

A MARKETING AUDIT OF THE ACTUARIAL PROFESSION

BY RAY J. H. MILNE, B.Sc., F.F.A. (CHAIRMAN); GORDON M. BAGOT,
B.Sc., F.F.A.; ALASDAIR C. BUCHANAN, B.Sc., F.F.A.;
ALAN R. GOODMAN, B.Sc., F.F.A.; ASHOK K. GUPTA, B.Sc., F.F.A.;
IAIN G. HORN, M.A., F.F.A.; STEWART F. LEE, B.Sc., F.F.A.; BOB PORCH,
B.Sc., F.F.A.; IAN J. THOMSON, B.Sc., F.F.A.
OF THE FACULTY OF ACTUARIES' MARKETING RESEARCH GROUP

Presented to the Faculty of Actuaries on 19 November 1990

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. 1,837 were returned representing an overall response rate of 48.3% of those mailed. Within this, 59.5% of UK 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

Chapter 2—Demographic Factors

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

Chapter 3—S.W.O.T. Analysis

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

Chapter 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).

Chapter 5—Image

The first part of this chapter 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?**

Chapter 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.

Chapter 7—Resources

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

Chapter 8—North American Developments

This chapter begins with a section on a survey carried out in the United States 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 to the Faculty of Actuaries Student Society (ref 1). 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 professions 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 UK 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 United States, the publishers conclude that the actuary has the "number 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. They have 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 UK, 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 UK 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.

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:-

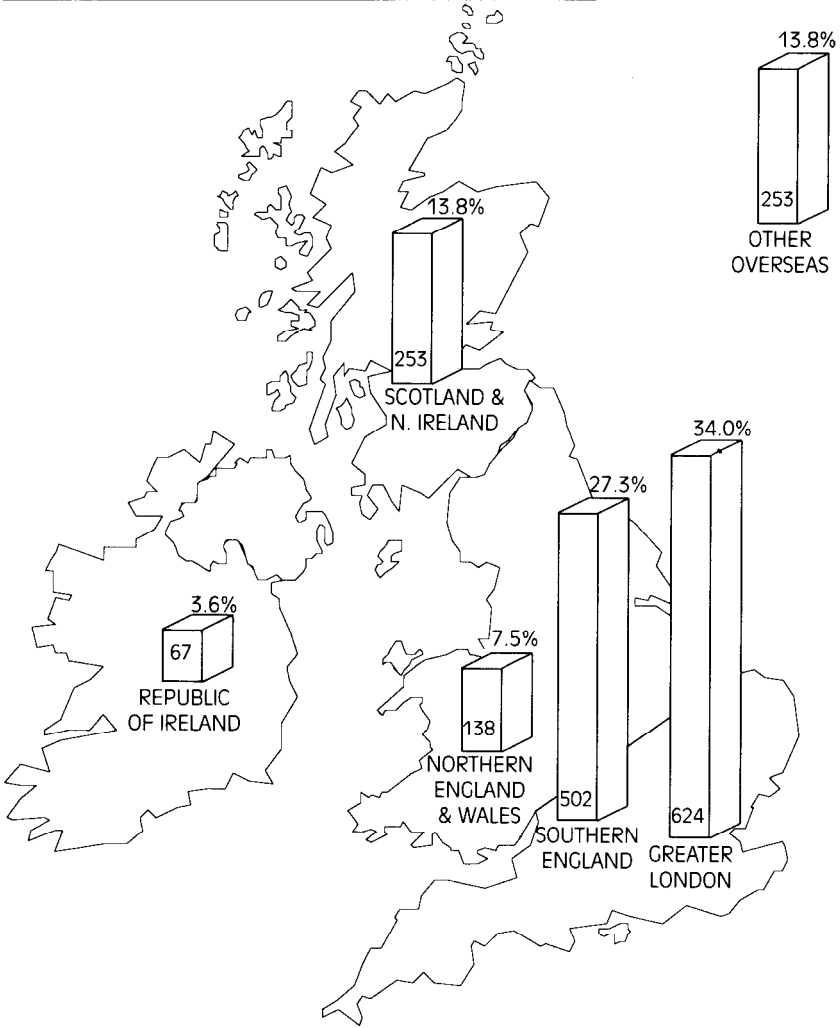
- (i) identify significant sub-groupings against which the responses of the earlier sections of the questionnaire could be measured
- (ii) compare the responses with the known population of Faculty and Institute members
and
- (iii) establish interesting relationships between the sub-groups.

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 UK.

Table 2.1 Geographical Location of Respondents



2.3 Professional Designations

2.3.1 We had originally anticipated that AIA's would have been asked to complete the questionnaire, but in the event only FFA's and FIA's 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

<i>Professional Designation</i>	<i>Number</i>	<i>Percentage</i>
a) AIA	22	1.2
b) FFA	413	22.5
c) FIA	1,415	77.0
d) Not Stated	3	0.2
	<hr/> 1,853	<hr/> 100.9

2.3.2 This demonstrates that 16 respondents (0.9%) 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 FIA's and Institute records showing that 66 of their FIA's and AIA's are FFA's. Six respondents indicated only AIA.

2.3.3 The obvious confusion over dual qualification and AIA's 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

<i>Year Examinations were Completed</i>	<i>Years of Experience</i>	<i>Number</i>	<i>Percentage</i>
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
		<hr/> 1,837	<hr/> 100

2.5 *Current Employment*

2.5.1 Table 2.4 details the numbers and percentages of responses.

TABLE 2.4

<i>Current Employment</i>	<i>Number</i>	<i>Percentage</i>
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
	<hr/> 1,837 <hr/>	<hr/> 100 <hr/>

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

<i>Current Employment</i>	<i>Number</i>	<i>Percentage</i>
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
	<hr/> 1,837 <hr/>	<hr/> 100 <hr/>

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 UK 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 brackets are calculated on the assumptions that these 320 are distributed throughout the UK 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*

<i>Geographical Location</i>	<i>Number</i>		<i>Response Rate (%)</i>
London	927	(1,039)	(54.4)
Southern England	796	(892)	(53.3)
Northern England & Wales	153	(172)	(70.3)
Scotland & N. Ireland	22	(24)	(100.0)
Republic of Ireland	90	(86)	(60.5)
Other Overseas	941	(903)	(22.0)
Unspecified UK	320	(—)	(—)
	<hr/> 3,249 <hr/>	<hr/> (3,116) <hr/>	<hr/> (46.1) <hr/>

2.6.4 The Faculty were only able to supply a split of UK (532) and Overseas (155) Fellows. The UK 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 brackets 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 exams.

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

<i>Years of Experience</i>	<i>Faculty</i>	<i>Institute</i>	<i>Total</i>		<i>Response Rate (%)</i>
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
	<hr/> 687	<hr/> 3,249	(3,116)	<hr/> 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 brackets 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

<i>Current Employment</i>	<i>Faculty</i>	<i>Institute</i>	<i>Total</i>	<i>Response Rate (%)</i>
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%).

*Footnote:-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.

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.

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 (ref 2) placed the analysis in the context of a marketing audit of a company. Within this audit, he quotes H. Davidson (ref 3) 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 to 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 chapter 2.

3.4 *Strengths*

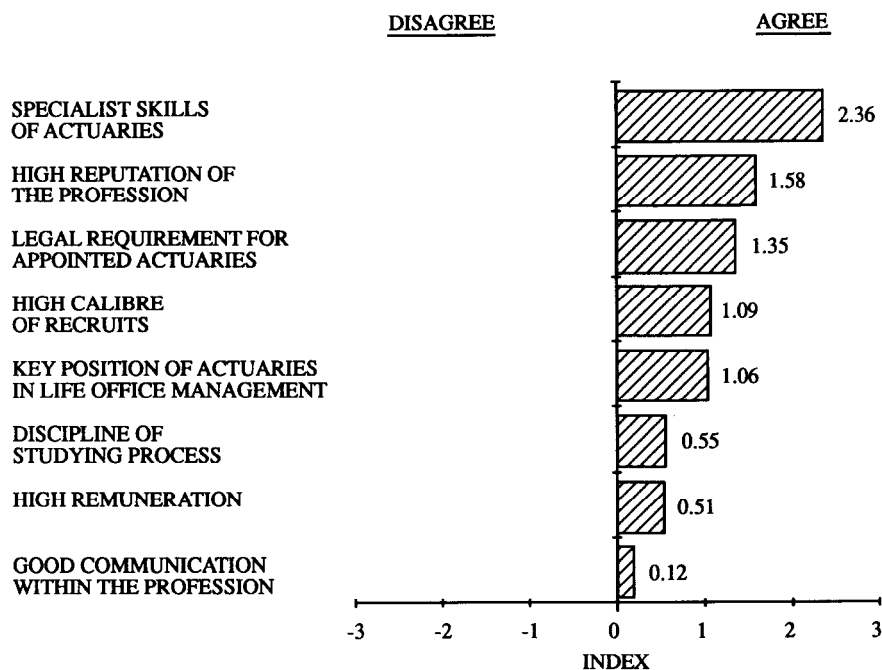
3.4.1 The profession’s view of its strengths are indicated by Table 3.1. Overall, there was support for all of the suggested strengths but the depth of feeling varied from very strong agreement for **specialist skills of actuaries** (index figure +2.36) to very weak agreement for **good communication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

<i>Years of Experience</i>	Discipline of Studying <i>Index</i>	Good Communication <i>Index</i>
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**

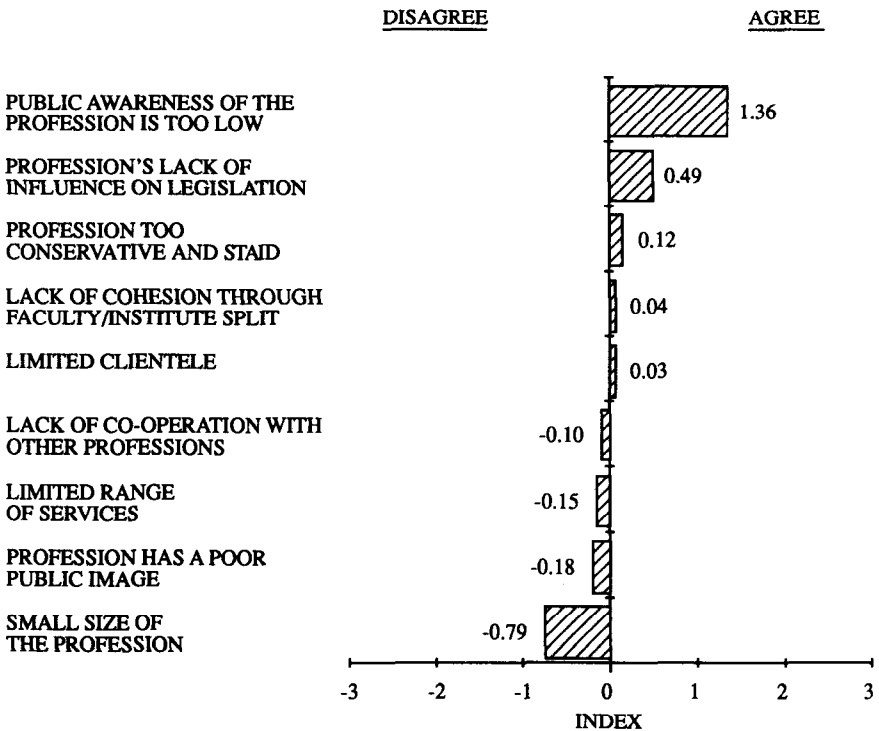
actuaries (1.14 cf 1.35), **good communication** (−0.20 cf +0.12), **the profession's high reputation** (1.04 cf 1.58) and **the key position of actuaries in life office management** (0.55 cf 1.06).

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**,

Table 3.3 - Weaknesses



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.

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 ($+0.16$ cf -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

<i>Years of Experience</i>	Too Conservative and Staid <i>Index</i>
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).

