations. However, there is reasonable correlation between members' desired image for the profession and their views on their occupations.
- The image of the profession varies by experience of members and by their occupations. The more experienced members of the profession think it is

viewed as less 'dull' and 'lucrative' and more 'esoteric' and 'responsible' than the more recently qualified members. Insurance consultants, in particular, find the image of the profession most at odds with their desired image.

—A close correlation existed between the results of the predictor questionnaires and the actual survey results.

## 5.2 *How Satisfactory is the Image of the Profession?*

5.2.1 The questionnaire next addressed the extent to which members were satisfied with the profession's image amongst various groups which are either important or potentially important to it. The overall results are summarised in Table 5.6.

It is apparent that a significant proportion of members of the profession are not satisfied with our image amongst the target groups. In particular, a majority are not satisfied with our image amongst journalists, undergraduates and the general public.

Table 5.6. *Members' satisfaction with the profession's image amongst various groups*

	Very satisfied (%)	Fairly satisfied (%)	Not really satisfied (%)	Very dissatisfied (%)	No response (%)
General public	1.4	29.5	55.0	13.1	1.1
Undergraduates	1.5	41.4	50.5	5.4	1.2
Journalists	1.6	35.8	53.9	7.5	1.1
Company directors	2.7	50.7	41.2	4.0	1.4
Pension scheme trustees	13.2	65.7	18.1	1.0	2.0
Insurance intermediaries	6.4	56.1	32.5	3.1	1.9

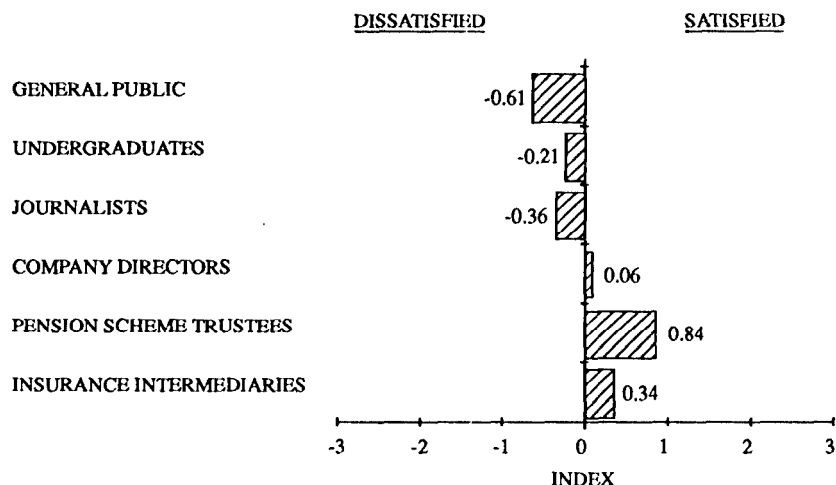
5.2.2 In order to assist in later analysis, we have used the same technique as in previous sections to convert the various percentages into a single index. We have allocated a score of +3 for very satisfied, +1 for fairly satisfied, -1 for not really satisfied and -3 for very dissatisfied. The weightings are, of course, arbitrary, but in the broadest terms a positive index figure is a measure of satisfaction and a negative index figure a measure of dissatisfaction.

Using this scoring system, the overall results for the various groups are summarised in Table 5.7.

5.2.3 The next stage of the analysis was to look at the responses from the various sub-groups of the membership as before. The index figures for these are summarised in Appendix IV.

5.2.4 Comparing the index figures from Faculty and Institute members, it is clear that there is a reasonable overall level of agreement between the two groups. There is, however, a small but consistent indication that Faculty members are more satisfied with the image of the profession, particularly amongst insurance intermediaries.



Table 5.7. *Members' satisfaction with the profession's image amongst sub-groups*

5.2.5 The analysis by years of experience demonstrated some significant differences in the index for the sub-groups and the index for the population overall, particularly in relation to undergraduates and insurance intermediaries. Indeed, what emerged was a very clear trend of reducing satisfaction (or increasing dissatisfaction) the more recently individuals had qualified. This is demonstrated in Table 5.8. We have illustrated the results produced by averaging the index for all six target groups and also for undergraduates and insurance intermediaries. We would suggest that the result for undergraduates is particularly meaningful, given that the more recently an individual has qualified, the more clear is his memory of the views of an undergraduate.

Table 5.8. *Members' satisfaction with the profession's image*

Years of experience	Average index	Undergraduates' index	Insurance intermediaries index
All	+ 0.01	- 0.21	+ 0.34
Over 30	+ 0.25	+ 0.22	+ 0.62
20-30	+ 0.12	- 0.08	+ 0.70
10-20	+ 0.01	- 0.22	+ 0.34
5-10	- 0.08	- 0.27	+ 0.22
0-5	- 0.11	- 0.40	+ 0.06

5.2.6 The analysis by current employment also disclosed some differences between the index for sub-groups and the overall index.

The index figure for retired members is significantly higher than the overall population index in relation to the image amongst undergraduates (+0.29 cf. -0.21). In relation to journalists, the index for benefit consultants is significantly lower than for the overall population (-0.54 cf. -0.36) whilst the index for life office employees is significantly higher (-0.22 cf. -0.36).

5.2.7 The analysis by geographical location shows few noteworthy divergences from the overall population indices. The most significant relate to overseas members who are much less satisfied than the rest of the population with the image amongst journalists, but more satisfied than the rest in relation to insurance intermediaries.

5.2.8 We have compared the overall results with those of predictor questionnaires completed by members of the Faculty and Institute Councils. They were asked to predict the percentage of members who would complete either the very satisfied or fairly satisfied responses. The actual results are compared with the average prediction in Table 5.9.

Table 5.9. *Members' satisfaction with the profession's image*

	Survey result (%)	Predicted results	
		Faculty Council (%)	Institute Council (%)
General public	30.9	30.8	36.3
Undergraduates	42.9	31.8	30.2
Journalists	37.4	32.9	32.6
Company directors	53.4	40.8	48.9
Pension scheme trustees	78.9	56.0	60.7
Insurance intermediaries	62.5	60.4	50.4

It can be seen that in every case the Faculty Council underestimated the profession's level of satisfaction with its image. However, on the basis of a *t*-test (at the 5% level) the understatement is only significant in relation to the image amongst undergraduates, company directors and pension scheme trustees.

With one exception (general public), the Institute Council also underestimated the profession's level of satisfaction with its image. In this case, the difference between the actual and predicted responses is significant (at the 5% level) in relation to the image for undergraduates, pension scheme trustees and insurance intermediaries.

5.2.9 Key conclusions to be drawn from the responses to Section B, question 4, are:

—There is a significant level of dissatisfaction with the image of the profession amongst the general public, undergraduates and journalists. In the case of the general public, this may be more to do with the lack of any awareness rather than a particularly poor image of the profession.

- There appears to be little disparity between members of the Institute and Faculty as regards the perceived image of the profession.
- The more recently members have qualified the less satisfied they are with the image.
- The Faculty and Institute Councils predicted lower levels of satisfaction than resulted from the survey.

## 6. MEDIA ANALYSIS

### 6.1 *Introduction*

6.1.1 There can be little doubt that, as we approach the end of the 20th century, the media have a major influence on public awareness and image. Accordingly we felt it appropriate to attempt to examine the quantity and quality of the coverage given to the profession in this area.

6.1.2 In general terms the two most influential areas of the media are television and the national press. It was felt, however, that the actuarial profession receives negligible coverage on television and that attempts at researching this area would be fruitless. As far as the national press is concerned we obtained access to a computerised facility which stores the text of back issues of various publications, in some cases as far back as 1985.

6.1.3 The following national titles were available and were selected for this analysis:

*Financial Times*

*Independent/Independent on Sunday*

*The Times/Sunday Times*

*Guardian*

*Daily Telegraph/Sunday Telegraph.*

6.1.4 In order to provide a yardstick for comparison it was also necessary to investigate the coverage given to other professions. For this purpose the accountancy and legal professions were selected as being two professions actuaries might wish to compare themselves against.

6.1.5 The computer system works on the basis of retrieving mentions of key words such as Actuary or Accountant. For the purpose of this analysis the following key words were selected:

Actuary, Actuaries, Actuarial.

Accountant, Accountants, Accountancy.

Lawyer, Lawyers, Solicitor, Solicitors, Barrister, Barristers, Law Society.

### 6.2 *Quantity of National Press Coverage*

6.2.1 Table 6.1 shows the number of references to the actuarial profession appearing in the selected titles over the five-year period 1985 to 1989 inclusive. The figures are broken down into six-month periods to show up any obvious

trends. Unfortunately the system does not store information prior to certain dates for some of the publications.

Table 6.1. *References to the actuarial profession*

Dates	<i>Financial Times</i>	<i>Independent/Independent on Sunday</i>	<i>The Times/Sunday Times</i>	<i>Guardian</i>	<i>Daily Telegraph/Sunday Telegraph</i>	Total
1/1/85-30/6/85	175	n/a	n/a	26	n/a	201
1/7/85-31/12/85	135	n/a	49	29	n/a	213
1/1/86-30/6/86	163	n/a	40	30	n/a	233
1/7/86-31/12/86	149	n/a	49	15	n/a	213
1/1/87-30/6/87	148	n/a	50	14	26	238
1/7/87-31/12/87	161	n/a	62	23	38	284
1/1/88-30/6/88	181	n/a	57	28	31	297
1/7/88-31/12/88	164	15	43	18	46	286
	(57.3)	(5.2)	(15.0)	(6.3)	(16.1)	
1/1/89-30/6/89	152	33	54	35	43	317
	(47.9)	(10.4)	(17.0)	(11.0)	(13.6)	
1/7/89-31/12/89	162	38	54	11	54	319
	(50.8)	(11.9)	(16.9)	(3.4)	(16.9)	
Total	1590	86	458	229	238	2601

6.2.2 The figures in parentheses are the percentages of references for the publications for the relevant periods.

6.2.3 These figures show quite clearly that the profession receives its greatest coverage in the *Financial Times*. Over 50% of all references appear in this publication. This is probably not surprising given that, as shown in Table 6.6, nearly a third of all actuarial references being picked up arise from references to the FT-Actuaries Indices. However, in addition there is considerable common ground between the profession's activities and those of the *Financial Times* readers, and there is an actuary on the paper's staff.

There is some evidence of increased total coverage over the years, even if the additional coverage from the newer *Independent* and *Independent on Sunday* is excluded.

Finally, in comparison with other titles, the coverage in the *Guardian* is low, a fact which may be of interest to the profession's public relations committees.

6.2.4 Similar tables were compiled in respect of the accountancy and legal professions and a summary of the results is given in Table 6.2.

The accountancy profession also achieves its greatest coverage in the *Financial Times*, but to a lesser extent than for the actuarial profession. There is again evidence of increasing coverage over the years.

Coverage of the accountancy profession in the *Guardian* is lower than the other titles, but not as low as the corresponding figure for the actuarial profession.

The legal profession is most favoured by *The Times* and *Sunday Times*, with the *Financial Times* bringing up the rear.

Table 6.2. Total references to the three professions

Profession	<i>Financial Times</i>	<i>Independent/Independent on Sunday</i>	<i>The Times/Sunday Times</i>	<i>Guardian</i>	<i>Daily Telegraph/Sunday Telegraph</i>	Total
Actuarial	1,590 (9.3)	86 (1.4)	458 (2.0)	229 (1.5)	238.0 (2.4)	2,601 (3.7)
Accountancy	6,027 (35.2)	1,188 (19.1)	4,667 (20.6)	2,394 (16.1)	2,119 (21.4)	16,395 (23.2)
Legal	9,520 (55.6)	4,949 (79.5)	17,521 (77.4)	12,253 (82.4)	7,527 (76.2)	51,770 (73.2)
Total	17,137	6,223	22,646	14,876	9,884	70,766

6.2.5 Table 6.2 shows that the actuarial profession receives good coverage from the *Financial Times*, but is underexposed in the *Guardian*, *Independent* and *Independent on Sunday*.

6.2.6 Finally Table 6.3 gives the totals over time. Due to a lack of figures for the *Daily Telegraph* and the *Sunday Telegraph*, we have only looked at post 1/1/87 figures. Also, because of its recent launch we have excluded the figures for the *Independent* and *Independent on Sunday*. This Table suggests that there has been an increasing trend in the coverage of the three professions taken together. The actuarial profession, however, has not kept pace with this trend and is currently receiving a lower proportion of attention through this section of the media than it enjoyed in late 1987 and early 1988.

Table 6.3. Analysis of years 1987, 1988 and 1989

	Actuarial	Accountancy	Legal	Total
1987 Jan-June	238 (3.4)	1,613 (22.9)	5,208 (73.8)	7,059
July-Dec	284 (4.0)	1,636 (23.1)	5,157 (72.9)	7,077
1988 Jan-June	297 (3.9)	1,813 (24.0)	5,432 (72.0)	7,542
July-Dec	271 (3.5)	1,655 (21.1)	5,901 (75.4)	7,827
1989 Jan-June	284 (3.2)	1,835 (21.0)	6,637 (75.8)	8,756
July-Dec	271 (3.4)	1,984 (24.2)	5,918 (72.3)	8,183
Total	1,655 (3.6)	10,536 (22.7)	34,253 (73.8)	46,444

### 6.3 Quality of Media Coverage

6.3.1 For any reference to a given key word the computer system is able to retrieve the paragraph which contained the key word together with the headline of the article and an indication of the subject matter. Accordingly, the system was used to retrieve over 400 references to each of the actuarial, accountancy and legal professions using the same key words as in the previous section.

6.3.2 For each profession the references were studied and categorised as in Table 6.4.

These figures show that nearly a third of the actuarial references being picked up are due to the FT-Actuaries Indices. Strictly these are not references to the actuarial profession, and simply arise because the indices include the word

'actuaries'. To take account of this the figures in parentheses in Table 6.4 show the percentages for the actuarial profession if the FT-Actuaries Indices are ignored.

The most obvious conclusions to be drawn from these figures are that a relatively low number of references to legal firms occur in the national press, whereas there is a higher percentage of references to individuals in the legal profession. The high percentage of actuarial references arising from appointments is also worth noting.

*Table 6.4. Percentages of references to the three professions*

Category	Actuarial profession (%)	Accountancy profession (%)	Legal profession (%)
Reference only	32.1 (46.3)	52.7	66.0
Named individual	7.0 (10.1)	13.9	20.6
Name of firm	14.8 (21.4)	21.4	5.2
Professional body	2.8 (4.0)	5.6	4.1
Appointments	6.5 (9.4)	1.9	1.2
Unusual	3.3 (4.8)	1.9	1.5
Derogatory	2.8 (4.0)	1.7	1.4
FT-Actuaries Indices	30.8	0	0
FT Accountancy Column	0	0.9	0

6.3.3 Of more concern to the actuarial profession, however, are the higher proportions of unusual and derogatory references. These references (for the publications listed in § 6.1.3) are given in full in Appendix V, from which it is clear that the word 'actuarial' is being used by some journalists incorrectly as an adjective with the following possible meanings:

Calculating, theoretical, conservative, complicated, clinical, hypothetical, dry, or dense.

This contrasts with the smaller percentages of derogatory and unusual references to accountants and lawyers. Any such references tend to imply that accountants should stick to figures and not attempt to run businesses, whilst lawyers charge excessive fees.

6.3.4 We next applied the percentages from Table 6.4 to the total number of references for each profession, in order to estimate the references under each category. For this purpose we used the data for the most recent year, 1989. The resulting figures are shown in Table 6.5.

These figures suggest that the actuarial professional bodies achieve very little coverage when compared to the others. The Law Society achieves 38 times as much and the various accountancy bodies 15 times as much as the Faculty and Institute. The relatively high coverage given to actuarial appointments is apparent here also.

Table 6.5. Estimated breakdown of 1989 references to the professions

Category	Actuarial profession	Accountancy profession	Legal profession
Reference only	203	2,512	10,887
Named individual	45	663	3,398
Name of firm	94	1,020	858
Professional body	18	267	676
Appointments	41	91	198
Unusual	24	91	247
Derogatory	16	81	231
FT-Actuaries Indices	196	0	0
FT Accountancy Column	0	43	0

#### 6.4 The key conclusions from this section are:

- The actuarial profession achieves very low coverage in the national press when compared with the accountancy and legal professions. The accountancy profession achieves over 6 times as much coverage, whilst the legal profession achieves 20 times as much. If references to the FT-Actuaries Indices are ignored these factors increase to 9 and 29 respectively.
- There is also some evidence of deterioration in this position. It was certainly disappointing to find that six press releases were issued by the Institute and Faculty between 1 December 1989 and end May 1990 and only one of them achieved any coverage in the national newspapers covered by the above analysis (and even then in only 2 newspapers).
- There is a possible problem with the image the national press has of the profession. Of particular concern is the fact that the word 'actuarial' is being used as an adjective with a number of incorrect and sometimes derogatory meanings.
- The actuarial profession's coverage in certain national papers is particularly weak, e.g. *Guardian*, *Independent* and *Independent on Sunday*. Coverage in *The Times*, *Daily Telegraph* and their Sunday equivalents could also be improved.

### 7. WHAT LEVEL OF RESOURCES SHOULD BE ALLOCATED?

7.1 Sections 4 and 5 of the paper were concerned with the gathering of information about the profession, and Section 6 covered other aspects of awareness and image. However, if the information gained is to be put to any use, it will involve either changing the level of resources allocated to promoting public awareness and image, or changing the emphasis of the existing use of resources. Question 5 of Section B was intended to obtain the profession's view of the former aspect.

7.2 Again, we considered it important to look separately at the target groups. The question asked was "What level of resources should the profession be allocating to public awareness and image amongst the following groups?". We acknowledge the difficulty of this question, given that many members will have little idea what resources are currently allocated. This was pointed out by some respondents. However, we were looking for general impressions rather than precise answers.

7.3 The overall results are summarised in Table 7.1. Merely from a brief inspection of these figures, it is apparent that a substantial majority of members of the profession consider that more resources should be allocated to public awareness and image. It has to be said that our survey did not address the question of from where those resources should come!

In his paper, B. R. J. Brown<sup>(4)</sup> suggests that additional resources could come from companies employing actuaries or possibly from government or industry; we suggest however that these latter sources are unlikely to prove very fruitful.

Table 7.1. *Members' views on level of resources which should be allocated to promoting public awareness and image*

	Significantly more than at present (%)	A little more than at present (%)	A little less than at present (%)	Significantly less than at present (%)	No response (%)
General public	22.8	58.2	11.8	2.0	5.3
Undergraduates	34.0	57.0	4.2	0.3	4.5
Journalists	31.0	56.7	6.9	0.5	4.8
Company directors	25.0	59.7	9.3	0.6	5.4
Pension scheme trustees	9.9	62.8	19.9	1.1	6.4
Insurance intermediaries	10.6	59.2	21.3	2.8	6.2

7.4 We have used the same technique as in earlier sections to convert the various percentages into a single index figure. We have allocated a score of +3 for significantly more, +1 for a little more, -1 for a little less and -3 for significantly less. The weightings were, again, arbitrary, but in the broadest terms a positive index figure is a vote to allocate more resources and a negative index figure a vote for less resources to be allocated.

Using this scoring system, the overall results for the various groups are summarised in Table 7.2.

Clearly the substantial positive index figures reflect the perception that more resources should be allocated, particularly in relation to undergraduates and journalists.

7.5 The next stage of the analysis was to look at the responses to this question from the various sub-groups of the membership. The index figures for the various sub-groups are summarised in Appendix VI.

7.6 Comparing the index figures for Faculty and Institute members, there is a very high level of consistency between them.



7.7 The analysis by years since qualification demonstrated a general trend of more recently qualified members voting more strongly for more resources to be allocated. The general trend is not as clear as was the case when considering the level of satisfaction with the profession's image, except in the desired allocation of resources in relation to undergraduates. This is illustrated in Table 7.3.

Table 7.2. *Resources allocated to public awareness and image*

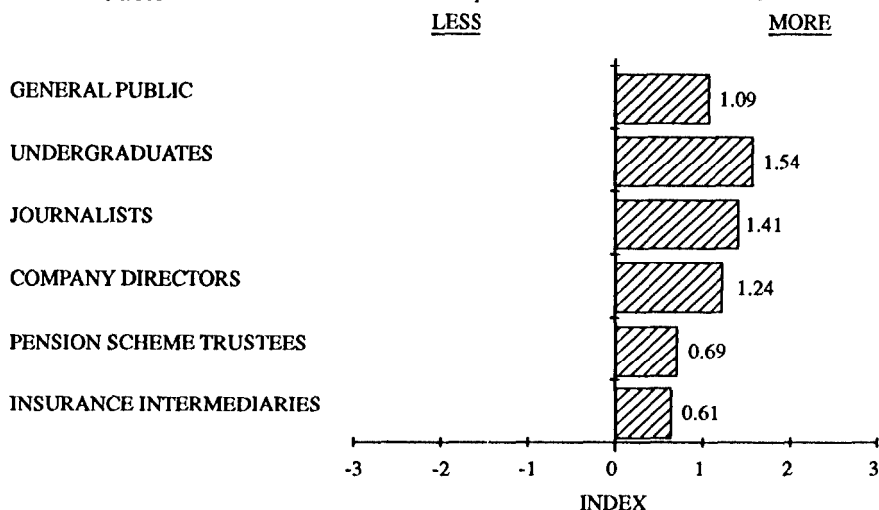
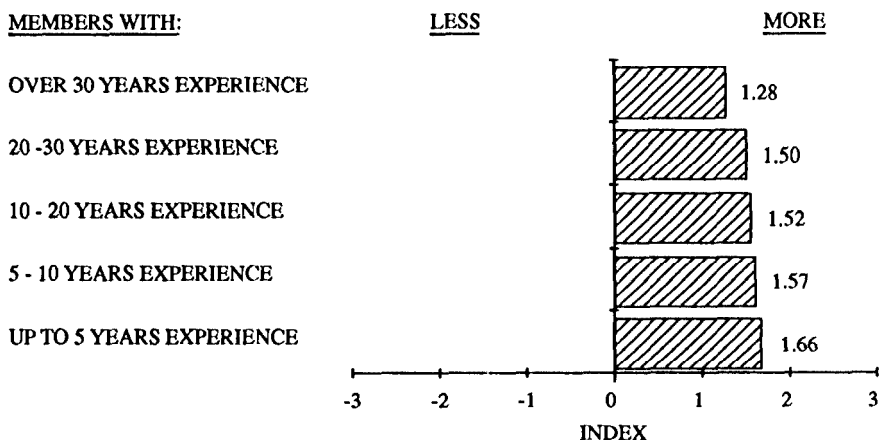


Table 7.3. *Desired allocation of resources for undergraduates*



7.8 The analysis by current employment discloses a number of differences between the index for the sub-group and the index for the population as a whole.

The index for retired members is significantly lower than the overall population index in relation to undergraduates (+1.27 cf. +1.54) and journalists (+1.11 cf. +1.41). Surprisingly, in relation to company directors, the index for life office members is significantly lower than the overall population index (+1.06 cf. +1.24), whilst less surprisingly the index for benefit consultants is higher (+1.54 cf. +1.24). The index for benefit consultants is also significantly higher than the overall population index in relation to pension scheme trustees (+0.86 cf. +0.69).

7.9 The analysis by geographical location shows there is little divergence between indices for the various groups and the indices for the overall population. The only exceptions are the indices for members in the Republic of Ireland which are significantly higher than the overall population indices in relation to journalists (+1.85 cf. +1.41) and insurance intermediaries (+1.03 cf. +0.61).

7.10 As with other questions, we have compared our overall results with those of a predictor questionnaire completed by members of the Faculty and Institute Councils. They were asked to predict the percentage of members who would complete either the significantly more or a little more responses. The actual results are compared with the average predictions in Table 7.4.

Both the Faculty and Institute Councils have underestimated the desire of the membership to allocate additional resources to improving public awareness and the image of the profession.

*Table 7.4. Desired allocation of additional resources to improving public awareness and image*

	Survey result (%)	Predicted Results	
		Faculty Council (%)	Institute Council (%)
General public	81.0	63.6	48.0
Undergraduates	91.0	77.1	61.3
Journalists	87.7	61.7	56.9
Company directors	84.7	47.5	56.0
Pension scheme trustees	72.7	49.2	44.6
Insurance intermediaries	69.8	44.5	44.4

7.11 A number of key points emerge from this section and a consideration of previous sections on image and awareness:

—In general, responses indicate a desire to allocate more resources to improving awareness and the image of the profession. This is consistent with the conclusions that perceived awareness of the profession is less than desired, and the perceived image is different from the desired image and generally less than satisfactory. These discrepancies were most marked in relation to awareness/

image amongst the general public, undergraduates and journalists. The responses in relation to allocation of resources concentrate more on undergraduates, journalists and company directors, perhaps reflecting a view that the latter two groups are centres of influence for the general public.

- The more recently qualified members are keenest for the allocation of more resources, reflecting the greatest level of dissatisfaction with the awareness/image of the profession.
- The Faculty and Institute Councils both underestimated the desire of members to allocate additional resources to improving public awareness and image. It is easier, however, to suggest more resources should be allocated when the source does not have to be identified.

## 8. NORTH AMERICAN DEVELOPMENTS

### 8.1 *The 'Number One' Profession*

8.1.1 In *The Jobs Rated Almanac 1988*, published by L. Krantz in the U.S.A.<sup>(6)</sup> the actuary is calculated to have the No. 1 job. The authors, in coming to their conclusions, evaluated 250 jobs, taking into account a number of criteria.

Choosing data was the most challenging part of the project for the authors. In addition to providing useful statistics on income levels, educational requirements and the common criteria for career selection, the authors attempted to include other pertinent information. This included, for example, the leisure time an occupation affords, travel opportunities, use of expense accounts and company cars.

The data came from many sources around the U.S.A. but the key data came from the Bureau of Labor Statistics, the Department of Commerce and the Census Bureau (80% of the data came from these sources, the other 20% from trade unions, trade associations, management consulting firms and telephone surveys).

### 8.1.2 *Criteria used in analysis*

1. *Environment.* A number of factors were identified and rated, of physical and emotional natures. These included lifting required, work conditions, stamina, competitiveness, meeting the public. Actuaries ranked 2nd out of 250, given that they need and enjoy a quiet, well-lit environment, free from distractions and interruptions.
2. *Income.* For many people, income is the most important aspect of a job, but other factors come into account. Income can be determined to a large extent by one's profession, but geographic location, complexity of work and what the market is willing to bear are important too. The ranking system, while based largely on average incomes of the 250 jobs, also took account of the income differential, i.e. the range of income from the lowest to the highest.