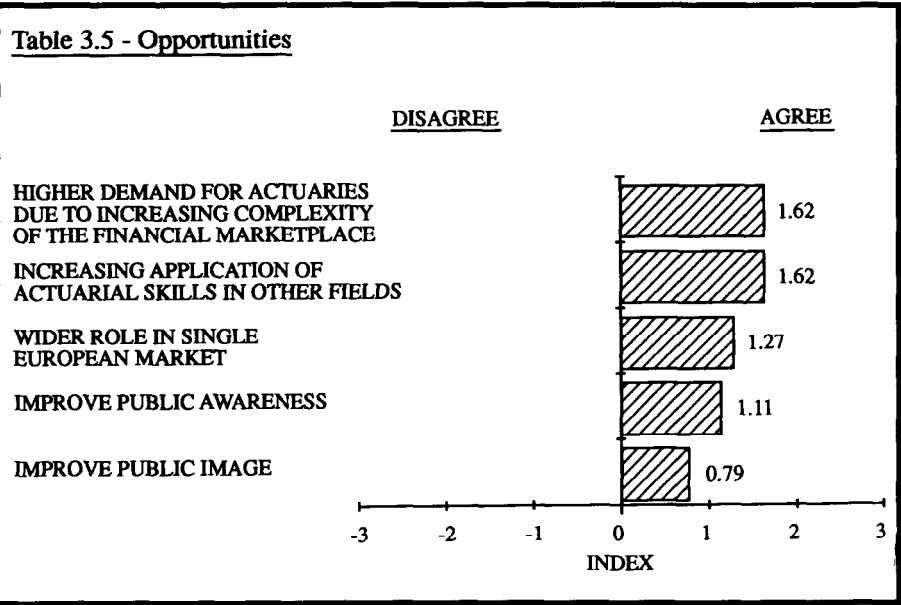
Benefits consultants felt **low public awareness** to be more of a weakness (1.59 cf 1.37) together with **lack of influence on legislation** (0.74 cf 0.49). They did however disagree that **limited clientele** should be regarded as a weakness (-0.23 cf $+0.03$). Actuaries with up to five years' experience 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.



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).

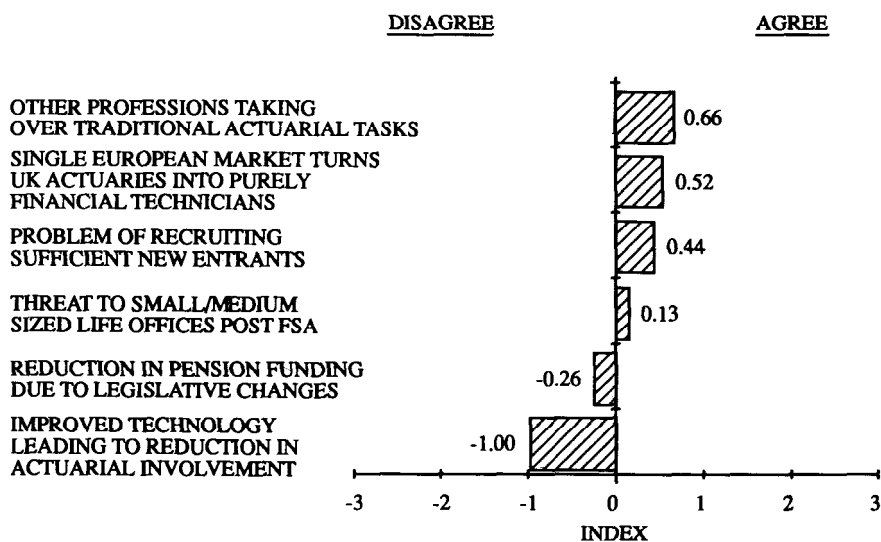
3.7 Threats

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.

Table 3.6 - Threats



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 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 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.

**Footnote:- A Rank Correlation Co-efficient 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.*

TABLE 3.7 *Weaknesses—Comparison with Predictors*

<i>Weaknesses</i>	<i>Survey Rank</i>			<i>Predicted Rank</i>	
	<i>Combined</i>	<i>Faculty Only</i>	<i>Institute Only</i>	<i>Faculty Council</i>	<i>Institute Council</i>
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 above 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 recognize 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*

	<i>Should Be Very/Fairly Aware (%)</i>	<i>Are Very/ Fairly Aware (%)</i>
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 Chapter 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*

	<i>Desired Level of Awareness Index</i>	<i>Perceived Level of Awareness Index</i>
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.

TABLE 4.3 *Q1 Desired Levels of Awareness (%)*

	<i>Survey Results</i>	<i>Predicted Results</i>	
		<i>Faculty Council</i>	<i>Institute Council</i>
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

*Footnote:- In the context of this section t-tests were used in each case to calculate the probability (i.e. probability value) of achieving a result as significant as that actually obtained, if the true population percentage is equal to the average of the predictor questionnaire percentages.

TABLE 4.4 *Q2 Perceived Levels of Awareness (%)*

	<i>Survey Results</i>	<i>Predicted Results</i>	
		<i>Faculty Council</i>	<i>Institute Council</i>
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 (%)*

	<i>Survey Results</i>	<i>Predicted Results</i>	
		<i>Faculty Council</i>	<i>Institute Council</i>
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 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 FFA's (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).

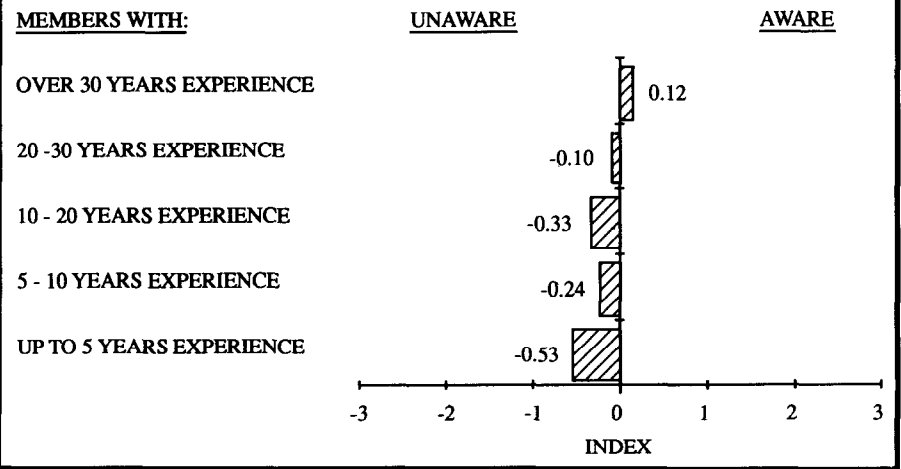
On the assumption that one might expect the more recently qualified actuary to be more in tune with undergraduate awareness, it would suggest that those who qualified more than 5 years ago quickly lose touch with the actual awareness levels of undergraduates.

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/N.I. had a mean score of 1.56. It is interesting to note that the view of members working in a life office (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 Chapter 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 (ref 4) 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 (ref 5), 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

- they felt most aptly describe the general image of the actuarial profession;
- they would most like to describe the image of the actuarial profession; and
- 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:—*

<i>the current image of the profession</i>	<i>the desired image for the profession</i>	<i>members Occupations</i>
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:-

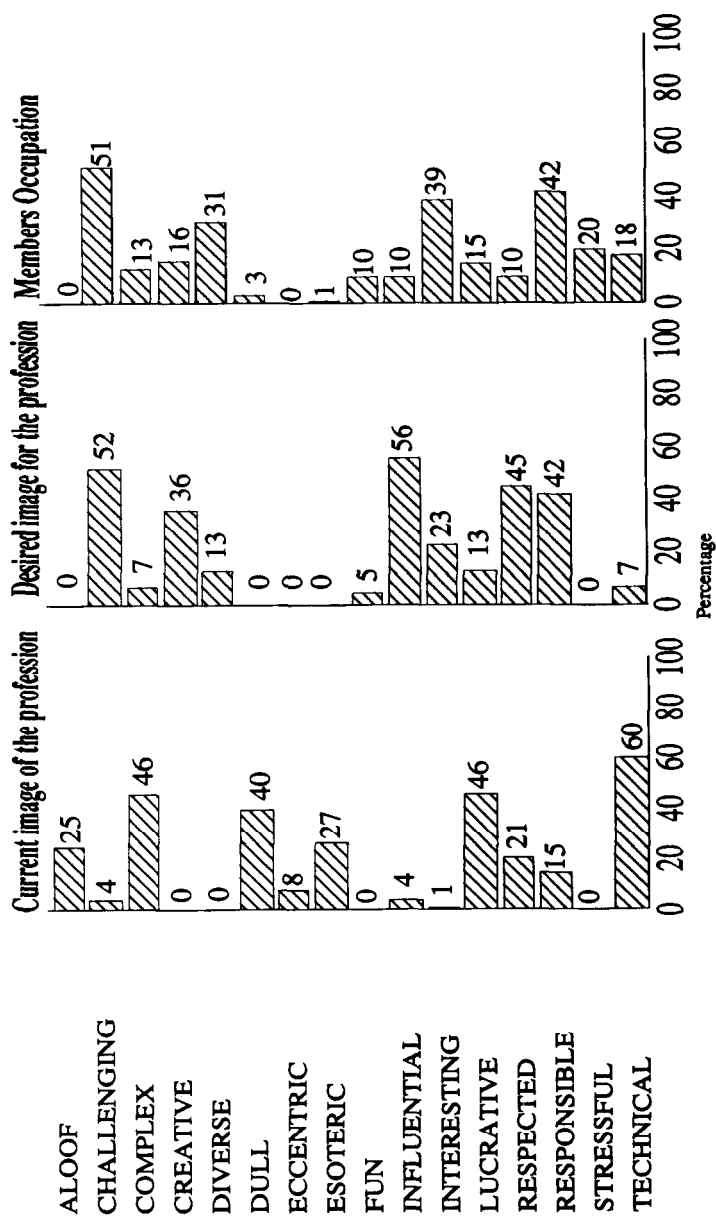


Table 5.2 illustrates the relative response rates for each of the adjectives.

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

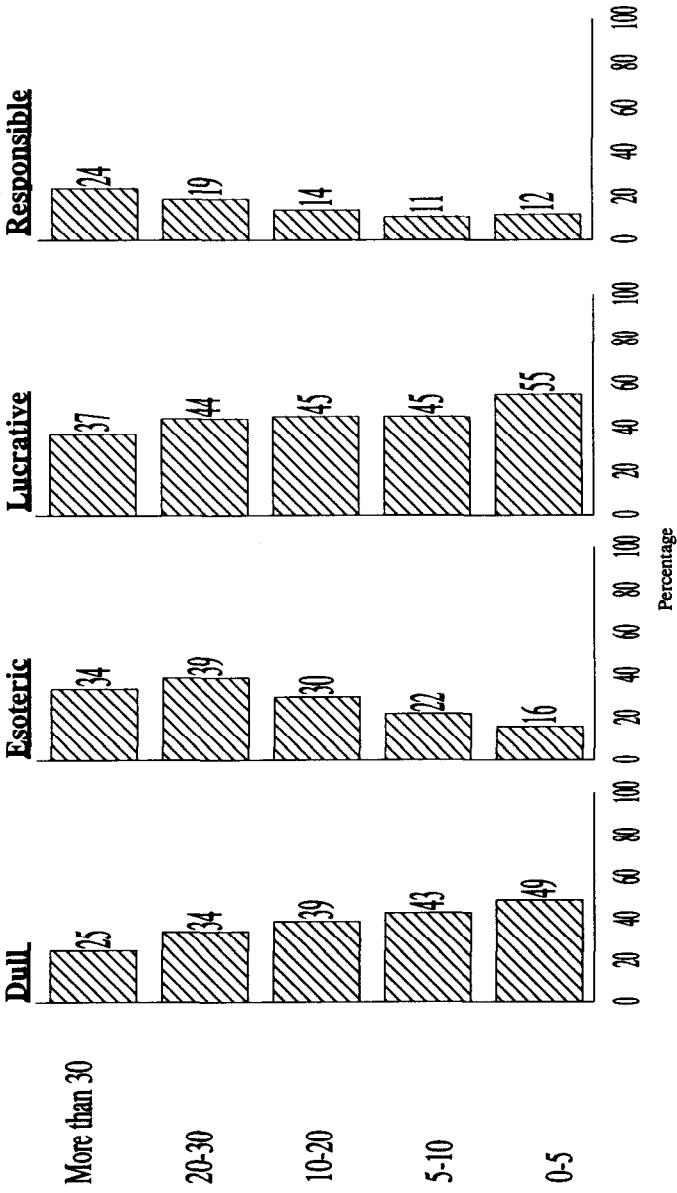
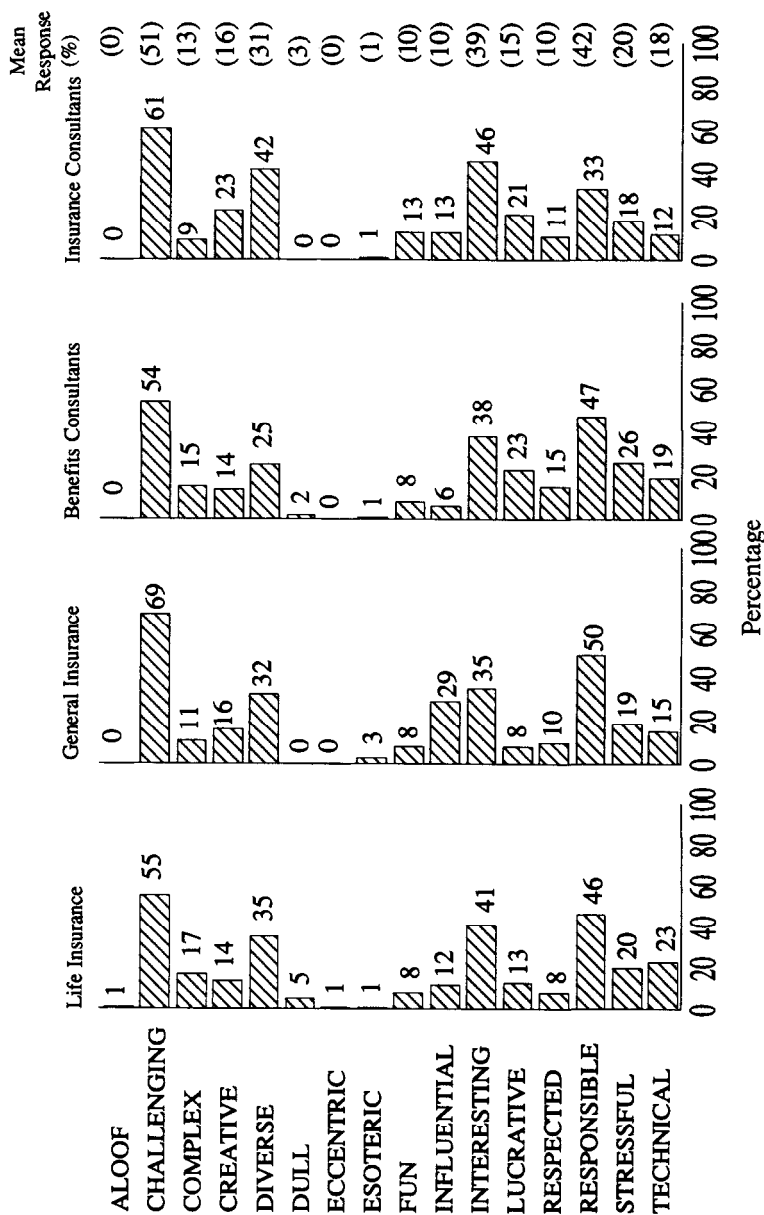


Table 5.4 - Description of Occupations

adjectives used by members to describe their occupations. The figures in brackets 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 was +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 Co-efficients of the Survey and Predicted Results*

	<i>Faculty Council</i>	<i>Institute Council</i>
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

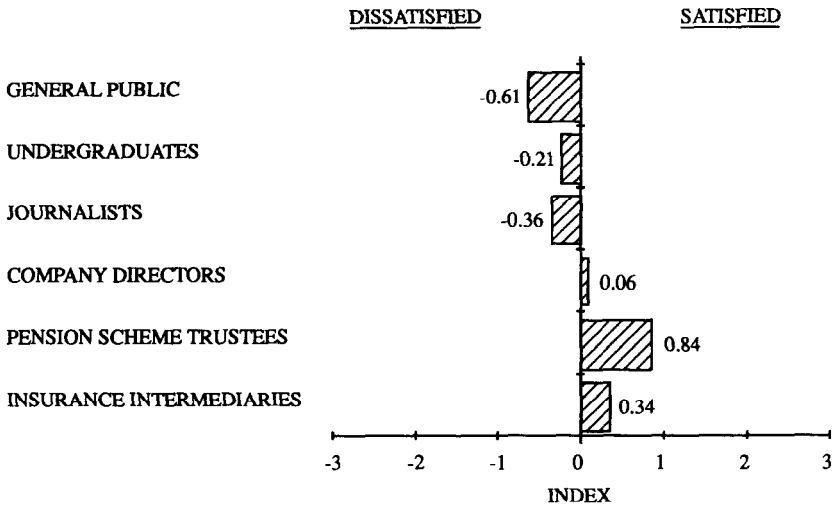
Members' Satisfaction with Profession's Image Amongst Various Groups

<i>Response</i>	<i>Very Satisfied</i>	<i>Fairly Satisfied</i>	<i>Not Really Satisfied</i>	<i>Very Dissatisfied</i>	<i>No</i>
	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>	<i>%</i>
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.

Table 5.7 - Member's Satisfaction With Profession's Image Amongst Sub-Groups



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.

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 Profession's Image*

<i>Years of Experience</i>	<i>Average Index</i>	<i>Undergraduates' Index</i>	<i>Insurance Intermediaries Index</i>
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

	<i>Predicted Results</i>		
	<i>Survey Result</i>	<i>Faculty Council</i>	<i>Institute Council</i>
	<i>%</i>	<i>%</i>	<i>%</i>
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 has 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

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*

<i>Dates</i>	<i>FT</i>	<i>Ind. Ind/S</i>	<i>Times S/T</i>	<i>Guard</i>	<i>D/T S/T</i>	<i>Total</i>
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 (57.3)	15 (5.2)	43 (15.0)	18 (6.3)	46 (16.1)	286
1/1/89—30/6/89	152 (47.9)	33 (10.4)	54 (17.0)	35 (11.0)	43 (13.6)	317
1/7/89—31/12/89	162 (50.8)	38 (11.9)	54 (16.9)	11 (3.4)	54 (16.9)	319
Total	1590	86	458	229	238	2601

6.2.2 The figures in brackets 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*

<i>Profession</i>	<i>FT</i>	<i>Ind. Ind/S</i>	<i>Times S/T</i>	<i>Guard</i>	<i>D/T S/T</i>	<i>Total</i>
ACTUARIAL	1,590 (9.3)	86 (1.4)	458 (2.0)	229 (1.5)	238 (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)	17,52 (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 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*

		<i>Actuarial</i>	<i>Accountancy</i>	<i>Legal</i>	<i>Total</i>
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 brackets 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 <i>Category</i>	<i>Actuarial Profession(%)</i>	<i>Accountancy Profession(%)</i>	<i>Legal Profession(%)</i>
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 is 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 <i>Category</i>	<i>Actuarial Profession</i>	<i>Accountancy Profession</i>	<i>Legal Profession</i>
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 chapter 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, Telegraph and their Sunday equivalents could also be improved.

7. WHAT LEVEL OF RESOURCES SHOULD BE ALLOCATED?

7.1 Chapters 4 and 5 of the paper were concerned with the gathering of information about the profession, and Chapter 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 (ref 4) 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*

	<i>Significantly More Than At Present</i>	<i>A Little More Than At Present</i>	<i>A Little Less Than At Present</i>	<i>Significantly Less Than At Present</i>	<i>No Response</i>
	%	%	%	%	%
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.

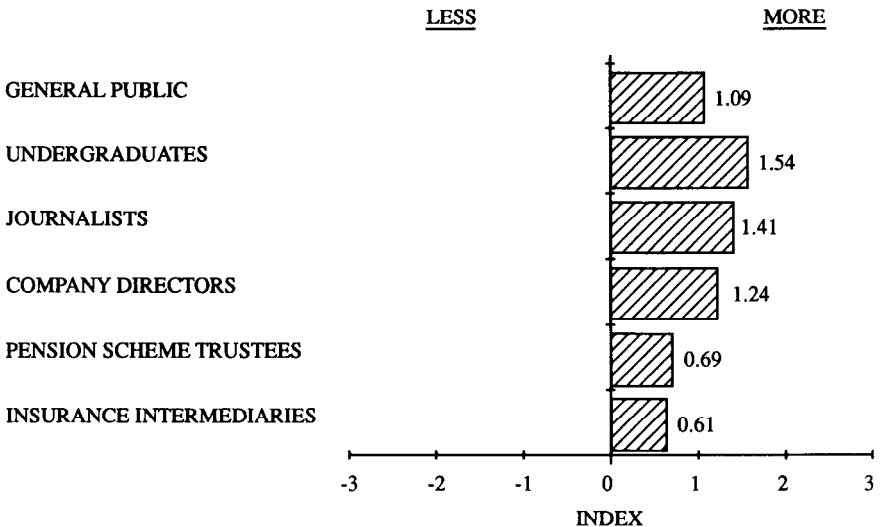
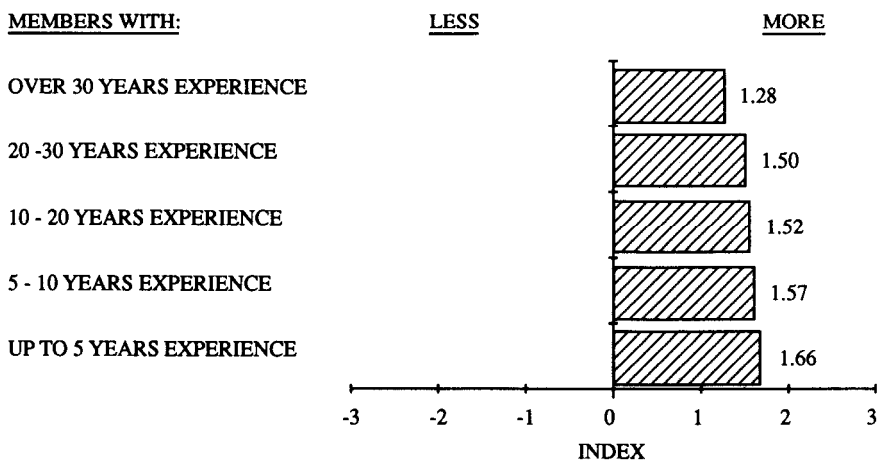
Using this scoring system, the overall results for the various groups are summarised in Table 7.2.

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

	<i>Survey Result</i>	<i>Predicted Results</i>	
	<i>%</i>	<i>Faculty Council</i>	<i>Institute Council</i>
	<i>%</i>	<i>%</i>	<i>%</i>
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 USA (ref 6) 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 USA, 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
- 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 15 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 22 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 UK actuaries have more involvement in life office management. However, if such an analysis were performed in the UK, 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 UK actuarial profession in the future will not be dissimilar to that facing the profession in the USA. It is therefore of value to review what has been happening recently in that country.

8.2.2 In the USA, 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 we are finding issues which affect our profession and society at large that we are not addressing effectively in the US.**

The following is a resume of the background, issues and recommendations arising from this report.

- (a) The vision of the US 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 US profession actively works together to reach common and consistent objectives reflecting the shared Mission and Intellectual Core.

- (c) The US 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 US 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. US 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 is 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 US 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 US public are 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. US 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 US 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 US 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 US 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.