In this analysis, actuaries came 25th out of 250, with two types of occupation clearly ahead. These were the sports profession (basketball

players, baseball players, football players including coaches and umpires, and racing drivers) and the medical profession (surgeons, psychiatrists, osteopaths, etc). On average the sportsmen earn 10 times the salary of an actuary, and the medical profession anywhere between 2 and 4 times.

3. *Outlook*. This part covered five points in general order of importance as follows:
  - (i) Current unemployment rate,
  - (ii) Expected employment growth to 1995,
  - (iii) Potential salary growth,
  - (iv) Seasonality of work, and
  - (v) Potential for promotion.

Included in occupations with the worst outlook were those in professional sports and entertainment, but actuaries came 5th out of 250. The volume of insurance and pension plans is expected to expand and the rising average age of the population will contribute to a greater need for health and pension benefits. Continuing diversity for insurance cover (malpractice cover, for example) should also stimulate demand for actuarial services. Insurance is a necessity with little likelihood of general recession affecting demand.

4. *Physical Demands*. It is not surprising that the occupations which emphasise analytical ability and require extended periods of concentration generally tend to be those with fewer physical demands. Actuaries rank 4th out of 250, with the only potential physical problem being eye strain, caused by any long periods of work at computer terminals.
5. *Stress*. A large number of stress factors can be easily identified, including competitive pressures, deadlines to meet, working in the public eye, risks to health or life, stamina, etc. While actuaries usually work regular hours, certain projects and deadlines may often call for significant overtime. Constant attention to detail is necessary and precise calculations are required, usually based on large volumes of data. Despite this 'pressure', actuaries were rated to have one of the least stressful jobs, ranking 15th out of 250.
6. *Security*. In uncertain economic times, job security takes on added importance in the minds of workers. A steady pay-cheque, freedom from fear of unemployment, firing, or work-related illness or injury and the knowledge that other jobs are available in one's occupation all count for peace of mind. Actuaries rank highly at 22nd out of 250, with church ministers/priests, bank clerks and statisticians above them. Expectations are that employment prospects for actuaries will increase faster than the average over the next ten years—increased statistical analysis and answers will be required to solve complex insurance, pension and health-care problems.

8.1.3 *Summary*. The overall ranking system assumes that each of the six aforementioned factors is equally important and a total score found by adding the six rankings. The overall leader is the actuary with 73 points, the nearest

challengers being computer programmers and analysts with scores greater than 180. They lose to the actuaries principally because of lower income expectations and more stressful occupations.

Therefore, according to this American analysis, actuaries have the highest rated jobs. Naturally the role of the actuary in two countries can differ—e.g. in the U.K. actuaries have more involvement in life office management. However, if such an analysis were performed in the U.K., it is our opinion that the rankings of actuaries within each of the six factors above would also be fairly high, and that the overall ranking could possibly still be 'number one'.

## *8.2 'Task Force on Strengthening the Actuarial Profession'*

8.2.1 Much of what may be facing the U.K. actuarial profession in the future will not be dissimilar to that facing the profession in the U.S.A. It is therefore of value to review what has been happening recently in that country.

8.2.2 In the U.S.A., the Society of Actuaries set up a special committee, whose title was 'Task Force on Strengthening the Actuarial Profession'. The Task Force's charge was to work with appropriate Society committees and task forces to develop action plans, in co-ordination with other bodies, to prepare members, students, and the actuarial profession for the future roles of the actuary. The Task Force was also responsible for initiating discussions on issues related to the future of the actuary within the Society membership.

In a report dated January 1989, the Task Force recorded that actuaries have many strengths as a profession, but increasingly they are finding issues which affect the profession and society at large that are not being addressed effectively in the U.S.A.

The following is a résumé of the background, issues and recommendations arising from this report:

- (a) The vision of the U.S. actuary of the future is built upon an actuarial profession mission statement and a statement of the intellectual core, both of which the Task Force want to be embraced by the entire profession today:  
*Mission:* To be, and to be perceived as being, the financial architects and potential managers of enterprises, both private and public, that are built on the intellectual core of the actuarial profession.  
*Intellectual core:* The application of experience analysis and risk evaluation to measure, communicate, and respond to the current financial implications of future contingent events.
- (b) In addition to mastering the basic 'intellectual core', which defines the actuarial profession now and in the future, the actuary will have to be skilful in many disparate topics such as communications, strategic thinking, business knowledge, results orientation, decision making, people management, technology application, and, of course, professional responsibility.

While the Task Force has focused on the role of the individual and future actuary, it also recognised that its vision for the future cannot be realised

unless the actuarial organisations help prepare themselves and individual actuaries for that future. The organisations must focus on the following issues: recruiting and selection, basic education, continuing education, research, public relations, principles, standards and discipline and 'strengthening the profession'.

The Task Force believed strongly that the vision of the future actuary is best addressed on a national profession-wide basis. Success will not be attained unless the entire U.S. profession actively works together to reach common and consistent objectives reflecting the shared Mission and Intellectual Core.

- (c) The U.S. profession has tended to recruit from the small pool of individuals who are solely or primarily mathematically orientated. However, the recruitment range must be broadened to include individuals who have not only sufficient mathematical skills, but also have a strong business orientation.
- (d) The question of what level of mathematical aptitude is necessary to practise as a U.S. actuary needs to be addressed. The answer affects recruiting and selection, as well as the education programme. The Task Force identified that consideration also has to be given to current actuarial training and testing procedures which make many actuaries (at least the younger ones) think they actually can get the correct answer to every problem. U.S. actuarial students need to recognise that there is more than one answer and more than one viewpoint to bring to the solution of a problem.

Actuaries are eclectics rather than scientific specialists. While they use calculus and statistics, they are not necessarily at the cutting edge of those subjects. Similarly, exposure to economics, accounting, and law makes actuaries conversant with, but not experts in, those subjects. Even in areas where extensive education and testing are done, a new Fellow usually is not considered qualified to practise without an 'apprenticeship' in a particular area.

Thus, the education and examination committees were identified as having a responsibility to ensure that the process is relevant and that the new Fellow has those success-building qualities.

- (e) The profession must direct significant attention to continuing education. Most U.S. actuaries will not work for the rest of their careers applying only today's skills. Not only will broader skills training need to be made available to current actuaries, but both current and future actuaries will need to have available a route by which they can 're-equip' for changing career paths. Continuing education is vital for current actuaries so that they can be a part of the Task Force's expanded vision for the profession's future.
- (f) The U.S. public is unaware of actuaries. The profession's public relations officers must address the actuary's image problem and increase the public profile. The profession must communicate with various parties, particularly

with potential actuaries and potential employers, as well as with other members of the profession and public policymakers.

- (g) The Task Force identified public interface as the area most in need of strengthening. This was reinforced by interviews with non-actuaries. U.S. actuaries need to comment formally and informally on proposed legislation and regulation. Legislators, regulators, and their staff, as well as the public, need to know the implications of proposed actions which the unique actuarial perspective can provide.
- (h) The intellectual core of the actuarial profession is the evaluation of the current financial implications of future contingent events.

The actuarial field is concerned with current responses to prospective events, not merely with hypotheses concerning their likelihood or even their future costs. This practical focus on money and planning may be part of the reason for the relative success of the actuarial profession, as well as part of its unique intellectual core. The use of the words future and contingent emphasises that the actuary is concerned with the uncertainty of tomorrow, not with past events or future events which are certain. The U.S. actuary is thus a type of futurist whose work covers the intersection of risk and money. It should be evident that the 'intellectual core' is not restricted to insurance and benefit plan applications, nor even to financial security plans generally. The full potential for the actuarial profession within the scope of its intellectual core has not yet been realised.

- (i) The U.S. public's need for actuarial services far outstrips its demand, which in turn exceeds supply. The need has been substantially met in terms of narrow actuarial services applied to conventional private financial security programmes, such as whole life insurance and defined benefit pension plans. The need is substantially unmet in terms of other financial security programmes, particularly those that focus on assets rather than liabilities, and on banking services rather than insurance.

To meet society's actuarial needs more completely, the profession must identify such needs, assert and substantiate its claim of special expertise regarding them and prepare its members to meet new challenges.

8.2.3 Specific recommendations for action in the U.S. were described and the key points can be summarised as follows:

- The North American profession should work towards an objective of having all practising actuaries in one body.
- Major organisational changes are required if the profession is to improve the effectiveness of its public interface activities. In fact, an advisory group representing the six North American actuarial societies has already designed a public awareness campaign for 1990 (following on from an award winning campaign in 1989). The essence of the campaign is to alert the general public to the actuarial expertise already available on a variety of issues that affect

people's lives, such as medical care, car insurance, pension planning, environmental risks and demographic changes.

- A theme, recurrent in the Task Force's paper and resulting from a questionnaire, is the improvement and broadening of the actuary's education. Business, communication and management skills will be required, together with foreign language skills and an international perspective including marketing, law, government and politics. In effect skills are required to broaden the range of services of the actuary for the ever increasing complex demands of the next century.

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APPENDIX I

# **ACTUARIAL PROFESSION RESEARCH QUESTIONNAIRE**



For  
Fellows of  
The Faculty of Actuaries  
and the  
Institute of Actuaries



Compiled by the  
Faculty Marketing Research Group

## SECTION A – S.W.O.T. ANALYSIS OF THE PROFESSION

The statements below are designed to find out your views on the current position of the profession. Please comment on these by ticking the box which is **closest** to your view on each statement.

	AGREE STRONGLY	AGREE	DISAGREE	DISAGREE STRONGLY
<b>1. THE FOLLOWING ARE STRENGTHS OF THE PROFESSION:-</b>				
(a) The specialist skills of Actuaries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) The legal requirements for appointed Actuaries and pension scheme Actuaries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) The high calibre of recruits.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) The high remuneration offered to members.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) The high reputation of the profession.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Good communication within the profession.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) The discipline of the studying process.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) The key position of Actuaries in life office management.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any other strengths?				
<b>2. THE FOLLOWING ARE WEAKNESSES OF THE PROFESSION:-</b>				
(a) The public awareness of the profession is too low.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) The profession has a poor public image.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) The profession's lack of influence on legislation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) The small size of the profession.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Lack of cohesion through the Faculty/Institute split.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Lack of co-operation with other professions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(g) The profession is too conservative and staid.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(h) Limited range of services.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(i) Limited clientele.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any other weaknesses?				
<b>3. THE FOLLOWING ARE OPPORTUNITIES FOR THE PROFESSION:-</b>				
(a) A wider role in the Single European Market	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Improve public awareness.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Improve public image.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Higher demand for Actuaries due to the increasing complexity of the financial marketplace.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Increasing application of actuarial skills in other fields e.g. risk management	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any other opportunities?				
<b>4. THE FOLLOWING ARE THREATS TO THE PROFESSION:-</b>				
(a) Single European Market turns UK Actuaries into purely financial technicians.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Problem of recruiting sufficient new entrants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Other professions taking over traditional actuarial tasks e.g. accountants.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Threat to small/medium sized life offices post Financial Services Act.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Improved technology leading to reduction in Actuarial involvement.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Reduction in pension funding due to legislative changes.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Any other threats?				

## SECTION B – PUBLIC AWARENESS AND IMAGE OF THE ACTUARIAL PROFESSION

The following questions are designed to find out your views on the public awareness and image of the profession. Please tick the box which is **closest** to your view for each question.

	VERY AWARE	FAIRLY AWARE	NOT REALLY AWARE	UNAWARE
<b>1. HOW AWARE OF THE ACTUARIAL PROFESSION DO YOU THINK THAT THE FOLLOWING GROUPS <u>SHOULD</u> BE?</b>				
(a) General public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Undergraduates (i.e. potential recruits).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Journalists.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Company Directors (potential employers of actuaries).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Pension Scheme Trustees (potential employers of actuaries).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Insurance intermediaries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>2. HOW AWARE OF THE ACTUARIAL PROFESSION DO YOU THINK THAT THE FOLLOWING GROUPS <u>ARE</u>?</b>				
(a) General public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Undergraduates (i.e. potential recruits).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Journalists.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Company Directors (potential employers of actuaries).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Pension Scheme Trustees (potential employers of actuaries).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Insurance intermediaries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**3. (a)** Which three of the list of adjectives shown below do you feel **most aptly describe** the general image of the Actuarial Profession.

**(b)** Which three of the list of adjectives shown below would you **like to describe** the image of the Actuarial Profession.

**(c)** Which three of the list of adjectives shown below **most aptly describe your current employment**.

	(a)	(b)	(c)
Aloof	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Challenging	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Complex	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Creative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Diverse	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Dull	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Eccentric	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Esoteric	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Fun	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Influential	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Interesting	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lucrative	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Respected	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Responsible	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Stressful	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Technical	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**Any other adjectives**

(a)

(b)

(c)

	VERY SATISFIED	FAIRLY SATISFIED	NOT REALLY SATISFIED	VERY DISSATISFIED
<b>4. HOW SATISFIED ARE YOU WITH THE IMAGE THAT THE PROFESSION CURRENTLY PORTRAYS AMONGST THE FOLLOWING GROUPS?</b>				
(a) General public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Undergraduates (i.e. potential recruits).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Journalists.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Company Directors (potential employers of actuaries).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Pension Scheme Trustees (potential employers of actuaries).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Insurance intermediaries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**SECTION B continued**

5. WHAT LEVEL OF RESOURCES SHOULD THE PROFESSION BE ALLOCATING TO PUBLIC AWARENESS AND IMAGE AMONGST THE FOLLOWING GROUPS?	SIGNIFICANTLY MORE THAN AT PRESENT	A LITTLE MORE THAN AT PRESENT	A LITTLE LESS THAN AT PRESENT	SIGNIFICANTLY LESS THAN AT PRESENT
(a) General public.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(b) Undergraduates (i.e. potential recruits).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(c) Journalists.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(d) Company Directors (potential employers of actuaries).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(e) Pension Scheme Trustees (potential employers of actuaries).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
(f) Insurance intermediaries.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

## SECTION C -- FURTHER INFORMATION

For each question please tick the item **closest** to your present situation.