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
1. THE FOLLOWING ARE STRENGTHS OF THE PROFESSION:–				
(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?				
2. THE FOLLOWING ARE WEAKNESSES OF THE PROFESSION:–				
(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?				
3. THE FOLLOWING ARE OPPORTUNITIES FOR THE PROFESSION:–				
(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?				
4. THE FOLLOWING ARE THREATS TO THE PROFESSION:–				
(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.

1. HOW AWARE OF THE ACTUARIAL PROFESSION DO YOU THINK THAT THE FOLLOWING GROUPS <u>SHOULD</u> BE?	VERY AWARE	FAIRLY AWARE	NOT REALLY AWARE	UNAWARE
(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"/>

2. HOW AWARE OF THE ACTUARIAL PROFESSION DO YOU THINK THAT THE FOLLOWING GROUPS <u>ARE</u> ?	VERY AWARE	FAIRLY AWARE	NOT REALLY AWARE	UNAWARE
(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)
Alloof	<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)

Tick three boxes in each column

4. HOW SATISFIED ARE YOU WITH THE IMAGE THAT THE PROFESSION CURRENTLY PORTRAYS AMONGST THE FOLLOWING GROUPS?	VERY SATISFIED	FAIRLY SATISFIED	NOT REALLY SATISFIED	VERY DISSATISFIED
(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"/>

APPENDIX II

- A. Table 1 below 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 1 below are zero to four decimal places and accordingly independence is rejected at any practical level of significance.

Table 1—*Summary of Chi-Squared Tests*

<i>Cross Tabulations</i>	<i>Chi-squared Value</i>	<i>Degrees of Freedom</i>	<i>Probability Value</i>
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. The following tables 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 2

<i>Designation</i>	<i>Location</i>					
	<i>London</i>	<i>S. England</i>	<i>N. England /Wales</i>	<i>Scotland /NI</i>	<i>Republic of Ireland</i>	<i>Other Overseas</i>
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 3

<i>Years of Experience</i>	<i>Location</i>				
	<i>London</i>	<i>S. England</i>	<i>N. England /Wales</i>	<i>Scotland /NI</i>	<i>RoI/Other Overseas</i>
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 4

<i>Employment</i>	<i>Location</i>				
	<i>London</i>	<i>S. England</i>	<i>N. England /Wales</i>	<i>Scotland /NI</i>	<i>Roll/Other Overseas</i>
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 5

<i>Designation</i>	<i>Years of Experience</i>				
	<i>Over 30</i>	<i>20—30</i>	<i>10—20</i>	<i>5—10</i>	<i>0—5</i>
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 6

<i>Designation</i>	<i>Employment</i>						
	<i>Life Office</i>	<i>Gen. Ins.</i>	<i>Benefits Consltn.</i>	<i>Ins. Consltn.</i>	<i>Govt./ Educ.</i>	<i>Retired</i>	<i>Others</i>
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 7 (excluding retired)

<i>Years of Experience</i>	<i>Employment</i>				
	<i>Life Office</i>	<i>General Insurance</i>	<i>Benefits Consultants</i>	<i>Insurance Consultants</i>	<i>Govt./ Education/ Others</i>
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")

<i>Sub-Groups</i>	<i>General</i>		<i>Undergraduates</i>	<i>Journalists</i>	<i>Company Directors</i>	<i>Pension Scheme Trustees</i>		<i>Insurance Intermediaries</i>	<i>Average</i>
	<i>Public</i>								
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 yrs. experience	0.40		2.14	1.81	2.26	2.71		2.02	1.89
20—30 yrs.	0.24		2.13	2.13	2.39	2.78		2.20	1.97
10—20 yrs.	0.18		1.98	2.06	2.36	2.71		2.22	1.91
5—10 yrs.	0.22		2.06	2.14	2.37	2.82		2.16	1.96
0—5 yrs.	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
Gen Insurance	0.10		1.90	1.71	2.16	2.59		1.97	1.73
Benefits Cons.	0.28		2.05	2.13	2.52	2.87		2.07	1.98
Insurance Cons.	-0.02		1.89	2.14	2.61	2.73		1.80	1.85
Govt./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
S. England	0.16		2.03	2.02	2.27	2.73		2.21	1.90
N. England & Wales	0.19		1.96	2.13	2.29	2.75		1.97	1.88
Scotland/N.I.	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

APPENDIX III cont'd

PERCEIVED LEVELS OF AWARENESS—INDEX FIGURES
(+3 = "Very Aware", -3 = "Unaware")

Sub-Groups	General Public	Undergraduates	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 yrs. experience	-1.53	0.12	0.10	0.49	1.61	1.17	0.32
20—30 yrs.	-1.95	-0.09	0.36	0.42	1.77	1.48	0.33
10—20 yrs.	-2.15	-0.33	0.20	0.49	1.72	1.28	0.20
5—10 yrs.	-2.31	-0.24	0.10	0.35	1.76	0.98	0.10
0—5 yrs.	-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
Gen. Insurance	-2.10	-0.03	0.03	0.61	1.77	0.79	0.17
Benefits Cons.	-2.25	-0.33	-0.04	0.52	1.89	0.83	0.10
Insurance Cons.	-2.15	-0.12	0.13	0.65	1.82	0.84	0.19
Govt./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
S. England	-2.19	-0.23	0.24	0.39	1.65	1.18	0.17
N. England & Wales	-2.33	-0.37	-0.14	0.39	1.60	0.99	0.02
Scotland/N.I.	-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			Pension			Insurance Intermediaries	Average
	Public	Undergraduates	Journalists	Company Directors	Scheme Trustees	Trustees		
All	-0.61	-0.21	-0.36	0.06	0.84	0.84	0.34	0.01
FFA	-0.59	-0.13	-0.31	0.15	0.80	0.80	0.49	0.07
FIA	-0.61	-0.23	-0.37	0.03	0.85	0.85	0.29	-0.01
Over 30 yrs. experience	-0.30	0.22	-0.33	0.29	0.99	0.99	0.62	0.25
20—30 yrs.	-0.42	-0.08	-0.38	0.02	0.87	0.87	0.70	0.12
10—20 yrs.	-0.61	-0.22	-0.30	0.03	0.84	0.84	0.34	0.01
5—10 yrs.	-0.77	-0.27	-0.46	-0.02	0.80	0.80	0.22	-0.08
0—5 yrs.	-0.73	-0.40	-0.41	0.04	0.79	0.79	0.06	-0.11
Life Office	-0.59	-0.23	-0.22	0.13	0.82	0.82	0.39	0.05
Gen Insurance	-0.45	-0.26	-0.13	-0.13	0.87	0.87	0.21	0.02
Benefits Cons.	-0.77	-0.31	-0.54	-0.07	0.92	0.92	0.19	-0.10
Insurance Cons.	-0.42	-0.13	-0.61	-0.01	0.92	0.92	0.22	-0.01
Govt./Education	-0.60	-0.09	-0.54	0.09	0.83	0.83	0.03	-0.05
Retired	-0.40	0.29	-0.34	0.23	0.78	0.78	0.52	0.18
Other	-0.57	-0.37	-0.55	-0.09	0.70	0.70	0.43	-0.08
London	-0.58	-0.31	-0.31	-0.03	0.82	0.82	0.26	-0.02
S. England	-0.66	-0.17	-0.29	0.05	0.83	0.83	0.25	0.00
N. England & Wales	-0.80	-0.17	-0.59	0.15	0.67	0.67	0.28	-0.08
Scotland/N.I.	-0.57	-0.12	-0.27	0.09	0.89	0.89	0.51	0.09
Republic of Ireland	-0.49	-0.46	-0.19	0.34	0.94	0.94	0.46	0.10
Others	-0.52	-0.22	-0.61	0.12	0.95	0.95	0.59	0.05

APPENDIX V

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

A) UNUSUAL

Financial Times 01 Dec 89: UK Company News: The getting of wisdom from Pearl—The UK 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 03 Dec 89: 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 04 Dec 89: 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 Dec 89: 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 Jan 90: 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 Jan 90: 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 UK 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 Jan 90: 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 Jan 90: 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 07 Feb 90: 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 Mar 90: 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 Mar 90: 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 appear 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 03 May 90: 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 90: 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 01 Dec 89: UK Company News: The getting of wisdom from Pearl—The UK insurance market since AMP's coup.

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

Financial Times 09 Dec 89: 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 UK 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 Dec 89: 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 03 Feb 90: 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.

Times 12 Mar 90: 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 02 Apr 90: 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 05 Apr 90: 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.'

Times 06 Apr 90: 'Concern' at delay of report into LUI; London United 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 Apr 90: 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 Apr 90: 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	General Public	General			Pension		Insurance Intermediaries	Average
		Undergraduates	Journalists	Company Directors	Scheme Trustees			
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 yrs. experience	1.03	1.28	1.22	1.11	0.72	0.50	0.98	
	0.95	1.50	1.42	1.13	0.62	0.42	1.01	
	1.04	1.52	1.45	1.29	0.57	0.54	1.07	
	1.19	1.57	1.52	1.26	0.69	0.64	1.14	
	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	
Gen Insurance	0.98	1.37	1.23	1.34	0.52	0.71	1.02	
Benefits Cons.	1.17	1.54	1.54	1.54	0.86	0.45	1.18	
Insurance Cons.	0.91	1.29	1.64	1.49	0.66	0.72	1.12	
Govt./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	
S. England	1.10	1.56	1.43	1.24	0.71	0.73	1.13	
N. England & Wales	1.13	1.48	1.55	1.19	0.63	0.51	1.08	
Scotland/N.I.	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”. 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) 4 were very supportive of the survey, pleased to see the research being done, wishing us good luck and looking forward to seeing results.
- (ii) 5 queried the relevance of their replies since they are long retired.
- (iii) 21 queried whether their overseas experience was relevant.
- (iv) 9 had worries over question B5, not knowing how much resource was currently spent and whether we were suggesting more resource or just reallocation.
- (v) 3 believed our 10-15 minutes completion time was a ridiculous under-estimate.
- (vi) 2 felt our range of occupations was evidence of ignorance—investment not included.
- (vii) 3 felt they should have been allowed neutral responses.
- (viii) 2 were confused over company director—all directors or just finance directors or insurance company directors?
- (ix) 3 were unhappy that their views might not be relevant.
- (x) 2 believed there were other groups that should be aware of us.
- (xi) 9 other one-off comments were made on the questionnaire.

2. Comments about the profession

- (i) 11 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) 8 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 we lose our actuarial specialities and hence all reason to exist.
- (iv) 3 believed the Faculty/Institute split needs resolving.
- (v) 3 were worried over European standardisation.
- (vi) 2 felt we were seen as the champion of the employer, at odds with individual needs.
- (vii) 2 thought we should become government advisers providing research facilities.
- (viii) 3 believed our profession was too small to have a wide sphere of influence.
- (ix) 2 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 programs 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.”

APPENDIX VIII

List of References:

1. Lagden J. Marketing the Actuarial Profession. Institute of Actuaries and Faculty of Actuaries Student Society Paper.
2. Iqbal M. Marketing of Retail Financial Services. Institute of Actuaries and Faculty of Actuaries Paper.
3. Davidson H. Offensive Marketing. Penguin Books.
4. Brown B.R.J. The Institute of Actuaries—Some Thoughts on the Future of the Profession. Birmingham Actuarial Society Paper.
5. Packham M. The Future of the Profession. Fiasco April 1990, published by the Staple Inn Actuarial Society.
6. The Jobs Rated Almanac. Copyright Les Krantz, 1988, Pharos Books, 200 Park Avenue, New York, NY 10166.

DISCUSSION

A.K. Gupta, introducing the paper, said:—I have the honour of presenting to you tonight on behalf of the Faculty Marketing Research Group the paper before you entitled “A Marketing Audit of the Actuarial Profession”. I have been allocated the easier task of provoking you to speak whereas my colleague Ray Milne has the more difficult task later on of ‘javelin catcher’.

The Committee started with a brief which effectively comprised “researching marketing issues of interest to actuaries” and being a professional committee we decided to start off with the profession. In effect we decided to address the question “How effectively does the profession market itself?” Firstly, I should make two comments about our approach. Our research made extensive use of predictor questionnaires, the rationale behind this is that in any market research of this type it is very easy for the results to appear self evident. Consequently we decided to use predictor questionnaires to guard against this. Secondly the research group felt obliged as actuaries to apply statistical techniques within the analysis. Unfortunately this did not come particularly naturally to me or to several others in the group. We therefore hope that the theorists here tonight are satisfied that our techniques match the text books. However, I hope that the statistical content will not detract from the meat of the paper and from the discussion.

I would like to highlight a few of the results and make a few comments on these which I hope will stimulate discussion. When carrying out staff appraisals I always consider it more important to concentrate on an individual’s strengths than on his weaknesses and so before considering our weaknesses I would like to talk about our strengths.

Our key strengths lie in our skills and our reputation; we should therefore use these to capitalise on the opportunities available to us especially in other financial spheres. These opportunities result from the increasing complexity of the market place and the application of actuarial skills in other financial areas. How can the profession encourage this? Do we encourage innovative thinking or do we stifle it? If the latter, how can we eliminate any actions which do this? Our key weakness is undoubtedly the image of the profession and the level of public awareness and this must limit our influence and our ability to attract new blood into the profession. How can we change this within our resources? Can we use our resources more efficiently?

I find it somewhat ironic that the perceived image of the profession is not in line with our view of our own occupations. However our occupations are very similar to our desired image for the profession. Why is this? This also poses the question of how we can project the profession’s image to reflect what we actually do.

One area we found surprising is that we do not consider the profession or our occupations to be influential, yet this is the thing which the profession wants most of all. However, the senior echelons of most UK Insurance Companies are dominated by actuaries, so we are certainly in a position to be influential if we choose to exert our influence. Do we choose not to exert our influence because we consider it inconsistent with our roles? Should we place greater emphasis on communication in our training? We are interested in members’ views on these.

Finally in nearly every area the results differ according to the years of experience of the respondents with most dissatisfaction occurring amongst the younger members. Last year a candidate stood for the Institute Council elections who promised to represent the more junior members of the profession and he tried to canvass votes on this basis. Whilst I personally consider such canvassing undesirable 30% of Faculty Fellows have 10 years experience or less and the questionnaire results do indicate different views for this group. How can we enable younger Fellows to have a greater input into professional decisions? Do the right forums exist? Before I sit down there are three errors I would like to bring to your attention.

Firstly on page 6 Section 1.3.2. In the last paragraph, the first sentence should read “The predictor questionnaire showed that both Councils expected the small size of profession to be seen as a weakness”.

Secondly on page 24 Section 3.8.3. In the second last paragraph on that page, the final sentence should read “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”.

Finally on page 27 Section 4.3.1. In the second paragraph third line, the word “higher” should read “lower”.

I would hope I have said enough by now to stimulate others to speak. I and the other members of the group look forward to your comments. Thank you.

J. J. McCutcheon, opening the discussion, said:—It is a privilege to be allowed to open the discussion

on this evenings paper “A Marketing Audit of the Actuarial Profession” and I congratulate the authors on producing such a readable work for our consideration. I did, however, point out to the President that I know nothing about marketing and even less about auditing; fully aware of my ignorance, the President replied, “Precisely—that’s what makes you the ideal opener” and, realising that this logic had defeated me, he quickly added, “If all else fails, you will at least be able to comment on the statistical methodology”.

I am, Sir, flattered by your opinion, but before everyone else rushes for the door in anticipation of a lengthy discourse of a purely technical nature, let me reassure you all and ask you to remain! If time permits, I may discuss some statistical points, but for the moment however it suffices to say that, although I might have some minor criticisms of detail, the statistical techniques used seem to me broadly valid and to have been applied sensibly. In places the authors’ descriptions of their statistical tests are somewhat terse and, to understand fully the details, I found it necessary to carry out quite a few further calculations and indeed also to consult my colleague *Athol Korabinski*, whose advice had been sought by the authors at an earlier stage.

I accept, however, the authors’ view that it would have been inappropriate to include extensive technical discussion in their paper. Moreover doing a certain amount of further calculations has been for me both instructive and enjoyable. If our Board of Examiners takes a similar view of the paper perhaps a high proportion of methodology questions in our future Part 1 Statistics Examination will begin with the words “In a recent survey of the actuarial profession”. For this reason alone future students would be well advised to read tonight’s paper!

The use of a predictor questionnaire has enabled interesting comparisons to be made, sometimes with surprising results. I think that the reader’s understanding of the paper might have been helped by just a little more discussion on this aspect of the work. In one or two places I was not entirely clear about the precise form of the predictions which had been sought.

In 1.1.4 it is stated that the response rate was just over 50% overall and nearly 60% for UK Fellows. The authors are right to find this encouraging. Many surveys of other professions have elicited much lower responses. Whether the present response reflects a particular interest in the topics under consideration, a sympathy inherent in our profession to the collection of data by surveys, or to other factors is a matter of speculation.

Section 2, Demographic Factors, provides, much useful background information about the respondents. The geographical information in Table 2.1 is particularly interesting. Table 2.2 relates to professional designation. The confusion over dual qualification referred to in 2.3.3 is of relatively little significance in practical terms, but may perhaps explain why I was unable to reconcile precisely certain cross-tabulations in the Appendices with some of the figures in Section 2. It seems odd however that the one respondent who claimed to be both a Fellow and an Associate of the Institute should have his (or her) views counted twice!

It is perhaps worth commenting on the fact that sex and age, the factors traditionally adopted in many actuarial studies, are not used in the analysis of the results. In the present context ‘actuarial age’—that is years since completion of examinations seems an acceptable alternative to age last birthday, but it is perhaps a pity that the questionnaire did not ask respondents to divulge their sex. It would be interesting to determine whether or not the female members of the profession held particular views. Since there are more than 150 female Fellows in the UK alone, it is just possible that a sufficient number of ladies have replied to permit a *meaningful analysis*, if only we knew who they were. One can only speculate as to whether or not the response rate from the ladies has been significantly higher than that from their male colleagues.

Section 3 deals with analysis of Strengths, Weaknesses, Opportunities and Threats—SWOT. Perhaps this is another area where my ignorance is to be publicly exposed, but I did wonder whether or not the authors, in claiming in 3.1.1 that the principles of the SWOT analysis will probably be familiar, were being somewhat flattering to many of their readers. I am gratified that my own ignorance of these topics has been greatly reduced by a study of the paper.

It is interesting that after due consideration the Research Group should have settled for 8 Strengths, 9 Weaknesses, 5 Opportunities and 6 Threats, fewer Strengths than Weaknesses, more Threats than Opportunities, but fortunately in this matter simple arithmetic tells only part of the story.

The numerical coding used to assign an ‘average value’ to the respondent’s views on many questions is necessarily somewhat arbitrary. It seems to me a sensible practical procedure, provided that due caution is exercised in interpreting the results. Table 3.1 deals with Strengths. It is interesting to observe that in broad terms each of the 8 items suggested was seen as a strength, good communication only just so, however. In contrast, for 4 of the 9 suggested possible weaknesses the average view seems to be that the suggested factor

was not in fact a weakness. These last remarks have, however, to be treated with some degree of caution in view of the subjective nature of the relevant answers and of the numerical coding system adopted.

It is also interesting to observe in 3.5.2 that, of the weaknesses not listed in the questionnaire but chosen by the respondents themselves, the education system received the largest number of mentions.

Sections 4, 5 and 6 deal with 'Public Awareness', 'Image' and 'Media Analysis'. These important topics are inextricably linked. I propose therefore that we deal with them together and to include the results of some small researches of my own.

I see that the press references listed in Appendix 5 are classified as either "unusual" or "derogatory". Were the authors unable to find anything complimentary? Certainly it is not reassuring to learn that the political approach of Mr V. P. Singh, who within the past fortnight has been forced to resign as Indian Prime Minister is considered by the *Sunday Times* to be "actuarial".

What about the politicians in this country? *The Times*, almost exactly one year ago, reported a debate in the House of Commons on the Government's refusal at that time to increase the pension payable to certain categories of war widow. The Government was described by no less a person than Mr Martin O'Neill, Chief Opposition Spokesman on Defence, as acting in the role of a 'heartless actuary'—so at least one senior politician has marked us down for heartlessness. It is, however, perhaps worth noting that at a previous stage of his career the Chief Opposition Spokesman on Defence worked for several years as an insurance clerk in St Andrew Square and I wonder if his view of the profession is somewhat coloured by the time he spent there. In the circumstances it would be indelicate of me to identify the company for whom he worked! To keep the record straight, I should add that the Government reconsidered its position and did in fact increase the widows' pensions. Perhaps, like the Government, we are not heartless after all.

The paper quotes extensively from the national press, but does not refer to more lengthy references to our profession, for example in books by non-actuaries. Such references are of course relatively rare, but it is worth considering two illustrations published more than twenty years apart—in the early 1960's and the mid 1980's—to see if one can detect significant changes to the external perception of our profession.

The first book, to which I refer only briefly, will be known to many of you. It is "Anatomy of Britain", by Anthony Sampson, published in 1962, the year I became a student of the Faculty. Mr Sampson wrote:

"Actuaries are specialised mathematicians who, after a course which may take six years or more, are versed in the intricate statistics of men's lives on which the life insurance industry depends . . . Their training is narrow and bleak: most of it is done by correspondence . . . Only one in four of actuaries are graduates. Life insurance draws its meritocracy from a self-made, specialised world. The actuaries are one of the highest-paid professions".

This was certainly a limited view and, although some of the comments may have been true twenty years ago, surely few are valid today.

The second, much more recent, book, although containing several pages of comments on actuaries, is, I suspect, less well known. Its title is "The Two Tycoons: a personal memoir of Charles Clore and Jack Cotton". (You will note that the two tycoons were not themselves actuaries). This book, published in 1984, is by Charles Gordon a Cambridge educated lawyer who worked closely with Clore and Cotton. It contains extensive comment about actuaries, but time constraints require me to be selective in quoting extracts.

Talking about insurance companies, Mr Gordon says:—" . . . Inside their vast offices, at the hub of their activity were the closet-czars . . . , the most secret order since the Knights of Malta. In other words—the actuaries".

He continues: "Actuaries, devastating in their caution and their doom-laden prognostications, have always killed people off before their time. The word 'actuarial' is one of the most lethal in the entire language and, pleasant as most actuaries seem personally, they have for generations been executioners by administration. Any scintilla of miscalculation by an actuary can lead to a future catastrophe . . .".

Talking more generally about our profession, and surely exaggerating somewhat, Mr Gordon adds: "Meanwhile the entire developed world is ruled by honourable but unknown men who are not even subject to an independent audit; most of the population have never even met an actuary".

Although Mr Gordon assigns to our profession the tag of "closet-czars", he exempts from this label the investment actuaries, about whom he writes: "(they) are an altogether different breed. They have to be, for there cannot be closet fund managers; they are far too exposed and rightly so".

How much of what Mr Gordon wrote six years ago was true then and how much will be true ten years from now? Are the marketing actuaries an altogether different breed?

Mr President, it is sometimes said that although an audit tells you where you are at one particular moment it generally does not tell you in which direction you ought to be heading. Such criticisms cannot be applied to this evening's marketing audit. The members of the Research Group, ably led by Mr Milne, have provided us with several pointers. They are to be warmly congratulated for the vast amount of work which they have done on our behalf and for presenting the results of their labours in such a lucid manner.

The paper raises many issues vital to the long term well-being of our profession. By concentrating our minds on these issues the Marketing Research Group has placed us all very much in its debt. In thanking tonight's authors most warmly for an extremely interesting paper, I am sure that I speak for us all.