1. **GEOGRAPHICAL LOCATION:**

(a) Greater London ☐

(b) Southern England (Severn to The Wash) ☐

(c) Northern England & Wales ☐

(d) Scotland & Northern Ireland ☐

(e) Eire ☐

(f) Other overseas (give name of country)

2. **PROFESSIONAL DESIGNATIONS:**

(a) AIA ☐

(b) FFA ☐

(c) FIA ☐

Year examinations were completed

3. **CURRENT EMPLOYMENT:**

(a) Life office	<input type="checkbox"/>
(b) General insurance organisation	<input type="checkbox"/>
(c) Consultant: Employee Benefits	<input type="checkbox"/>
(d) Consultant: Insurance	<input type="checkbox"/>
(e) Government	<input type="checkbox"/>
(f) Retired	<input type="checkbox"/>
(g) Other (please specify)	<div style="border: 1px solid black; height: 20px; width: 100%;"></div>

4. ADDITIONAL COMMENTS.

5. NAME (optional)

Thank you for taking the time to complete this questionnaire. Please return it in the envelope provided.  
Note: A stamp **is** required.

## APPENDIX II

- A. Table A1 is a summary of the chi-squared tests carried out on the various cross tabulations of demographic factors. The probability value is the probability of achieving a result as 'extreme' as that actually obtained if the two factors were truly independent. Probability values can therefore be used 'at a glance' to carry out tests for independence at a particular significance level. At the 5% significance level independence is therefore rejected in all of the cross tabulations except location versus years of experience. Four of the probability values in Table A1 are zero to four decimal places and accordingly independence is rejected at any practical level of significance.

Table A1—Summary of chi-squared tests

Cross tabulations	Chi-squared value	Degrees of freedom	Probability value
Location/designation	831.16	5	0
Location/years of experience	25.09	16	6.8%
Location/employment	223.66	12	0
Designation/years of experience	9.48	4	5.0%
Designation/employment	29.15	6	0
Years of experience/employment	67.20	16	0

- B. Tables A2–A7 are a breakdown of the chi-squared values into contributions from each cell of the two-way table. The actual data values are also shown together with the expected values under the null hypothesis of independence. The higher the chi-squared value, the less the factors are likely to be independent.

The following points should be noted in conjunction with these tables:

1. Since the chi-squared test requires at least 5 cases in each cell we have occasionally amalgamated various sub-groups.
2. For these tests we ignored replies that did not state designation.

Table A2.

Designation	London	Location				
		Southern England	Northern England/ Wales	Scotland/ Northern Ireland	Republic of Ireland	Other overseas
FFA						
Chi-squared	45.39	60.78	4.82	534.47	0.04	0.02
Actual	60	30	19	232	16	56
Expected	139.60	112.80	31.27	57.18	15.19	56.96
FIA						
Chi-squared	13.05	17.48	1.38	153.72	0.01	0.00
Actual	565	475	121	24	52	199
Expected	485.40	392.20	108.73	198.82	52.81	198.04

Table A3.

	Location				
Years of experience	London	Southern England	Northern England/Wales	Scotland/Northern Ireland	Republic of Ireland/Other overseas
Over 30					
Chi-squared	0.06	0.05	0.01	5.49	1.81
Actual	67	54	15	38	27
Expected	69.0	55.65	15.36	26.04	34.95
20-30					
Chi-squared	1.66	0.47	5.30	0.84	0.04
Actual	104	68	10	40	45
Expected	91.66	73.92	20.40	34.59	46.42
10-20					
Chi-squared	0.25	0.02	0.57	3.44	0.33
Actual	209	161	50	60	108
Expected	201.86	162.79	44.93	76.19	102.23
5-10					
Chi-squared	1.33	0.05	0.85	0.83	0.00
Actual	90	84	27	44	51
Expected	101.62	81.95	22.62	38.35	51.46
0-5					
Chi-squared	0.22	0.42	0.05	0.79	0.21
Actual	150	133	36	52	83
Expected	155.86	125.69	34.69	58.82	78.93

Table A4.

	Location				
Employment	London	Southern England	Northern England/Wales	Scotland/Northern Ireland	Republic of Ireland/Other overseas
Life Office					
Chi-squared	35.19	15.70	1.59	22.35	0.00
Actual	201	307	57	176	155
Expected	304.52	244.98	67.35	123.47	155.68
General/Govt/Others					
Chi-squared	27.53	16.38	3.12	11.14	3.51
Actual	125	31	10	13	52
Expected	78.51	63.16	17.36	31.83	40.14
Benefits/Insurance Consultants					
Chi-squared	23.92	9.75	7.78	28.60	0.00
Actual	257	114	60	30	97
Expected	189.65	152.57	41.94	76.89	96.95
Retired					
Chi-squared	2.08	1.84	0.01	8.36	4.81
Actual	41	50	11	34	15
Expected	51.32	41.29	11.35	20.81	26.24

Table A5.

Designation	Years of experience				
	Over 30	20-30	10-20	5-10	0-5
FFA					
Chi-squared	4.05	0.33	1.98	0.49	0.60
Actual	59	62	111	69	89
Expected	45.43	57.64	126.86	63.43	96.64
FIA					
Chi-squared	1.11	0.09	0.54	0.13	0.16
Actual	153	207	481	227	362
Expected	166.57	211.36	465.14	232.57	354.36

Table A6.

Designation	Employment						
	Life Office	General Insurance	Benefits Consultant	Insurance Consultant	Government/ Education	Retired	Others
FFA							
Chi-squared	3.57	1.96	1.24	11.33	0.00	3.59	0.95
Actual	227	9	91	7	8	46	25
Expected	200.25	14.29	102.25	23.22	7.81	34.83	30.36
FIA							
Chi-squared	1.03	0.56	0.36	3.26	0.00	1.03	0.27
Actual	670	55	367	97	27	110	111
Expected	696.75	49.71	355.75	80.78	27.19	121.17	105.64

Table A7 (excluding retired)

Years of experience	Life Office	Employment			Government/ Education/Others
		General Insurance	Benefits Consultants	Insurance Consultants	
Over 30					
Chi-squared	5.62	1.64	0.06	4.13	6.93
Actual	25	5	22	9	15
Expected	39.99	2.84	20.84	4.63	7.70
20-30					
Chi-squared	0.00	0.07	9.61	2.42	13.13
Actual	130	10	42	21	43
Expected	129.45	9.19	67.47	14.98	24.91
10-20					
Chi-squared	0.16	1.17	0.10	2.65	0.04
Actual	316	27	157	26	61
Expected	308.89	21.94	160.99	35.74	59.44
5-10					
Chi-squared	0.29	0.10	2.70	0.88	4.02
Actual	149	10	96	22	19
Expected	155.76	11.06	81.18	18.02	27.97
0-5					
Chi-squared	0.83	2.86	1.46	0.78	5.55
Actual	253	10	138	23	30
Expected	238.90	16.97	124.51	27.64	45.97



## APPENDIX III

## DESIRED LEVELS OF AWARENESS—INDEX FIGURES

(+ 3 = 'Very Aware', - 3 = 'Unaware')

Sub-Groups	General public	Under-graduates	Journal-ists	Company directors	Pension scheme trustees	Insurance intermediaries	Average
All	0.22	2.05	2.01	2.38	2.77	2.19	1.93
FFA	0.28	2.11	2.03	2.35	2.77	2.36	1.98
FIA	0.21	2.03	2.01	2.39	2.77	2.14	1.92
Over 30 years experience	0.40	2.14	1.81	2.26	2.71	2.02	1.89
20-30 years	0.24	2.13	2.13	2.39	2.78	2.20	1.97
10-20 years	0.18	1.98	2.06	2.36	2.71	2.22	1.91
5-10 years	0.22	2.06	2.14	2.37	2.82	2.16	1.96
0-5 years	0.19	2.02	1.91	2.47	2.82	2.22	1.93
Life Office	0.17	2.04	2.02	2.29	2.72	2.31	1.92
General Insurance	0.10	1.90	1.71	2.16	2.59	1.97	1.73
Benefits Consultants	0.28	2.05	2.13	2.52	2.87	2.07	1.98
Insurance Consultants	-0.02	1.89	2.14	2.61	2.73	1.80	1.85
Government/Education	0.14	1.97	1.80	2.71	2.89	2.03	1.92
Retired	0.54	2.18	1.73	2.34	2.78	2.10	1.94
Other	0.28	2.16	1.77	2.36	2.79	2.31	1.94
London	0.17	2.05	1.99	2.47	2.77	2.09	1.92
Southern England	0.16	2.03	2.02	2.27	2.73	2.21	1.90
Northern England & Wales	0.19	1.96	2.13	2.29	2.75	1.97	1.88
Scotland/Northern Ireland	0.16	2.10	2.03	2.28	2.77	2.44	1.96
Republic of Ireland	0.49	2.01	1.86	2.37	2.79	2.43	1.99
Other Overseas	0.49	2.08	2.01	2.55	2.83	2.20	2.02

## PERCEIVED LEVELS OF AWARENESS—INDEX FIGURES

(+ 3 = 'Very Aware', - 3 = 'Unaware')

Sub-Groups	General public	Under-graduates	Journalists	Company directors	Pension scheme trustees	Insurance intermediaries	Average
All	- 2.15	- 0.28	0.11	0.45	1.73	1.17	0.17
FFA	- 2.12	- 0.23	0.20	0.46	1.72	1.45	0.24
FIA	- 2.16	- 0.29	0.09	0.45	1.74	1.08	0.91
Over 30 years experience	- 1.53	0.12	0.10	0.49	1.61	1.17	0.32
20-30 years	- 1.95	- 0.09	0.36	0.42	1.77	1.48	0.33
10-20 years	- 2.15	- 0.33	0.20	0.49	1.72	1.28	0.20
5-10 years	- 2.31	- 0.24	0.10	0.35	1.76	0.98	0.10
0-5 years	- 2.45	- 0.53	- 0.14	0.43	1.75	0.91	0.00
Life Office	- 2.24	- 0.36	0.26	0.39	1.65	1.41	0.18
General Insurance	- 2.10	- 0.03	0.03	0.61	1.77	0.79	0.17
Benefits Consultants	- 2.25	- 0.33	- 0.04	0.52	1.89	0.83	0.10
Insurance Consultants	- 2.15	- 0.12	0.13	0.65	1.82	0.84	0.19
Government/Education	- 2.20	- 0.08	- 0.08	0.66	1.80	0.60	0.11
Retired	- 1.36	- 0.17	0.01	0.54	1.56	1.13	0.28
Other	- 2.19	- 0.37	- 0.14	0.17	1.88	1.24	0.09
London	- 2.23	- 0.29	0.11	0.44	1.77	0.93	0.12
Southern England	- 2.19	- 0.23	0.24	0.39	1.65	1.18	0.17
Northern England & Wales	- 2.33	- 0.37	- 0.14	0.39	1.60	0.99	0.02
Scotland/Northern Ireland	- 2.11	- 0.19	0.33	0.33	1.66	1.56	0.26
Republic of Ireland	- 1.95	- 0.34	- 0.01	0.58	1.84	1.39	0.26
Other Overseas	- 1.92	- 0.40	- 0.17	0.69	1.92	1.34	0.24

## APPENDIX IV

## SATISFACTION WITH IMAGE—INDEX FIGURES

(+ 3 = 'Very Satisfied', - 3 = 'Very Dissatisfied')

Sub-groups	General public	Under-graduates	Journalists	Company directors	Pension scheme trustees	Insurance intermediaries	Average
All	-0.61	-0.21	-0.36	0.06	0.84	0.34	0.01
FFA	-0.59	-0.13	-0.31	0.15	0.80	0.49	0.07
FIA	-0.61	-0.23	-0.37	0.03	0.85	0.29	-0.01
Over 30 years experience	-0.30	0.22	-0.33	0.29	0.99	0.62	0.25
20-30 years	-0.42	-0.08	-0.38	0.02	0.87	0.70	0.12
10-20 years	-0.61	-0.22	-0.30	0.03	0.84	0.34	0.01
5-10 years	-0.77	-0.27	-0.46	-0.02	0.80	0.22	-0.08
0-5 years	-0.73	-0.40	-0.41	0.04	0.79	0.06	-0.11
Life Office	-0.59	-0.23	-0.22	0.13	0.82	0.39	0.05
General Insurance	-0.45	-0.26	-0.13	-0.13	0.87	0.21	0.02
Benefits Consultant	-0.77	-0.31	-0.54	-0.07	0.92	0.19	-0.10
Insurance Consultant	-0.42	-0.13	-0.61	-0.01	0.92	0.22	-0.01
Government/Education	-0.60	-0.09	-0.54	0.09	0.83	0.03	-0.05
Retired	-0.40	0.29	-0.34	0.23	0.78	0.52	0.18
Other	-0.57	-0.37	-0.55	-0.09	0.70	0.43	-0.08
London	-0.58	-0.31	-0.31	-0.03	0.82	0.26	-0.02
Southern England	-0.66	-0.17	-0.29	0.05	0.83	0.25	0.00
Northern England & Wales	-0.80	-0.17	-0.59	0.15	0.67	0.28	-0.08
Scotland/Northern Ireland	-0.57	-0.12	-0.27	0.09	0.89	0.51	0.09
Republic of Ireland	-0.49	-0.46	-0.19	0.34	0.94	0.46	0.10
Others	-0.52	-0.22	-0.61	0.12	0.95	0.59	0.05

## APPENDIX V

UNUSUAL AND DEROGATORY REFERENCES TO THE ACTUARIAL PROFESSION  
IN THE NATIONAL PRESS

## (A) UNUSUAL.

*Financial Times* 1 December 1989: U.K. Company News: The getting of wisdom from Pearl—The U.K. insurance market since AMP's coup.