J. M. MacHarg said:—It is interesting but not really surprising that in their excellent paper the Research Group have not concerned themselves about marketing our commercial services as actuaries but they have been concerned more with the profession as such and with such questions as public awareness and influence on legislation. This is common to many professions, they contemplate themselves in the mirror and they perceive that they are very beautiful and they wonder why the world doesn't think so too. We are as sad about this as any other profession. We enjoy our work, we are happy to be actuaries, we know that we are jolly good chaps and chapesses and we want to tell the world all about it.

It's not surprising too that more recently qualified Fellows are more concerned about lack of awareness and more keen to allocate resources to do something about it but it's not just that older Fellows are more complacent or generally more fuddy-duddy although that may well be so. In my own defence I must say that I don't feel that my current occupation matches my desired image of the profession (I am retired!). The plain fact is that as a profession we have been aware of all this for some time and many have not been idle, but we have been forced to be realistic about possible results. Once you start trying to explain how fascinating and important actuarial work is to a journalist, never mind to somebody at a party, you will soon find out that the expression "I don't wish to know that" is not confined to the music hall stage—the eyes definitely do begin to glaze over. As for devoting more resources the Research Group do frankly recognise the problem. I was reminded of these many polls that are taken on the National Health Service, people are stopped in the street and are asked if they would be prepared to pay higher taxes to improve the National Health Service—they say 'yes of course', naturally. Then you go on and say, well how about education—would you prefer to pay more tax for that? They say "Oh yes certainly", so you say "Well now that's great you have now agreed to another £0.05 on the standard rate of income tax" and the mood suddenly changes.

Public relations is an area where it is very easy to pour money down the drain or down the throats of advertising agencies which is more or less the same thing. In our concern with the image, we must not neglect the substance. The first priority is to maintain standards, standards of selection, standards of training, standards of professionalism and to ensure that our services and training are relevant. If our services are irrelevant and if our public comments and submissions to government are half-baked, the battle is lost before it has begun. It is better to be thought conservative and staid than superficial, provided of course you spell them all with small letters. On the question of awareness amongst undergraduates, this varies from university to university and I think we are probably better placed up here than perhaps in some of the universities down south, but such things as undergraduate awareness have to be built up gradually almost universally by university. A good start is to make sure that actuaries are adequately paid and this is something which may commend itself to most of the present audience. Then in recruiting we should select carefully, we should not insult people by encouraging them to take up a profession in which they are unlikely to be successful. We should present the career as a challenge to the right persons and not undercall the hours of work that will be required. We do have a good recruitment video and we do have good recruitment literature which do face these points frankly. Once people have started out we should make sure that our education service is as good as it can be and that our office culture, the culture in which we bring up students, encourages study and success, and then the feedback to universities will be positive.

Influencing in legislation is another important objective and we have had our disappointments in the past but we have also had our successes. Again this is something that has to be worked at over time and in which some modest PR assistance is, I believe, appropriate but there is no substitute for careful preparation and we have to anticipate trouble before it hits us between the eyes. Brawn saves blood, brains save brawn and they also save a good deal of wasted PR fees. Rather similar comments may be made on relationships with

the press. If we want to get some idea over to the press, say at a press conference, we have to prepare with the utmost care and to think hard how best to get the point across. Again some skilled PR assistance will be helpful, but don't expect the press to be falling over themselves to sing the praises of the actuarial profession. Members of the press, like politicians, often have strong prejudices and after all they get a much bigger readership when they are being unkind to people than when they are being nice. My plea is for realism, for modest expectations and probably for modest expenditure. Some good work has been done and, as the Group will know, more is already being planned. Let us continue the work and by all means reinforce it but don't let us be too sensitive or sad if we get an unfavorable reference to an actuary on page 3 of the *Sun* or on the same page of Saturday's *Financial Times* or in some other paper of equal standing. Our modest first objective would be to get to the stage when it will be realised that accountants are people who thought firstly that actuarial work would be too exciting and secondly that the exams would be too difficult for them.

M. J. Breingan said:—I would like to welcome the paper this evening because it gives the chance for the profession to debate the important issues arising out of it.

I would like to comment initially on Section 6—Media Analysis and the press coverage of different professions. I would suggest that editors include stories of interest to their potential readership, and therefore that means that the content of the *FT* is inevitably going to be different from that of the *Guardian*. I would also expect that lawyers would feature most prominently in "general" newspapers because it seems that civil and criminal court actions are the stuff of the news pages. Therefore I would prefer to look specifically at the comparison with the accounting profession, shown in Table 6.2. Why is there such a discrepancy there between ourselves and the accountants? I would suggest it is because of the *breadth* of the positions in business and community life which accountants fill and the associated press references which this gives rise to. For instance, I understand that the Director General of the BBC, Michael Checkland, is an accountant. Now, there were some raised eyebrows in the press at his appointment initially, but I don't think there were any serious questions about his suitability. I think there would have been a more forceful reaction to headlines which said "Actuary to Head the BBC".

I would also like us to consider the role played in the nation's boardrooms by different professions. The boards of the Scottish Life Offices have their own actuaries there of course, but there are several accountants and lawyers too, and they are obviously considered able to bring useful contributions to the office's deliberations. In the wider financial services scene, banks are surely in the business of risk management, but I could discover only one actuary on the board of one of the Scottish Clearing Banks and none on any of the big four English clearers, yet accountants are again represented.

On to the even broader perspective: I could once again find no actuaries on the board of companies such as BP, ICI, BOC, Hanson, Marks & Spencer. Perhaps you say "not relevant businesses" but again accountants are there in many cases and they are making a contribution. So my conclusion has to be that the business community is not persuaded that our skills are of use beyond a fairly narrowly defined sphere of expertise and I think that this is the major challenge facing us.

I think the paper is also valuable for its summary in Section 8 of the USA Task Force Report. We should all study it, for I think it has many lessons for us. The Mission Statement of the US profession has a breadth of vision which goes well beyond the traditional confines of insurance and pensions. "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". The intellectual core refers to "The application of experience analysis and risk evaluation to measure, communicate, and respond to the current financial implications of future contingent events". That emphasises the need for a wider business orientation for the US actuary. 8.2.2, Section (h) concludes "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 believe that this is the need for the UK profession also. We must work towards that wider acceptance of our abilities which will result in actuaries playing an important part in a much greater range of our commercial life in the UK. Our Councils can produce plans and strategies for the profession, but I suggest that it is up to us all to widen our horizons. Firstly to be seeking ways to expand the relevance of our qualification by adding to it such skills as the US Task Force highlighted—"communications, strategic thinking, business knowledge, results orientation, decision making, people management, technology application".

It is up to us all secondly, I suggest, to grasp opportunities as they arise for influence, for training, for experience in a wider range of activities. I suggest also that it is only in this way (and indeed over a number of years) that our profession is going to be perceived as the respected and influential one which this stimulating paper shows that we would like it to be.

C. D. Daykin, F.I.A. said:—I wanted to respond to the previous speaker and also to paragraph 1.4.3 of the paper, which talks about the incorporation of the SWOT analysis into the strategy of the profession. I am not sure when this paper was first being drafted, or whether the authors knew to what extent a strategy was being developed for the profession, but it was in July of this year that the two Presidents, and then the two Councils, decided to appoint a Planning Joint Committee to develop a strategic plan for the profession. In fact just this last Friday at the Faculty, and the previous Monday at the Institute, the two Councils approved continuing consultation on the part of the Planning Joint Committee on the basis of a mission statement which runs as follows:

“To enhance the role and reputation of the actuarial profession in providing expert and relevant solutions to financial problems, especially those involving uncertain future events”. The Marketing Research Group refer in paragraph 8.2.2 of their paper to the mission statement which has been developed for the actuarial profession in North America. We were aware of this and felt that we should try to keep our mission statement rather less complicated than theirs. I think they have got a bit tied up by having a separate definition of the intellectual core of the actuarial profession. The words they use are the “current financial implications of future contingent events and the application of experience analysis and risk evaluation”. This all seems too much of a mouthful for a succinct and easy-to-market mission for the profession.

There may be some who feel a little unhappy about the profession having a mission statement at all—the very idea seems slightly North American. Nevertheless it does give us a strategic focus. I would like to highlight two or three aspects of the mission statement, which will appear in public very shortly in *The Actuary* and be developed into a more complete strategic plan in the near future.

Handling uncertainty about the future is a key element of what actuaries do. The phraseology is sufficiently broad to encompass all sorts of things and not just insurance and pensions. The mission statement does, however focus on financial problems, although actuaries do also get involved in non-financial problems because this seems to be a particular mix of expertise which is distinctively actuarial—the combination of finance and future uncertainty. Likewise there were some who thought we ought to emphasise the long term nature of much actuarial involvement but this would be to deny the fact that many actuaries are also involved in quite short term considerations and many of the same skills are applicable.

A further issue was the extent to which our advice was engaging the public as a whole. The purpose of using the words “expert and relevant solutions” was to emphasise the fact that we were in a real world. It was essential that our problem solving should not be a theoretical exercise but should be relevant to our publics, to the needs of our clients and to all those who are likely to have to rely on it. Public image is an issue which has been addressed in the paper and it is very much at the heart of the mission statement, where we talk about enhancing the role and the reputation of the actuarial profession. As the Society of Actuaries’ phraseology goes, “to be and to be perceived to be”. It is very important not just what we are but what the perceptions of the public are about us. There is probably a lot we could do in that area.

One thing that we have not specifically highlighted, other than through the word ‘relevant’, is the question of whether service to the public is a key element of the profession’s activity. To some extent this will come out in the next stage, which is to determine a set of strategic objectives for the profession which are consistent with the mission statement. These come under five headings:

- Professional Standards
- Education and Research
- Personal Development
- Standing
- Influence

In each of these areas we have formulated a strategic objective, the intention then being to fit a number of sub-objectives under those strategic objectives, to engage the activities of all the different parts of the profession, the committees, joint and otherwise, education services and so on.

Under Standards we are making our overall objective to achieve the highest standards of integrity,

expertise and relevance in the giving of actuarial advice by our members. We use the terminology of "our members" because these are objectives for the Institute and the Faculty in determining and encouraging the work of members.

Secondly we have Education, where the objective is to have appropriately high education standards and to promote the extension of relevant knowledge and research.

In Personal Development the objective is to encourage and promote personal and professional development of members. That may seem a little obscure as it stands, but it relates to the development of actuaries as practical individuals with, for example, managerial, communication and IT skills, so that they can play a full part in the enterprises in which they work and with the clients they advise.

Fourthly—to promote the standing of actuaries and to raise the public esteem of the profession. Here we are concerned with the role of actuaries as perceived by the public, improving the standing of actuaries in the public eye and the esteem which others have of us.

Fifthly—to promote the influence of actuaries, both individually and as a profession, in all areas where their advice can make a positive contribution. That is the other side of the coin with the public—not just how they see us but how we influence them. Are we really being influential in the political process? That's another aspect to which this evening's paper draws attention—the extent, for example, to which we as a profession are influencing the process of legislation.

I am delighted that the timing of this paper is such that a SWOT analysis has been carried out by the Marketing Research Group and presented here tonight. I believe that it is going to be presented at the Institute in a couple of months time. That fits in very nicely with the work that we are doing in developing a strategic plan. We have asked each of the committees, the joint committees of the two professional bodies, and also individual committees of the Institute and Faculty respectively, to carry out their own SWOT analysis of the activities they are doing and to develop some objectives for what they aim to be doing over the next three years. This is part of a process of moving from a reactive mode of activity, where as a profession we have continually been reacting to what is going on outside, to a more pro-active position, where we will be more in control of our destiny by looking ahead and working towards what we want to do. This is leading to a corporate strategic plan for the Institute and Faculty, which will be submitted to what I believe to be the first ever joint meeting of the two Councils, which is due to take place in York at the beginning of March next year.

This raises all sorts of questions about how effectively we can work together as the Institute and Faculty. It has been encouraging even in the early stages that committees have started to ask "Well, why can't we do this together?" or "Aren't there more things that we can do working together?" Well I am sure there are lots of things we can do together building on the strengths that we have as two separate bodies. So I am very optimistic that this process will lead to a much greater public projection of the image of our profession and that we will be able to move forward together as the Institute and Faculty.

R. K. Sloan said:—Having waded through the considerable volume of findings presented, I paused to reflect on the ultimate objective of the exercise. Perhaps we are trying to get close to the No.1 job ranking in the USA, in order to help with recruitment—and perhaps even bolster our own self-esteem! There again, while an improvement in public awareness is undoubtedly necessary, this would to some extent be only cosmetic, in that the general public do not normally make much direct use of the services of an actuary. By contrast, actuaries have a considerable amount of involvement with other professions, particularly accountants and solicitors, so that it seems clear to me that improved communication with, and awareness in the eyes of, these other professions is of paramount importance.

Perhaps I might now turn to Section 6, Media Analysis, and in particular to the interesting conclusion that so many references to the actuarial profession are derogatory in nature. This caused me to reflect on the different possible perceptions of the adjective "actuarial", which evidently has a wide range of possible meanings. In its most general form, I find that "actuarial" can be merely the description of a technical methodology involving discounting for interest and allowance for all relevant contingencies.

In its next sense, "actuarial value" can be held to be the "true and fair" answer to a financial calculation, as in the case of a pension fund transfer value calculated in accordance with GN11. On the other hand, it can also seem to mean the complete opposite, for example when we refer to the "actuarial value" of pension fund investments as compared to their current *market* value, in other words an artificial value. In a sense we are victims of the recent statutory requirement to disclose actuarial findings in very much abbreviated form, for

example in company accounts, where they will often be read by parties who may not be in a position fully to comprehend the underlying implications.

I would next like to highlight the particular situation surrounding the involvement of actuaries in the assessment of claims for damages under Personal Injury and Fatal Accident cases. To quote from Messrs Owen and Shier in their 1985 paper, "giving evidence in court must be one of the supreme tests of marketing the actuarial profession". This paper was presented against the backdrop of Lord Justice Oliver's famous, *or should I say infamous, remarks in his judgment on the Auty case* to the effect that "the predictions of an actuary could be only a little more likely to be accurate (and would almost certainly be less entertaining) than those of an astrologer". Instead, the Courts continue to use their own decidedly arbitrary set of "multipliers", which are based largely on the precedents of previous cases.

Since then we have seen the publication in 1984 by HMSO on behalf of the Government Actuary's Department of a comprehensive set of actuarial tables, prepared by an Inter-Professional Working Party of actuaries and lawyers, which also includes a detailed description of the methodology to be adopted in allowing for the effects of inflation and other variables. However, the Judiciary still seems unprepared to accept the validity of the actuarial approach, despite various attempts to introduce a Private Members' Bill to Parliament in order to authorise the use of actuarial evidence in general, and the published actuarial tables in particular. I therefore urge continuation of the most strenuous efforts to have the actuarial approach accepted by the Courts—in the interests not of the actuarial profession, but of the plaintiffs.

Finally, apart from my shock at being included in the membership category only one away from "in or near to retirement", I was particularly struck by one item in Section 8 dealing with the Jobs Survey in the USA; where actuaries were apparently rated to have one of the *least* stressful jobs, ranking 15 out of 250. I can but wonder where I am going wrong!

W. B. McBride said:—Everything actuaries do, and the perception thereof, is what the Marketing Audit is about. Seen from the perspective of some of the newspapers quoted everything actuaries do amounts to producing dense pages of actuarial mumbo jumbo in order to hide common-sense under an actuarial bushel.

Yes, one newspaper admits that the actuarial skills are of a high order, but "it is the accountants who take the practical initiatives and get things done".

It is indeed interesting to compare us with the accountancy profession. I very much agree with the comments of Mr Breingan, in particular that the business community has not been persuaded that *our skills* have a broad application. My own view is that accountants have substantially occupied ground which we could, and perhaps should, have moved into; the general financial control ground of industry and commerce. We, by contrast, have not expanded greatly beyond the areas of involvement in which we featured when I entered the profession, namely the specialist areas of insurance and pensions funds and the like. Has our specialisation perhaps earned for us the higher relative level of derogatory remarks in the press as in Section 6.3, as well as only about 10% of the coverage relative to accountants?

Money Marketing, recently interviewing a well-known member of the Faculty after his appointment as Chief Executive of a well-known Scottish mutual life office, drew from him the remark that he had entered the profession because he felt it would be more 'challenging' than accountancy. I took him to mean more intellectually challenging, because of the higher mathematical content. *I felt much the same in my time. Yet the joke about actuaries finding accountancy too exciting is now the public perception.* Money Marketing, incidentally, regularly features anti-actuary comments, some of it quite venomous.

Does the key to good publicity lie perhaps in this concept of challenge? Table 5.2 shows that over half of us find our job challenging and desire this to be part of our image. But virtually nobody thinks it is in fact our image. Is it not perhaps the presentation, in the public arena, of the *relevance* of what we find challenging to every-day affairs that we should focus on? I find this focus to a degree missing even from the excellent vision of the US actuary in Section 8.2.2 (a). The same, I fear, applies to the mission statement described by the Government Actuary earlier tonight. The intellectual core is very dry reading: part technique, all abstract. No mention there of financial fairness between one human being and another. Yet this is the area of my working life which I have always found the most *challenging/interesting* and in which I am mostly engaged, as I am sure is the case with most of us here. This is surely our best point of contact with the general public.

It dismayed me, during the recent 'troubles' of my company, to realise how few of our policyholders understood that their actuaries saw fairness for and between them as our prime professional responsibility.

The dispensing of impartial financial judgement—of equity—between competing financial interests underlies everything actuaries do. I suggest that we devote in this direction a fair proportion of whatever resources we apply to improving our image—to humanise ourselves, in other words, as best we can.

Finally, I carried out a marketing audit of the taxi driver who brought me here tonight. “Was that the Faculty of Accuracies?” he asked; I replied that the Faculty of Approximations would be a better description and commended it to his future passengers, thus making, I trust, a small gesture towards popularising our image.

G. M. Murray said:—One of the things that struck me early in the paper (which I really found very interesting and thank the authors for) was Table 2.3. I find the figure of 296 for the years 1980 to 84 (5-10 years of experience) to be rather low since I naturally assumed that with the growing number coming into the profession a figure of nearer 350 might have been expected there. In discussion it probably came out (just as a guess because there is not any statistical proof as yet for it) that what we are seeing there is the result of a dropping in recruitment which took place in the recessionary period in the mid 70’s. It shows how short sighted even actuaries can be because here we are today, with a shortage of qualified people and yet not so long ago many employers were cutting back quite dramatically their intake of students because they didn’t think there were going to be enough jobs for them or that the cost was too high to take them on. So perhaps this is the point to make a plea—not to be too short sighted and to try to maintain recruitment policies of a steady nature since the overwhelming evidence would seem to suggest that there is and will be continuing jobs for us.

I was a little concerned at the way some of the discussion went with what I might call wish fulfilment which I think exists amongst many of us. I think we want to be loved, but probably more so than is really realistic. We have a situation where we don’t have as many qualified actuaries as we would like to have and therefore there is every incentive to try to improve recruitment and try to get more students in, but to start considering expanding the subject matter which we have for examination, to widen it into accountancy type areas! Surely not. Mr MacHarg made the comment that it was a little more complicated to be an actuary than to be an accountant. I think each to their own, certainly as long as there are more than enough jobs for the actuaries and we don’t want to drop standards if we are to maintain the standing of the profession. As Chris Daykin, said appropriately high educational standards are an objective for the profession. So if we are not going to drop standards, let us concentrate on getting more actuaries, and let us work to get a somewhat better image at schools etc and not worry too much about what others think of us. Except, perhaps, for accountants and solicitors since we work with them.

I also found Table 5.2 quite interesting. Broadly speaking, members do find their jobs challenging, diverse, interesting and responsible, and so in broad terms we have got our recruitment, I would say, nearly right in the sense of recruiting the right people for the job we have to offer. That must be a plus and I think we should take considerable credit for that. It’s interesting to see along Ronnie Sloan’s line that the desired image for the profession and also the current image of the profession both scored zero under stressful. Even the actuaries themselves don’t seem to think it is that high which is surprising. While the paper is extremely interesting and does show a way forward, I think for me the main message would be to concentrate on improving our image etc in the areas where it will benefit us directly in the short term and that would perhaps be at the recruitment level given the stresses and demands there are to have more actuaries.

H. Smith said:—I speak as a fellow of the Faculty, living in Scotland, working in a life office, a male, qualified for between 10 and 20 years and I responded to the questionnaire. Basically I am in every majority group possible. Not surprisingly I find myself in general agreement with the conclusions they came up with. However, I would like to strike a cautionary note and that is in what I see a major problem in the technique we are using and that is that it gives equal weight to everyone’s view. If a person is asked a question, you could be asking someone who has thought deeply about a problem, you could be asking someone who has thought a little about that problem, you could be asking someone who has hardly thought about the problem at all—equal weighting is given to each of these views. We all know the standard problem with opinion polls, you ask people what they would do in the event of having to make a decision and they give an answer. When it comes to actually making that decision the answer could be different. I think we have to view this technique with the same degree of caution. Can I give one example:

We are told that nearly 70% of actuaries are dissatisfied with the image of the profession amongst the general public. What is the obvious answer if you are asked whether you are satisfied with our image amongst the general public? I would say the obvious answer is no, but when you come down to think about

it you ask 'Does it really matter?' We don't deal with the general public. People don't sit at home wondering whether they are going to see their actuary tomorrow. We are a profession that has no dealings on a day to day basis with the general public. I would say that answer smells of a knee-jerk reaction within it.

One or two other comments on the topics raised by previous speakers. I would endorse very much what Mr Macharg said, in Section 7.2 we are told that the authors only wanted to get general impressions rather than precise answers. I think when you are asking people whether they would be willing to pay more, that is not adequate. Also I am a bit surprised at the surprise of Mr Breingan and Mr McBride at the difference in public awareness between actuaries and accountants. Two points arise:

Firstly, we are a much smaller profession by many orders of magnitude and secondly when looking at companies outside the insurance world and asking how many actuaries are on the board, we also have to ask how many actuaries do they have on their staff, what relevance has the actuarial profession to these companies compared to the relevance that accountants have. I find the results nothing to be surprised at and frankly nothing to be ashamed of.

C. W. F. Low said:—The last speaker has provoked me to come up here with his closing comments. I would certainly agree with Mr Macharg and Mr Murray that we should be targeting our PR. We should be targeting our PR to be a profession of the first instance, rather than of a profession of the second instance. It has been mentioned that we must work closely with accountants and solicitors and of course, we do. In the field of pensions you often find that the actuary is brought in to the purchase or sale far too late, as an expert of the second instance, because the directors did not think of him in the first instance. There are many opportunities arising from legislation where some companies are beginning to see the benefits of an actuary, dare I say it, a consulting actuary usually, in matters of wider finance. Because of the pensions cap we have the ability and the need to advise companies on reserving bases for benefits over the cap. Whether funded, funded in the balance sheet or unfunded, directors need to know the ultimate costs. There are the opportunities therefore in remuneration and benefit planning going far beyond pensions into other means of remuneration. There is the carrying of medical risks in the company balance sheet or, while the accountants so allow, off the balance sheet, but not insured, and the same for disability benefits.

These are but a few of the most obvious examples of opportunities open to us, I believe that the targeting of the profession's PR should be very much to company directors as well as to our fellow professionals.

The President said:—We have all probably had problems in persuading people that an actuarial job is not or is not often a back room statistical one meriting the meanings listed in paragraph 6.3.3. My own involvement was particularly when I was for a considerable time liaising with Edinburgh University and I used to say to the students that it was far more wide ranging than they might think, certainly in a Scottish life office. Some of them must have been convinced or not put off in some way because quite a few of them eventually joined our profession.