'Pearl is run by ACTUARIES and they did everything that ACTUARIES usually do', says Mr Tom Bennett, insurance analyst at Paribas.

*Sunday Times* 3 December 1989: Singh inherits a nightmare of graft and feuds; India general election.

The incoming prime minister, whose popularism conceals an ACTUARIAL approach to politics, is appalled by what is universally described in India as 'communalism'. His priority is the economy. But if he cannot prevent a further slide into religious anarchy, his fiscal and industrial reforms may never get off the ground.

*Independent* 4 December 1989: Whitehall Watch: Reforms unravel public spending; Peter Hennessy looks at improvements in reports on finances.

Even as recently as the 1970s you would have needed the ACTUARIAL skills of a Beveridge and the analytical horsepower of a Keynes to make sense of the information contained in the Treasury's annual White Paper on Public Expenditure. To their great credit, it was the accountancy professionals who took the initiative to get changes made.

*Sunday Times* 10 December 1989: A matter of public opinion; Leading Article.

Margaret Thatcher appears to have recognised that last week in ordering a government rethink on the legitimate claims by older war widows for a fair pension. The sooner this dwindling band of 53,000 elderly ladies receives a generous increase in their modest, sub-German social security pension, the easier the national conscience. By abandoning her own resistance to it, Mrs Thatcher has acknowledged the public passion aroused and wisely opted for political prudence over ACTUARIAL zeal. She is none the weaker for it.

*Daily Telegraph* 12 January 1990: CITY COMMENT: Nimble-footed THF.

Given the British attitude to inflation, and the outlook for interest rates, even 11½ pc looks a cheap rate for long-term funds. After all, only ACTUARIES really think there is any point in buying gilts on 10 pc yields to lock away.

*Financial Times* 23 January 1990: Arts: Kenny Wheeler—Queen Elizabeth Hall. Trumpeter and composer Kenny Wheeler is not a household name, though judging from his CV he ought to be. Celebrating his sixtieth birthday by taking a big band of jazz luminaries on a U.K. tour (until February 1), the shy Canadian has inspired and worked with some of Europe's most distinguished modern jazz musicians. A man of reticent demeanour, Wheeler has more the air of an insurance ACTUARY than someone who has spent time with the Spontaneous Music Ensemble.

*Independent on Sunday* 28 January 1990: ETCETERA—GAMBLING/The ebb and flow of an ACTUARIAL art.

His was an ACTUARIAL art. Like insurance, it was designed to tickle margins of profit out of competing probabilities. As anyone except a professional statistician will acknowledge, theories of probability are not science at all. Statistics reduces the inspiration in guesswork but the results remain guesses for all that. But while it might not be a pure science, there can be more money in insurance and horses than physics.

*Sunday Times* 28 January 1990: Stop Pavarotti; Diary; Scotland.

McClarty agreed: "Yon Princes Square should be bulldozed. Ah've got a wee granddaughter, Kylie jist nine an' the wean says she wants tae be an ACTUARY!"

*Guardian* 7 February 1990: Gorbachev warns of worsening food supplies.

It is the same with clothes, shoes, cars, anything. But even for the much coveted car, the queue has become so long that the person waiting may not live till the delivery date. A war veteran who retired recently after 30 years' work, was still waiting to reach the top of the list. He calculates he should take delivery around the ACTUARIAL date of his death.

*Daily Telegraph* 14 March 1990: Motoring: The real cost of running your car.

Happily, for most of us, they are not typical for the ordinary private motorist, probably running a used car. They are, according to Peter Mouncey, manager of AA marketing research, an ACTUARIAL view of what it would cost if we did everything by the book. For instance, they include the hypothetical loss of interest if the money spent on buying a car had been wisely invested—an irrelevant calculation for the motorist who is going to have a car anyway.

*Financial Times* 26 March 1990: The Lex Column: Hong Kong.

At times like these, investment bargains must be sought in unlikely places. The shadow of 1997 makes Hong Kong the last market to appeal to ACTUARIAL prudence. Indeed, the political imponderables make it uniquely hard to value. But on a one or two year view, it could be cheap all the same.

*Financial Times* 3 May 1990: Survey of Pension Fund Investment: A certain sourness in the City—Relations between investors and companies.

Pearl succumbed to a predatory offer that some thought unduly cheap. It was thought to have hidden its light under an ACTUARIAL bushel. Yet its earnings performance was arguably too good to make intervention justifiable. Since Pearl was an insurance company there was the old misgiving about dog eating dog.

*Sunday Times* 13 May 1990: GBS on one hand: GBH on the other; Cinema.

Begley has an ACTUARIAL view of existence. Life, he informs his wife, is made up of assets and liabilities and there are no prizes for guessing which column she falls into, not one that is likely to be entwined by any admiring limbs. So he moves in with Streep, whose estate is smothered in pink from her mail-box to her word-processor.

#### (B) DEROGATORY

*Financial Times* 1 December 1989: UK Company News: The getting of wisdom from Pearl—The U.K. insurance market since AMP's coup.

Last-minute assertions about the company's embedded value sounded too much like ACTUARIAL mumbo jumbo.

*Financial Times* 9 December 1989: The Long View: And now for the Nervous Nineties—Remarkable returns have been achieved by investors during the 1980s but the decade is ending on a clouded note for the U.K. economy.

In practice, allowing for non-equity investments, the median rate of return for pension funds has been a still-extraordinary 19%. No wonder the pension fund ACTUARIES have been made to look rather foolish because of their cautious calculations that returns could be expected to be only two or three points higher than the rate of growth of employee earnings.

*Guardian* 23 December 1989: Such niche timing/Trading marketing-speak with the television schedulers.

Preparations for this assault on the programme schedules were lengthy. The *Radio Times* and *TV Times* were gutted, timings carefully checked to ensure maximum exposure. My tastes were catholic, my religion the cathode. Only gradually did I realise the fun was often more ACTUARIAL than actual.

*Financial Times* 3 February 1990: The Lex Column: A distant view of Johannesburg.

In those terms South Africa belongs with South America, or indeed with Africa as a whole. It may be worth investing in politically risky economies in the Pacific Rim on the grounds that the growth they offer is not elsewhere available. But

anything which South Africa offers the investor—gold, for instance—is available elsewhere, if more expensive. And in dry ACTUARIAL terms, any long-term investment which could be worthless tomorrow can never be cheap whatever the price.

*The Times* 12 March 1990: A nice little learner.

The real answer was Good idea but sorry, it would cost too much. The stock answer, however, treated the correspondent to three dense pages of ACTUARIAL considerations, in the hope, no doubt, of persuading him not to ask such impertinent questions in the future.

\* *Financial Times* 27 March 1990: The Lex Column: Another own goal from the City.

To limit the damage, several steps need to be taken at once—by LUI, by the authorities and by the major Lloyd's insurance brokers. It is surprising, to say the least, that ACTUARIES at Tillinghast were apparently satisfied with the reasonableness of LUI's reserving policies 12 months ago, only to find new nasties staring them in the face in the last few weeks. In the circumstances, Tillinghast's new report needs to be published as soon as possible, with revised figures for LUI's position.

*Financial Times* 2 April 1990: The FT Review of Business Books: Masters of the universe.

Well, of course you must, and while waiting for the trading blood to rise, you might even save a few trading terms from the glossary; they might come in handy in the wine bar. Bet you didn't know that Congestion is a price pattern characterised by extended sideways movement, or that attempting to trade without a real understanding of the Fibonacci sequence could be a recipe for financial ruin. (And to think that I had thought that Fibonacci was a secret society of enlightened ACTUARIES.)

*Financial Times* 5 April 1990: Accountancy Column: A shopping list for the standards chairman.

He concludes: 'SSAP 24 appears to comprise no more than a hotch potch of options which are likely to precipitate confusion rather than clarification and incomparability rather than comparability.' There are simply too many different options and 'enormous flexibility regarding ACTUARIAL assumptions which could be exploited to improve reported figures.'

*The Times* 6 April 1990: 'Concern' at delay of report into LUI; London United

\* Tillinghast pointed out the inaccuracy of this statement to the *Financial Times*. The *Financial Times* retracted and clarified the situation on the following day. For details see the statement by Mr J. P. Ryan before the discussion.

### Investments.

The Corporate Affairs Minister, Mr John Redwood, has revealed it took six months for ACTUARIES to complete a report last year on London United Investments, the suspended insurance company. The delay prevented the Department of Trade taking action against the company for 10 months.

*Financial Times* 17 April 1990: The Lex Column: Fixing a price on a pension holiday.

Perhaps the stockmarket should value any extra income flowing from SSAP 24 more generously than the bulk of the company's profit stream. The lift ICI's 1989 earnings received from the new SSAP may be small (a mere £23m), but the conservative assumptions the ACTUARY uses mean it is rather more secure than ICI's cyclical earnings from chemicals. Hence it deserves, in theory, a higher multiple than the meagre p/e of 8.5 which the stock market gives to ICI as a whole.

*Daily Telegraph* 18 April 1990: CITY: Midweek Money Go Round—Tied down to a government job/Pension Companies feel work Mobility is being hit.

PENSION companies are concerned that government employee pensions benefits and job mobility is at risk because of ACTUARIES' 'refusal' to estimate guaranteed minimum pension rates.



## APPENDIX VI

## WHAT LEVEL OF RESOURCES SHOULD BE ALLOCATED?—INDEX FIGURES

(+ 3 = 'Significantly more than at present', - 3 = 'Significantly less than at present')

Sub-groups	Pension						Average
	General public	Undergraduates	Journalists	Company directors	scheme trustees	Insurance intermediaries	
All	1.09	1.54	1.41	1.24	0.69	0.61	1.10
FFA	1.08	1.51	1.29	1.21	0.82	0.65	1.09
FIA	1.09	1.55	1.44	1.25	0.66	0.60	1.10
Over 30 years experience	1.03	1.28	1.22	1.11	0.72	0.50	0.98
20-30 years	0.95	1.50	1.42	1.13	0.62	0.42	1.01
10-20 years	1.04	1.52	1.45	1.29	0.57	0.54	1.07
5-10 years	1.19	1.57	1.52	1.26	0.69	0.64	1.14
0-5 years	1.20	1.66	1.41	1.28	0.87	0.85	1.21
Life Office	1.11	1.59	1.39	1.06	0.62	0.68	1.07
General Insurance	0.98	1.37	1.23	1.34	0.52	0.71	1.02
Benefits Consultant	1.17	1.54	1.54	1.54	0.86	0.45	1.18
Insurance Consultant	0.91	1.29	1.64	1.49	0.66	0.72	1.12
Government/Education	1.32	1.60	1.43	1.20	0.46	0.66	1.11
Retired	1.01	1.27	1.11	1.10	0.84	0.68	1.00
Other	0.89	1.76	1.40	1.31	0.63	0.45	1.07
London	1.02	1.55	1.33	1.29	0.63	0.53	1.06
Southern England	1.10	1.56	1.43	1.24	0.71	0.73	1.13
Northern England & Wales	1.13	1.48	1.55	1.19	0.63	0.51	1.08
Scotland/Northern Ireland	1.01	1.46	1.25	1.08	0.73	0.68	1.03
Republic of Ireland	1.19	1.48	1.85	1.33	1.05	1.03	1.32
Others	1.25	1.60	1.58	1.28	0.73	0.48	1.15

## APPENDIX VII

## ADDITIONAL COMMENTS

Question 4 of Section C of the questionnaire invited 'Additional Comments'. A total of 125 respondents (6.8%) took advantage of this with about 15% of those giving multiple comments. The comments split roughly into two groups: those directed at the survey itself (46%); and those of a more general nature about the profession (54%). No two of the comments were identical so a degree of poetic licence has been used in grouping these.

*1. Comments about the questionnaire*

- (i) Four were very supportive of the survey, pleased to see the research being done, wishing us good luck and looking forward to seeing results.
- (ii) Five queried the relevance of their replies since they are long retired.
- (iii) Twenty-one queried whether their overseas experience was relevant.
- (iv) Nine had worries over question B5, not knowing how much resource was currently spent and whether we were suggesting more resource or just reallocation.
- (v) Three believed our 10-15 minutes completion time was a ridiculous underestimate.
- (vi) Two felt our range of occupations was evidence of ignorance—investment not included.
- (vii) Three felt they should have been allowed neutral responses.
- (viii) Two were confused over company director—all directors or just finance directors or insurance company directors?
- (ix) Three were unhappy that their views might not be relevant.
- (x) Two believed there were other groups that should be aware of us.
- (xi) Nine other one-off comments were made on the questionnaire.

*2. Comments about the profession*

- (i) Eleven believed that the profession should not be involved in image building. As many believed the opposite: define what image we want, work on recruitment, journalists and the wider public and build our influence on government.
- (ii) Eight gave (very varied) comments on the examinations. There was concern over lowering standards and increasing the undergraduate content of exams; inefficiencies in the tutoring system and relevance of the exams was worrying; there was some suggestion that the exams are too hard.
- (iii) There was much comment on what the profession should be—26 varied comments: most thought we should be rounded scientific general managers, well able to communicate, not just in life offices. Thus many wanted an expansion of the exams to cover general management,

accounting, etc. Others were worried lest we lose our actuarial specialities and hence all reason to exist.

- (iv) Three believed the Faculty/Institute split needs resolving.
- (v) Three were worried over European standardisation.
- (vi) Two felt we were seen as the champion of the employer, at odds with individual needs.
- (vii) Two thought we should become government advisers providing research facilities.
- (viii) Three believed our profession was too small to have a wide sphere of influence.
- (ix) Two felt an external survey was now required as to what the various interest groups thought.

The balance of comments were one-offs, including:

"I find it sad that a profession is so lacking in direction that it has to resort to such an enquiry when the Council should be certain that it reflects the views of the membership else it should resign."

"I thought Jim Lagden's paper on 'Marketing the Profession' made many points pertinent here. In particular, the actuarial profession needs an internal appraisal, planning a change process at the base of an external marketing, awareness, and image thrust. Change needs to focus on the real needs of clients e.g. cost-effective advice and financial programmes offering value for money."

"I would like to see the Institute behaving more as the servant of its individual members (who alone pay subscriptions); and not the creatures of these members' employers (who pay no corporate subscriptions); still less acting as the unpaid research department of the life insurance industry . . ."

"Some *threats* to the profession might prove *beneficial* if they activate change. Young actuaries should play a greater part in the affairs of the Institute."

STATEMENT FROM MR J. P. RYAN OF TILLINGHAST  
CONCERNING THE PAPER

The press cutting printed in Appendix V(B) of the paper under the heading '*Financial Times* 27 March 1990: The Lex Column: Another own goal from the City' is, in my opinion, libellous. I wrote to the *Financial Times* to that effect. Without admission of any liability on their part, the *Financial Times* retracted and clarified the situation the following day. They pointed out that our work was not covering all the LUI group companies, as implied in the statement, but only specific companies. The only specific reference to any report and accounts was in respect of Walbrook. This was tied to the brief specified to the company and specified to us. Since Walbrook is continuing to pay claims, the suggestions implied in the article are not true. Given the size of the capital base of Walbrook and the fact that the company is continuing to pay claims, it may be surmised that there was not a material deterioration in the reserves of that company between the original statement and the following year's accounts.

The second press comment in the *Financial Times* is as follows:

"TILLINGHAST

Tillinghast, the consulting actuaries appointed by London United Investments (Lex, March 27), points out correctly that its review last year was confined to LUI subsidiary Walbrook, El Paso Insurance, Desert Insurance and LUI Insurance Syndicate Inc. Tillinghast does not accept that its conclusions as to reserving policies applied to the LUI group as a whole."

# ABSTRACT OF THE DISCUSSION

**Mr G. J. Lagden** (opening the discussion): There is reference in § 1.3.1 to my paper 'Marketing the Actuarial Profession', which was presented in May 1985 (*J.S.S.* 29, 95). This gave the results of research into the feelings and opinions of various members of the profession at that time.

In 1988 the Communications Working Party, chaired by Peter Moore, was set up. It reported on the need for better communications within the profession. In 1990 the first of its proposals was implemented when the ten-year-old *Fiasco* was replaced by the new *The Actuary*. In the same year the Institute and Faculty joined forces in the development of the Mission Statement as a strategy for the future.

When I look at this paper I am concerned how high reputation is a strength if general public awareness is seen to be such a weakness, unless we mean reputation in specific areas. I am less concerned than the authors about journalists. I know that there are some withering comments reproduced in Appendix V, but I am afraid that sensationalist journalists have replaced experts. It is important to make the right friends in the papers.

It seems to me that at one time this profession was carefree and young, and we did not really care what anybody else thought of us. I have seen the profession move to middle age and develop a middle age spread. It has suddenly become very concerned with what other people think about it. However, I feel that comparing desired images with anticipated perceived images is a bit exotic. Can we not return to the more robust actual against expected, and attempt simply to see ourselves as others see us?

**Mr T. S. Shucksmith:** I am not a fan of the cult of the marketing actuary. Nevertheless, I found the results of the survey not only interesting, but also encouraging. It seems that a significant number of actuaries are more concerned about respect and being seen as responsible than being highly paid and powerful. High pecuniary rewards are more likely to attract envy than respect; and power, unless it is exercised benevolently and selflessly, is more likely to be resented than respected. I find the survey encouraging, because I consider a desire to be respected and seen as responsible to be more in tune with the values of a true professional than a desire for money, power or importance. In order to be respected, we must not only show skill, we must also be seen to be doing something worthwhile for society. I see the profession primarily as the determinant of prudent reserves and of the equitable distribution of profits in long-term financial arrangements, in which almost every household in the land has some involvement. It should, therefore, be relatively easy for us to achieve respect and to be seen as responsible if we do a good job. I consider marketing to be more concerned with getting the product right than creating the desired image.

In the area of provision for retirement, I consider actuaries have a greater understanding and a deeper involvement than any other profession or occupational category. I admit to being extremely disappointed with our performance in this area. From the point of view of the public at large final salary schemes have failed millions of early leavers and early retirement cases. I think that, as a profession, we have consistently dragged our feet on reforms and proper solutions to this problem. Another problem area is the lack of an entitlement to pension increases above those guaranteed, even when specifically funded for or intended. The profession has, to my disappointment, been slow to expose these problems and to suggest workable solutions. Of course, I understand the reasons which are perhaps typified in a letter to the *Financial Times* published on 13 October 1988 under the heading, 'Perils of Inflation Proofing'. The last two paragraphs read as follows:

"For these and other reasons, I believe pensioners must continue to rely on discretion to some extent for their increases. Nevertheless we are still hoping that, as a result of the current Occupational Pension Board inquiry, a way will be found to increase inflation protection for pensioners.

As to whether present arrangements particularly suit the actuaries, I can only say that, like all professionals, we are employed by our clients and our clear duty is to operate in their best interests." signed XYZ, Institute of Actuaries.

I wrote to the Institute objecting to the letter on a number of grounds. One of the points I made was as follows:

"I feel that the public looks for something wider in a true professional than just blindly following his client's interest. The latter may be basic and it may be good business marketing, but, by making such a bald statement, Mr Z is devaluing the profession of actuary in the eyes of the public".

I received a reply from a senior member of the Institute's Executive, and on this point he wrote, "This is a subjective view with which few, I feel, would agree". If this is really true, then I am afraid we cannot expect to be respected or regarded as responsible. The Institute executive also wrote, "It appeared appropriate [to Mr Z] to say that actuaries could not advise their clients to give absolute guarantees in relation to inflation proofing". Now, we have the Social Security Act 1990 requiring limited pension increases to be guaranteed for future service. If inflation falls to 5% p.a. or lower, as seems quite likely to me, this will mean guaranteed cost of living increases. Have actuaries been saying that LPI increases are too onerous an obligation for employers to accept? If so, it has not been audible to me. The Government proposes appropriate reserves, in many cases purely precautionary reserves, to provide guaranteed increases up to LPI on the earlier-service component. Have actuaries been crying 'theft' or 'too onerous'? Where are the best interests of the clients now?

I shall feel obliged to explain to those cherished final salary scheme clients which my firm advises the nature of the obligations and additional risks that they will be taking on. This will involve making an assessment of the range of inaccuracy of actuarially calculated past-service reserves and contribution rates and possibly the range of inaccuracy of actuarial estimates of indicative benefits from money purchase arrangements. We have considered this before in discussing original scheme designs.

Unfortunately, the Institute's motto is over-optimistic in that certainty cannot be obtained from uncertainty. From a marketing point of view, the profession may do itself a disservice by acquiescing in the assumption of greater certainty for our precisely calculated estimates than can be substantiated. We need to have an awareness of the inaccuracy of our calculated values in order to fulfil our functions responsibly. It is, therefore, a disappointment to me that the subject of the range of inaccuracy of actuarially calculated values and the need for and extent of margins, particularly in the area of pensioners, has never, to the best of my knowledge, been openly discussed. How else can we learn and develop our thinking?

**Mrs D. S. Lewis** asked how younger members of the profession should be encouraged to become more involved. She was disappointed that students were not asked to complete the questionnaire and wondered why. **Mr R. J. H. Milne, F.F.A.**, replied that it had been felt more appropriate to send questionnaires to the active members of the profession. To consider students' views would be a further part of the research. **The President** commented that he had received useful feedback direct from students when he had visited local actuarial societies in recent months, whilst **Mr Milne** stated that the Group had not originally realised how much the views of members would differ with age. They would have canvassed the views of the students if they had known.

**Ms A. C. Dash:** The paper considers the questions of the awareness of the actuarial profession and its external image. However, I think a crucial question is whether people outside the profession really understand what an actuary does. I suspect that journalists do not, which might be one reason why so few of the Institute and Faculty press releases are used and why press coverage is so limited. I think that if we could improve understanding, then a greater public awareness of actuaries and an improvement in our external image would follow. I agree with the authors that the use of external consultants in this area would help, as would research to determine the views of target groups.

Another recommendation which I endorse is the establishment of a more effective forum to elicit the views of younger actuaries. We could, perhaps, impose quotas of actuaries of different periods since qualification on certain committees such as the Public Relations Committee or even Council itself. It has become accepted that these bodies should consist of respected senior members of the profession. This means that, whatever their personal qualities, as a whole they do not represent the

demography of the profession. They cannot, therefore, reflect the whole range of actuarial opinion nor represent to the outside world the full range of images that actuaries would like to portray.

**The President:** About half of Institute Fellows have qualified within the past 13 years and the youthfulness of the profession is quite significant. The Council have already decided that committees and working parties should try to reflect this more.

**Mr A. Smith** (a visitor): I am not an actuary, but a public relations consultant. I advise you that you should think very seriously about the image you present and that you should be doing something about it. You are a good deal behind the other professions.

You do have a number of advantages. One, which you might see as a weakness, is that not many people know about you or what you do. You have the great advantage that you start with a relatively clean slate; you do not have to overcome any public animus to you. You have to make a decision whether you are going to market your profession or market your services. You must bear in mind that you are looking at a long haul—probably about five years—to really start to get some changes in attitudes. It would be nice to think that the transformation could happen overnight, but I do not think it is going to happen like that.

Previous speakers have made the point that your work is intimately connected with virtually everyone in this country; certainly through insurance and pensions, and in many other hidden ways. Those could be brought to public attention. You are a forward-looking profession, you look into the future, which other professions do not. That is a major strength to which you should play.

You need to work out to whom you are talking, and refine your messages for each audience you address. You talk both to the public and to your customers, and they are not necessarily the same people.

Do not knock the press. There are some sensationalist journalists; there are some sensationalist editors, but a journalist who understands your case and who understands what you are about is probably the best friend you have.

**Mr D. J. Morris:** The worrying thing I found from the extracts in Appendix V was that so many of them had nothing to do with actuaries. It was as if people could not use the dictionary. Those that did actually refer to actuaries seemed to be backhanded compliments. We do not start from the fortunate position of having no image. We have a bad image that we have to work at to improve. The survey indicated that everyone felt we ought to be devoting more resources to this, without actually being asked in the questionnaire precisely what was meant by resources. Was it money, or people or time?

**Mr C. B. Russell, F.F.A.:** The authors are rather gloomy about the perceived reputation of the profession. Perhaps there needs to be a distinction made between the reputation of a profession and the reputation of its members. From the questionnaire, most of the members believe the profession is regarded as dull and boring, and I think they are probably right. However, I believe that most actuaries individually are regarded as less dull and boring than the average actuary! I contrast that with the legal profession, which I think has a reputation for very high standards indeed, and many of its members have a reputation for failing to meet those standards! So, I am not sure whether it is good or bad for most individual members to have a better reputation than the profession as a whole.

A majority of members were in favour of spending more on increasing the reputation of the profession among the public, which presumably means seeking greater public awareness. This does concern me somewhat. My name appears in the local edition of the *Yellow Pages*. Over the years I have had a number of inquiries and I have almost always dealt with them or managed to find somewhere to pass them on. However, there is a certain amount of work which is hopelessly uneconomic. I see this uneconomic work as being a problem, particularly in the pensions area. There is a great deal which actuaries could do for individuals in the pension field; and I know that many individuals seek advice in this area. When people ask me about pensions, I tell them that they should ask an actuary. The point that worries me is that, if the public did become aware of the services that actuaries can offer, is there any way we could meet the demand at anything like the price they would be prepared to pay?

Other professions may be better placed to deal with individuals. There is the concept of the small town accountant, who charges a great deal less than the city one. Are we likely to have small town actuaries who charge much less? I rather doubt it. I am concerned that if we educate the public to know what we offer, the response might be, "Yes, actuaries have something to offer, but do not consult them because they are too expensive."

**Mr J. P. Ryan:** Council members of both the Faculty and the Institute, saw the size of the profession as being a weakness, whereas this was not generally so in the profession as a whole. This reflects the fact that it is only when dealing with things at Council level, or as members of working parties or dealing with large-scale projects in terms of recruitment that it becomes apparent that the size of the profession is a weakness. I think that it is more of a weakness of the profession as a whole than is drawn out in this paper.

On the issue of public awareness I see dangers. Much of our success as a profession is like Sherlock Holmes's dog which did not bark in the night. The fact that we do not have much headline publicity is a reflection that we do not have life companies failing or pension funds or insurance companies becoming insolvent. That would be a very good way of getting much more public awareness very quickly. I do not think we would like that.

The real client is the public at large. In dealing with our image, the correct measurement is not necessarily the number of mentions that we get in the press, but how few derogatory references we get in the press. A major way to improve the understanding of the press is to provide many off-the-cuff comments in anticipation of problems coming up and to explain current and future issues and some of the day-to-day complexities of the insurance industry. Inevitably, journalists have to cover wide ranges of topics. Modern technology has changed the economics of the press; there are pressures on staffing ratios and there is much greater emphasis on productivity. Anything that we can do to help them do their job in understanding what is happening is important, and will reduce the derogatory comments within the press.

The most worrying thing about the paper was the relative lack of importance given to awareness among undergraduates, both by older members and by members of the Councils. A high awareness of the profession among good quality undergraduates is all our future.

**Mr B. H. Shaw:** Public esteem needs to be earned. Public awareness in a good light has to be achieved. It does not come about just by marketing, it is more a matter of deeds.

One way we can consider providing a service to the public at large and making contact with individuals is on a voluntary basis. It is interesting to see a circular which was issued by the ABI on 22 January 1991, to do with the Occupational Pensions Advisory Service looking for voluntary advisers up and down the country. This is to help with queries arising on individual pensions matters. Quoting from this:

"However, the advisers themselves will continue to give their time and expertise on a voluntary basis. They are the backbone of the service, and each is named in a directory supplied to local Citizens Advice Bureaux so that the people with pensions problems can be referred on. The advisers themselves find the work satisfying and educational. It gives them an opportunity to see how various types of pension scheme work, and how pensions appear to the consumer. It thus provides useful experience."

Is this not the sort of way that we ought to be providing some service and making contacts with the public, and is it not the sort of thing that the Institute should be encouraging its members to participate in?

**Mr P. J. Turvey:** The profession needs to move forwards in this area as quickly as possible, but I would quote the old adage: there is only one thing worse than bad publicity—no publicity at all.

The analysis of strengths, weaknesses, opportunities and threats is very interesting and helpful. With the benefit of hindsight, it would have been useful if there had been space to write in new ideas or new insights. If 2,000 actuaries had sat down to think of other ideas we would have a very interesting list of further things to consider.



A survey of what members think about what consumers think can be only limited in its usefulness. We need to know exactly what the consumers themselves think, and why they think it. There is a limit to what the respondent can do. The questionnaire might have been more useful if there had been an 'I really do not know' box.

It is urgent to move on and do something, yet we do not have the information that we need for real external action. We must find out what consumers think as soon as possible. I would strongly support the recommendation in § 1.4.2 that we do some research, and I would add undergraduates to our research groups. When we have those results we will have a much better handle on the problem and will be able to tackle it. When we do tackle it we need to be practical. Mr Russell has pointed out the limited attractiveness of endearing ourselves to the general public as such. There is also a question of cost effectiveness and benefit. If we are going to educate the general public, who most days do not have a use for actuaries, how are we going to raise their awareness more than the slightest amount without spending millions of pounds on television advertising? People's awareness can be raised in a useful way when they will be doing something as a result of that awareness. However, if members of the general public are not going to be able to do anything with the awareness they have of actuaries, we have to consider very carefully how much effort we want to put into that area.

Once we have the data about what people think and why they think it, maybe we can move forwards. Some interesting things could come out of that survey if it was carefully matched with the questions which have been asked in the survey dealt with here. Good questions about Council are: is Council in touch with members of the profession? is Council in touch with consumers? is Council in better touch with consumers than general members? I should like to know the answer to that. I should also like to know the answer to the question: to what extent are our members in touch with our clients?

**Mr V. G. West:** I wish to make a comment about undergraduates and about one in particular. A friend has a daughter who is very bright and who had decided to become an actuary. She knew me and what actuaries were all about and she thought it was a good career. At university she met careers advisers and spoke to other actuaries. She has been told that the exams are very difficult; the pass rate very low; and the other actuaries that she spoke to endorsed this almost with pride. That was four years ago. She is now a qualified accountant. She came to me and said, "I was told when I took up accountancy that I could expect to qualify within three years. When I spoke to actuaries, they said, 'You will be lucky if you qualify within five years' ". That is only one person. I wonder if that image is consistent throughout undergraduates. That is what we need to find out. It is a hard course of study; but we should not say with pride that it is very difficult, that you do not stand a chance. We have to encourage people to realise it is a worthwhile career. It needs effort, but that will be rewarded.

**Mr C. D. Daykin:** Mr Ryan referred to the hidden role of actuaries, and it is the fact that actuaries are successful in doing what they are doing which means that they do not get publicity. The vast majority of the population need to be thankful to actuaries either for the safe conduct of their life insurance company or for the prudential management of their pension fund. However, people do not know that, because they do not know what is going on behind the scenes and they do not know that actuaries are involved.

The fact that actuaries are so involved in the United Kingdom is unusual in its own right. I spend much of my time visiting other countries and telling people there about how actuaries have such a fantastic role in the U.K., so it is somewhat ironic to find that people here are complaining that actuaries do not have much of a role, and that the second highest weakness referred to in Section 3.3 is that we do not have any influence on legislation. In most other countries of the world people marvel at the extent to which actuaries are involved in pensions and life insurance in our country. We find it from Canada, the United States of America and the European Community that they want to see actuaries involved in the same way as we are in this country.

One of the important factors in the U.K. situation, and the reason why we have influence on legislation, is the presence of the Government Actuary's Department. It is important from the profession's point of view, because it means that right at the heart of things, where legislation is being considered, there is an actuary with a formal position; other countries do not have that.

The paper raises the question as to whom we represent as a profession. Standing where I do, in a very public position, I see actuaries as having a very strong role in protecting the members of the public: the policyholders, the members of pension funds. I do not always find that attitude when I talk to other actuaries. They are often concerned with the interests of companies, with employers or with institutions. That is something that we need to watch carefully. If we are to be influential and have a positive image, we must make it our business to champion the public interest, the interest of policyholders and the members of pension schemes.

Turning to the strategic planning effort in which we are engaged, I am chairing the Planning Joint Committee which has produced the Mission Statement which was published in the December 1990 issue of *The Actuary*. We are looking at the major areas of standards, education, professional development, image and influence as ones where we want to have strategic objectives and specific aims as to what we are going to achieve. The Planning Joint Committee is about to receive a report from a sub-group which has been working on the strategy. This will take the process a stage further towards producing a strategy document for the profession which will be presented to the first ever joint meeting of the Institute and Faculty Councils in York on 4 March 1991. That is an exciting development because, in doing this together, the Institute and Faculty will be working as a united body. Together we shall be focusing the efforts of the profession on specific aims that will meet our objectives, so that we will not just react to the influences beyond our doors, but can be responsible, in some sense, for our own destiny.

We shall be much clearer about what we are trying to achieve as a profession. We should not be spreading our effort in all directions, but be trying to concentrate on the main things; and then be mobilising the whole profession, not just the Councils and the Committees, to achieve these objectives. The strategy has to be communicated and owned by the whole membership. I hope that will happen, and that we will have further opportunities to discuss the way that we are going forward. At the same time all our Committees, who do a tremendous amount of work for the Institute, will be developing action plans in accordance with the objectives, and moving forward with an eye to the future. For me this paper has come at a very opportune moment. The work done on the S.W.O.T. analysis, and the views obtained from members, were very useful background to what we have been doing in the Planning Joint Committee.

**Mr M. Nash** (a visitor): Like Mr Smith I am a public relations professional. I use the word 'professional' in these circumstances with some concern, if only because we have a constant battle within public relations and financial communications to establish that there is any profession at all. At least you do not have that problem.

An earlier remark referred to the use of the word 'benefit'. The one thing which is shining like a beacon through this discussion is that there is very little mention of what benefits you are bringing to the various audiences that you intend to target, and how you intend to speak to them. May I urge you that the next part of your research concentrates on what those people want to hear and the way they want to be spoken to rather than your apparent approach, which seems to say "how shall we educate them, and how shall we get them to understand us?" I suggest that you concentrate your future research on what the consumer wants.

**Mr C. M. Wiscarson**: It is always good when a group of people seek to find out more about themselves. However, they must take it on to the next step, which is to find out what other people think of them. I appeal to the profession not to ask questions of consumers themselves, but to employ professionals from outside who will ask questions that we would never think of asking. We will always tailor the questions to get the answers that we want.

The paper uses the word 'marketing'. I have always been taught that marketing comprises four particular aspects: product, price, promotion and distribution. I fear that we are looking, at too great an extent, at the promotion of the profession, and I would prefer to see a much deeper analysis of what the product is. Only one aspect of promotion is public awareness. I am not sure it is a particularly important one. One of the issues that has always faced me as an actuary is that we are not simply a profession to which the adjectives in Table 5.2 can apply; we are extremes of those. It is not that we are simply dull, it is that we are extremely dull. It is not that we are aloof, but we are extremely

aloof. It is not that we are technical, but we are extremely technical. Those of us who are average are extremely average. It is difficult to market a profession which exhibits those characteristics.

I cannot support putting more resources into the area of promoting the profession. Let us use those resources to examine what our consumers think. One set of consumers important to me are the non-actuaries among the boards of life and general insurance companies, who would provide a vitally important insight.

**Mr D. E. Purchase:** It was interesting that the Councils and the members did not agree about the small size of the profession. I suspect that is because Councils and Committees have great difficulty in finding enough volunteers to serve on working parties. I am very conscious, both from the results of this work and from other surveys, that there are many volunteers among the members, and a major task for Council is to find a more effective way of making use of the members who want to participate. The fact that Institute members in general are not too worried about the small size of the profession I find encouraging. I think they are right. However, it suggests that they do not have a very strong belief in the effects of economies of scale on our subscriptions.

I had great difficulty when I came to answering question 5 of Section B of the questionnaire, which asked, in relation to the general public, about the level of resources the profession should be allocating to public awareness and image. As I believe we are making no effort, and that that is the correct amount of effort to make, there was no answer that I could rightly give among the alternatives offered. I think that previous comments have tended to support that view. We are right to concentrate our efforts.

I should like to see more work done on the reputation of our profession among other professions. That is an area which has not been covered so far and which would be of great benefit. It is in those areas, and some quarters of government, that we have some real strength to build on, but also a good deal of further work that could be done.

**Mr C. M. O'Brien:** Let us forget the general public who, individually, have little or no contact with us, for a whole variety of reasons, some of which have been given. The major one is expense, given that we are such a small profession. Incidentally, I would have liked the question on use of resources to have had a rider as to subscription levels or cost on it.

The first impression we create is what each of us does in our contact with the world outside us. That is where it all starts, with the individual business contact. Thereafter, the important people are the journalists, because that is where the information is spread and where opinions are formed.

**Mr H. Brown** (a visitor): I am the marketing manager at a firm of consulting actuaries and I have read the paper with great interest. The survey was introspective, and I feel that much can be gained from further research into key target markets.

As someone involved in marketing, I spend much of my time checking artwork. As such I suffer from an occupational hazard; when going into a restaurant I do not tend to read a menu, I proof-read it. I wonder whether, as actuaries, the authors too suffered from an occupational hazard which, in one sense is a strength, but on the other, perhaps, is a weakness; possibly at times being too thorough, introducing too much complication for certain audiences. There were parts of the research findings that I had to read more than once to fully understand. I wonder, when the findings were released to the press, whether a clear summary of salient points accompanied the booklet, because you can confuse lay readers.

**Mr R. J. Squires:** I speak here wearing two hats. One is marked 'member of the Public Relations Committee', and, wearing that hat, I am very pleased with this report. I thought it very interesting and very useful. The other hat I wear is marked 'Treasurer', and, wearing that hat, I have to think where the money is going to come from to pay for these things that people want. The problem with any piece of market research is that if you ask consumers what they want; do they want their new car to be safer, go faster, be more economic on petrol, be more comfortable, etc., they will answer 'yes' to all those questions. Then, when you produce the new car in accordance with these answers, they will not buy it, because they did not actually mean that they were prepared to pay that much money. If the people

who have answered this questionnaire think we should be devoting more resources to public relations and our image, how much are they prepared to see the annual subscription increased by in order to pay for it? It would be very useful if we could have some indication of whether members are prepared to see another £50 a year on their subscription in order that we can have a public relations budget.

In looking at the Institute's finances I have become aware of how much benefit we get from voluntary work. If we had to pay commercial rates for all the work that is done by our members on various committees and working parties, the annual subscription would be enormous. I fully endorse what the President has said, that we should try to tap that resource to an even greater extent, involving the younger members as much as possible.

**Professor A. Asher:** I speak as convenor of the Actuarial Society of South Africa's sub-committee on public relations. We carried out a similar survey some 1½ years ago. In it we asked about items on which the membership felt more money should be spent. I was pleased to discover that public relations came after education and research. Perhaps a ranking could be included in the next survey.

In the important area of new entrants to the profession, we do particularly well in South Africa. Over 200 potential students enter at various universities each year with the idea of qualifying as actuaries. These 200 outnumber the number of participating actuaries in the country.

We do employ a PR consultant. This has some advantages, particularly in that she is probably more proactive than members would be themselves in maintaining contacts with the press. I should, however, mention that we have kept the costs down to something less than £200 a month. Nevertheless, the questions that are asked at the annual general meeting relate to the amount spent on public relations rather than the fact that we are not putting effort into it.

However, money does talk. Of the 200 students that begin each year in actuarial science, some 50 will get bursaries from life offices and consulting actuaries. Clearly, these make the actuarial profession attractive. One result is that many of the top students in the matriculation examination, which is the final school examination in South Africa, go into actuarial science. This means that we get much positive press coverage when the examination results come out.

There is one area where we are avoiding publicity. At the end of last year we ran a seminar on AIDS, which is more important in Africa than here, and we found that we had to turn down opportunities for publicity because we did not feel that the profession should be identified with the speculation surrounding the subject. This has frequently been our line.

The profession enjoys much influence with government—perhaps too much. For instance, we have been given the responsibility of certifying the appropriateness of the investment policies of pension funds and life assurers, which is something which we might not have wanted to claim for ourselves. One of the reasons for this is that our relationship with government—and more importantly the civil service—has been behind closed doors. They are not particularly keen on public protest, and, perhaps, it is right that the place of the profession is private lobbying rather than public protest.

**Mr E. Short:** I speak not as a member of the Institute, but as a member of the press.

Several of the comments that have been made remind me of an advertisement that is currently being run on television by a leading life company, "I want to be . . .". The message coming over to me is that the profession wants to be respected, it wants to be understood and it wants to be appreciated.

On marketing, the profession needs to decide what is being marketed. You have to be careful to distinguish between the profession and the industry it is serving. I refer to the difference between the actuary in a life company, and the actual life company itself. The distinction may be very clear to actuaries, but be very confusing to the public. A recent article in one of the trade magazines was headed 'An Interview with the President of the Institute of Actuaries', but it read more like an interview with the chief executive of a leading life company. This is a warning that actuaries need to be very careful when promoting a message, that people have a very clear idea who you are and where you stand. This applies also to the consultant pensions actuary, where the need to talk to clients is very clear. How often do I hear that low transfer values are blamed purely on the actuary? We have also seen recently in the press the confusion which arose over the role of the Government Actuary and the social security system.

We have to decide what are the target markets. These fall into four categories: the public, and

several speakers have felt that they are not worth bothering with directly; the consumer lobby; MPs and civil servants; and journalists. The last three all have a vested interest. They will tend to look for the profession to tell them what they want to hear.

Another point is how to communicate. The public-- not even the educated public-- does not think like actuaries, let alone speak like actuaries. The lay person thinks in terms of capital values when dealing with stocks and unit trusts. Yield means very little, whereas actuaries are weaned on yields, and think in yields. This leads to considerable confusion.

Journalists almost pride themselves on being innumerate, as if, by being so, they are down to earth, in touch with reality and have every other virtue. Most of those you speak to have very sharp minds. They are usually arts graduates, at least half having read history. They do not understand numbers; they do not want to understand numbers. Recently an actuary was promoting a new indexed unit trust. He said, "In two years out of three, the fund will perform within  $\frac{1}{2}\%$  of the index". The first question from the journalist was: "What happens in the third year?" Timescales are totally different. Long term to a journalist is probably only six months at the most, never as long as 10 years. So, when actuaries talk about 25 years it is quite beyond their comprehension. Forty years is an eternity.

A recent example of a failure in communication concerns the disclosure of expenses, where the profession put forward the concept of yields as the best method of disclosing expenses and completely failed to get the message over. It is not entirely the profession's fault, because the people they were talking to did not really want to hear what was being said. The moral of this is that actuaries must be prepared for disappointments, for failures, and to be misunderstood. It should not put them off trying to do what they really need to do.

**Mr R. E. Brimblecombe:** One of the advantages of working for an insurance company on the pensions side is being actuary to many small schemes. I know, over the years, that many of these smaller employers come to look on the actuary as one of their principal advisers, and we have a high public profile in that particular area.

I should like to comment on legislation. I was not at all surprised at the result of the comparison with the predictor analysis on the difference in view between the profession as a whole and the Institute Council. Apart from the point that Mr Daykin has made, the inevitability of any profession or any body in connection with influencing legislation is that much work takes place behind closed doors; and we have, over the years, had more influence on legislation than is generally thought.

We, as a profession, are fortunate that we have a very large constituency of the public who rely on actuarial advice. As Mr Daykin has said, millions of policyholders who have life policies, and millions of members of pension schemes, whether they know it or not, in their day-to-day life, rely on the actuary to ensure that there is continued financial health of their life policies or their pension schemes.

All of us meet people from day-to-day who have life policies, who are members of pension schemes. I suggest that every member of the profession talks about the actuarial involvement in those areas to try and raise in the public's mind the role of the actuary, and thus the image of the actuary.

I am one of those who believe that we should encourage young members. I was lucky enough-- if that is the right phrase-- to have been co-opted onto an Institute committee within three years of qualification. As chairman of one of the larger joint committees, I would be delighted if young members volunteered for a committee or working party.

**Mr M. Iqbal** (closing the discussion): In the past decade considerable changes have taken place among the professions. Previously it would have been unthinkable, almost unprofessional, for a firm to advertise for business, and yet today accountants and solicitors are allowed to do so. To begin with only minimal advertisements were permitted, but before long firms were allowed to market their services more freely. Some of the larger firms have even appointed marketing managers. Mr Smith has reminded us of this fact. I was gratified to see that at least one firm of consulting actuaries has followed suit. For all the right reasons we have been slow to follow. In competing for attention in universities and the financial community our small profession has, therefore, put itself at a disadvantage.

The need to market our profession more effectively was the subject of a paper by Mr Lagden in May 1985 (J.S.S. 29, 95). Many of the points made by him are still valid. This paper introduces a

measure of objectivity. I liked the idea of using the two Councils as a control group. Not only is this an essential research tool, it also pre-empted the bane of all marketers: the management's stock response to any research, which is to say, "I could have told you that". The Institute's Council finds this particularly interesting, and I should like to comment on a few of the differences highlighted.

Both Councils regard the small size of the profession as a weakness, whereas the membership did not. I suspect that the question was being interpreted differently. The Council is aware of the difficulties in allocating scarce resources. It is also aware that, in competing for attention in the universities, given the lower demand for actuarial trainees *vis-a-vis* accountants, etc., we are completely overwhelmed. Members may, however have felt that the small size has not inhibited them in their job or career aspirations. Perhaps it has even helped them.

Mr Turvey made the point that we should ask what the consumers think. The question was: are the Councils better placed to judge that than the members? It seemed to me that it did not really matter so long as the Council had access to the right information.

Members are critical of the profession's lack of influence on legislation. Mr Shucksmith referred to this in the context of pensions. This view probably reflects concern at us not taking more active steps to shape the course of legislation rather than concentrate on minutiae. Members are unaware of what has gone on behind the scenes, as Mr Daykin and Mr Brimblecombe have pointed out. Nevertheless the point is a fair one.

The membership overall seems concerned about the image of the profession among target groups, and seems prepared to allocate greater resources than the Institute has so far. This, of course, means larger subscriptions or a cut in other services. I disagree with Mr Squires's assertion that market research is a waste of time, because people do not respond in terms of buying decisions the way they have said at the time of the research. That is more a question of bad research rather than the concept itself being invalid. The need to concentrate on target professions in improving image is a view more strongly held among the more recently qualified and therefore younger members.

The most useful knowledge that I have gained from this paper is the extent to which the opinions of younger actuaries differ from those of their senior counterparts. We need to be alert to this. The Council is, on the whole, comprised of senior actuaries and, if I may use the expression, the inner Council members are very senior indeed. Of course they bring to bear their formidable intellect and wisdom to the issues of the day, but we do need to be vigilant.

I agree with the authors that we need to find a way of guiding the views of the younger actuaries. They are tomorrow's opinion formers. They are our best medium of change as well as being the products of modern culture and ethos. Ms Dash referred to this. The suggestion was that we should have proportional representation by age, and I presume by sex as well. The President referred to steps that we are planning to take in that area by co-opting more people into committees.

I now consider the steps that the Council is taking to address the issues identified by the paper. Some of these were begun before the paper was published. What we are doing comes in two forms. We are trying to achieve both changes in reality that are required and changes in perception; form and substance; because they are both important.

First, we are reviewing our education system to make sure that we attract the right sort of individual and then get him or her through the examinations quickly. I regard that as the single most important ingredient of successful change. At a seminar organised in Staple Inn last year by Ken Gardner, an Oxford academic stated that the very qualities that make typical actuaries also inhibit them from marketing their expertise. That has to change, but how? How do you change a trait of innate modesty, or shyness, into extrovertism?

Second, we have a Public Relations Committee that looks at internal and external PR. Progress has been sedate, but there are clear signs of a desire to move up a gear or two. Mr Arnold is the Chairman of that committee and has immersed himself wholeheartedly into the duties. We are seeking to improve the image of the profession, both among opinion-formers and the community at large. We have already identified poor communications skills as a weakness. A particular problem is that those actuaries who are good communicators are often spokesmen for their own firm and not for the profession. It comes back to the question that Mr Smith asked: what is it that we are trying to do? Are we marketing the profession or marketing the services? I suppose to the wide world we are marketing the profession; but to the people who are prepared to pay for it we are trying to market the services.

Third, the Institute and the Faculty are jointly developing a 10-year strategy for the profession. This will incorporate a meaningful mission statement that will form the beacon to see this century out. You have read about it in *The Actuary* and you have heard more from Mr Daykin. You will hear still more in the next few months.

A S.W.O.T. analysis was carried out by each Committee of the two Councils. One issue that has been of great interest to me, and to Mr Lee, is the need to roll back the frontiers of the profession. If I may use an analogy, the Anglo Saxon actuaries have to discover the New World and Australia, and claim it as theirs before the Spanish accountants and Portuguese lawyers do so. The Financial Management Group (FIMAG) is endeavouring to do this in the field of financial management. General insurance, long-term care and treasury management are other areas where we have skills that we could use. In all of this our true opposition is not the Spanish or Portuguese, but our own innate reserve. The Futures Committee of the Institute is looking into this issue. At the end of the day, however, it is something only the consulting actuaries can do.

The paper refers to high reputation as a strength, but general awareness as a weakness. I have an empirical view that, compared to 20 years ago when I qualified, actuaries are much better paid now, but much less important. We have acquired unique statutory functions, but this may well have marginalised our influence.

The paper does not really live up to its title. This is not really a full marketing audit. As Mr Nash has pointed out, there is no consumer research; nor have all the aspects of Davidson's book, referred to, been attended to. However, all that is an excuse for a second worthwhile paper in due course.

**The President (Mr H. H. Scurfield):** This has been a useful discussion and I thank those who have taken part.

The paper is timely, coming just when we are in the middle of the planning process which has been mentioned. There is much input to the planning process coming from this paper and from the discussions in Scotland and here. The next stage is the joint meeting of the two Councils in York. It is fitting that we should be discussing a paper prepared by actuaries of the Faculty, thus showing the spirit of co-operation which I emphasize is increasingly apparent between the two bodies.

Coming through strongly within the paper, and in the discussion, is the need for better communications, both from the profession as a whole and from actuaries as individuals. It has been suggested that we need a formal PR officer, and a formal PR budget. That, of itself, does not produce better communications. We need to develop and be confident about the relevant messages and the solutions to relevant problems. We need to decide to whom we are trying to communicate those matters. We need to have a will to communicate. There are things that can be done centrally, but it depends to a greater extent on each and everyone of us.

In this context, I should like to congratulate the Staple Inn Actuarial Society, and all those who have been involved in the development of *The Actuary*—still in its infancy—which is making a significant contribution to developing communication within the profession. I am pleased to single out and thank two people who have played a particular part in that, Mr Tompkins and Mr Lagden.

I hope that a part of continuing professional education will be the development of communication skills among actuaries. It is not our greatest inherent skill—not the one we seem to have built in. Maybe the younger members of the profession can help us here. In visiting the provincial societies, I have been impressed by the enthusiasm and by the interest in developing the profession. We should use that more.

From all I have said, you will understand that I am particularly pleased to see this paper. That we have had a valuable discussion goes to show that the audience has been particularly pleased to see the paper. We thank the Faculty who promoted the paper, the working party who did the work, and everyone who filled in the questionnaires. Please show your appreciation in the usual way.

**Mr R. J. H. Milne, F.F.A. (replying):** The research group agree that, given our limited budget, we have to forgo direct promotion of the profession to the general public. The resources are not there for us to change attitudes. Having said that, we agree with the comments that were made by several speakers that the media are the key to influencing the general public. There are three steps. The media influence the general public, who in turn influence undergraduates, assisting in the recruitment policy.

We also agree that voluntary support by members of the profession is important. We are not able to talk about a large PR budget, and the voluntary contributions by people in the profession with relevant experience can be extremely valuable.

Mr Turvey mentioned the lack of a 'don't know' box on the questionnaire. It was one of those things that caused the greatest amount of discussion within the research group. We felt that forcing people to give an opinion was a better way of getting results, and we have not changed our minds on that point.

We are indebted to Mr Brown for accusing us of being too thorough, particularly with reference to the statistical sections. We were concerned about that. However, if we were going to put results in a paper claiming that answers to certain questions were significantly different from predictions by the Councils of the Faculty and Institute, then we were keen to make sure that significant variations were statistically significant.

There has been some comment about our paper being incomplete. We agree; we could have gone further if we had had a larger budget and a remit to interview members of the public and target groups. We would have liked to do that. It looks as though it is an area that could be researched further, perhaps by ourselves, perhaps by the PR committees.