I used to say things like "you might be doing underwriting, and you can't delay a decision for days and weeks, the decision is required that day. If you're in investments and a million pounds are coming in each day you can't just leave it in the bank and think what to do with it eventually. If you are advising a pension fund and there is a takeover, or lots of redundancies the company may want advice the next day before they go and see a trade union representative", and I would now add how exciting it is to receive a fairly complicated document from the EEC via a Government Department on the Tuesday for comment on a Friday before the Department goes to see Brussels the next week (that actually happened last week). These do not fit in with this idea that our profession does not have stress although from a conversation I had with somebody from the Casualty Actuarial Society in America about a survey of professions and jobs, I don't know if it's the same ones as mentioned here, the actuarial profession came out the best in fact for lack of stress equal with piano tuners! Another problem is that actuaries tend to be the messengers of unpleasant news—forecasts of AIDS deaths, forecasts of increased pensions dependency and such things. On journalists, I have had phone calls from some members of the Financial Press following my recent appointment and having received the press release asking "What is an actuary anyway?" As Chris Daykin has mentioned Jim Souness, who I think had seen an advanced copy of the paper, in the last few weeks of his tragically short Presidency, had felt that it was important to get particularly involved with the new Joint Planning Committee of the Institute and Faculty that Chris Daykin was referring to. Hugh Scurfield the President of the Institute has indicated that he might wish to say something further on this. I don't know if you now want to do so after all Chris Daykin has said.

H. H. Scurfield (President of the Institute of Actuaries), said:—This is a very timely bit of research and we are very grateful to the Faculty and to all the profession who fed data into it. It is provocative and it does demand attention and I think we should be grateful not only to the authors but also to Jim Souness who I know felt quite strongly about this subject. I am delighted that we are doing this work to look at our mission, our strategic objectives and to be determining where it is we really want to go because we shall then be in a better position to do something about our image. While we are uncertain, we react rather than pro-act. There is one example going on at the moment, and this subject is life profit recognition. We have been, as actuaries, typically laid back on the subject. It is not something that the public understand so why do anything about it. Now the accountants have come up with a method and we have to react to it. We can see everything wrong with the method that accountants have come up with but now the real challenge, is to come up with a method, as we ought to have done five years ago, which looks a little bit more deeply than the accountants have and looks not just at one particular group of interested parties, the shareholders, but also the policyholders. There is an example where we waited too long. We should be out there in front and leading.

There is one person here that I would like to congratulate on the subject of marketing the actuarial profession, and that is Peter Tompkins who is the Editor of *The Actuary*. Here is someone who with a team has actually done something on the subject. We are now trying to come out and say something more about ourselves and producing a magazine monthly. It is very good to see it.

I was particularly pleased to see the item in 8.2.2 section (b) repeated, the mission statement and the intellectual core and where that led the Americans to, because I hope we are going to get led down this route as we go through this planning cycle. The answers won't necessarily be the same but I do believe that it may in the end enable us to present a more coherent whole as the actuarial profession in the UK. I do commend this paper to you and thank you for the opportunity of coming to this discussion.

P. D. G. Tompkins F.I.A. said:—Thank you very much for what you said about the magazine which we are producing. It is a great pleasure to put that forward and to market something within the profession. I think it is a very good paper indeed, very well put together and I hope to report it substantially as soon as I possibly can.

I think that the profession is unduly keen on looking at the bad side of its own publicity, of the way that the outside world views it, and I thought that one of the most significant points to draw from this paper was the analysis of the different varieties of remarks made in the press about the actuarial profession in Table 6.4. The analysis is between derogatory remarks (many of which have been quoted at the back) and other remarks and I thought the proportion of derogatory remarks was remarkably few. Obviously we all pick these up, we are all fond of referring to the Auty case and the remarks about the astrologers but in fact they are not very common. The general view from the comments which are taken from the newspapers is of a very technical profession and that technicality puts off the journalists who don't really understand it. So that, I think, is an area where we should perhaps be not complacent, but not too upset that there are a few cases where we do find that derogatory comments are being made.

I think the proportion of references compared with the other professions is worth looking at a little more closely. The comment has been made by several speakers about comparing ourselves with accountants, with competitors as it were. From Table 6.2 which analyses the different newspapers, one can see that in the *Financial Times* in particular the coverage of the actuarial profession is really quite decent in relation to the profession's size. The number of accountants in the country is massive, something over one hundred thousand, whereas we are talking about a few thousand qualified actuaries and we are getting something like one sixth of the coverage. I think person for person we are not doing too badly. I think myself, that the main area of external communication has to be the universities and I am pleased to see that that came out very strongly from the paper. 91% of the respondents felt that we ought to allocate more resources there and it is very important that we do have adequate resources allocated to promoting the profession in universities and that we do do a good job. We have higher education liaison officers, we have all these videos and promotion material. I hope that the magazine itself will play a role in supplying universities, colleges and schools with information of what is happening on a regular basis. After all when people see the word actuary they want to feel that it is something that is in the public domain and not something that's aloof and academic and it's the area which we should be devoting the most attention to, hoping that the press won't put in too many derogatory remarks but not worrying about the few that do come up from time to time.

P. F. J. Taylor said:—There was one thing which concerned me a little bit about the paper and that is it

seemed to me a little bit introspective. This really starts at the very beginning in paragraph 1.1.2, when it says the starting point was to conduct research amongst the members. That worried me a bit because really I think what we have to do is find out what the customer wants and what the customer thinks about us. If we turn to table 5.2 where we have the image of the profession and so on, again it's not what we think the image of the profession is that matters, it's what the customer desires from the profession and what the customer thinks the image of the profession is and how well does this match up with what we actually do. A connected point is in the mission statement in 8.2.2 section (b) which is quite an interesting one where it says "to be and to be perceived as being" and the point here is about being perceived to be. It can be argued that it is actually more important to be perceived to be these things than to actually achieve them. Now I don't want you to think that I am suggesting that we shouldn't actually achieve these things but the point is that there may be quite a number of different attributes which we might try to have in order to achieve these things and it is important to go for the ones which are perceived as being important by the customer rather than the ones which we might feel ourselves are important. I think I saw something in the paper where the authors suggested that they were going to take the research further and to go out and see what was actually required in the market place. I am sure that was the case and I would certainly encourage the Research Group to go on and do that because I think that will then round off what has certainly been a very provocative paper.

I would just like to go on to talk briefly about one of the strengths of the profession, "High Remuneration". This is an interesting one because unlike some of the earlier speakers I actually became an actuarial student because I had this perception that it was a highly paid job. Now every silver lining has a cloud and I can't speak for life insurance but in general insurance where I work there is no special role for the actuary. There is no fast track line of promotion and what that means is that the remuneration of actuaries working in general insurance tends to be determined by traditional job evaluation rules and so on and there are no extra brownie points for them in being a Fellow of the Faculty unfortunately. I personally think that this has led to the drift over the last ten years of actuaries out of the composite offices and into consulting practices where they are not so hidebound by these processes which large industries like the composite offices more or less have to have. I think this then leads on to "what do we have to do about it?" It seems to me there is a real need for the profession to market itself in this sense to customers like the large composite offices to show them that actuaries can help them run their business, that actuaries have some value to add that mere statisticians don't have and that the actuary can play a sort of enhanced role in the management of these companies through membership of the profession, through membership of the Faculty of Actuaries and membership of the Institute of Actuaries that the other staff however highly qualified they may be cannot actually provide that extra added value and I think there is a real marketing job for the profession there.

P. N. S. Clark F.I.A. said:—Peter Tompkins has put us on a more positive note. In that more positive vein, I wanted to pick up on an earlier speaker who had looked at the clearing banks, south of the border. In the interests of statistical credibility and in deference to my Chairman, I ought to point out that there is one actuary who sits on the board of the Bank of England and in his spare time doubles up as the President of the CBI. Notwithstanding that I agree with the comments of the earlier speaker.

P. H. Grace said:—Firstly I would like to join with others in congratulating the Research Group on their excellent paper. I believe it has more than justified the establishment of the group. Furthermore, as was mentioned by Chris Daykin and Hugh Scurfield the paper could hardly have been produced at a more opportune time. The Councils have formed a Joint Planning Committee which is currently working on a corporate plan for the two professional bodies. This paper should be essential reading for members of that Committee. Many of the findings should prove useful in its deliberations.

Approximately two thirds of the paper related to the responses received from the questionnaire. Professor McCutcheon commented favourably on the statistical methods and I propose not to add to his remarks other than on one aspect. Initially I shared Professor McCutcheon's view that the response rate, 59.5%, of the UK Fellows was good. But when one considers that we are a small profession it is disappointing that ignoring those who have retired it would appear that almost 40% failed to respond. It implies a serious lack of interest in the profession.

In this context it should be noted that the response rate fell as the period since qualifying increased. It should also be noted that the life office actuaries generated a lower response rate than either general insurance or employee benefit consultants. By chance in the course of conversation I identified several people who had not bothered to respond to the questionnaire. In each case they said that they did not consider

that it applied to them. They may have been deterred by the style of the questions or the length of the questionnaire but I fear their reaction was more an indication of apathy. I will revert to that point later.

I note that the group decided not to use the predictor questionnaires completed by the Institute Public Relations Committee on the grounds that the members of that Committee were mostly also members of the Institute Council. I am disappointed that these predictions were not published. Even if the Committee is a sub-set of the Council it would have been interesting to see if they were more closely aligned to the members than the Council members appear to be in respect of at least certain aspects. As the Faculty observer of that committee I am conscious that the committee spend considerable time discussing both communications within the profession and the best way of promoting the profession to a wider audience. It would also be interesting to know what the Group predicted, I am sure they carried out the exercise!

Several contributors have commented on the specific aspects of the SWOT Analysis and I only propose to comment on a few specific features, in particular, communication, threats from other professions and the opportunities to improve our image.

Communication was the lowest rated strength and indeed barely a strength at all on the weighting measurement. On the other hand, inability to communicate effectively was added to the list of weaknesses by over 50 respondents. Relatively few respondents would be aware that some two years ago the Institute had set up a Working Party to study communication within the profession. That party reported some fourteen months ago and the Institute's PR Committee was asked to consider implementation of its recommendations. One of the results of the report was the publication of *The Actuary* to which Hugh Scurfield referred earlier. The new magazine is intended not only to improve communication within the profession but also as a medium for drawing us to the attention of other professions and as mentioned by the Editor, Peter Tompkins, to prospective recruits. Whereas its predecessor *Fiasco* was supported solely by advertisements for the employment of actuarial students, it is intended that the new magazine should not only extend the range of employment posts advertised but also carry display advertising. In the present economic climate the latter aspect is obviously problematical and it is possible that the magazine might not attract sufficient advertising material to remain viable, in which case the profession would have to consider whether the magazine should receive some support from subscriptions. In this context the comments in the paper on communication should be borne in mind.

The profession sees the possibility of other professions taking over traditional tasks as the most serious threat. I imagine most respondents had in mind the accountancy profession, certainly that is the one that has been mentioned this evening. Over the last 35 years whilst the actuarial profession has grown by approximately 3.5% per annum the number of accountants in the UK has increased by over 4.25% per annum. It appears to many of us that much of this growth has been outside their traditional areas of audit and tax advice. In some instances, although not actually performing actuarial work they appear to have set the pace, for example SSAP24 and now more recently they appear to be setting some of the pace for profit recognition. Our training leads us to find solutions to financial problems in an uncertain future and as indicated by Chris Daykin such words appear in the mission statement that has been adopted by the Councils, but I pose the question "do they need to be financial?" As mentioned both by Brendan McBride and Malcolm Breingan, should we not be widening our horizons? Should we have promoted our services in the planning areas which invariably it involves assessing the affects of an uncertain future? If we had done so in the past perhaps we might have created more opportunities for us now, that is if we had been pro-active.

The Group identified the low public awareness of the profession as the principle weakness and its improvement an opportunity available to the profession. This is obviously an area which should be addressed by the PR Committee. I believe that Mr Macharg and one or two other contributors share my thoughts that perhaps questions concerning other groups' awareness of the profession could have been added to the list. For example the views of other professions and the legislators. In Chapter 4 the Group analyse in some depth the public awareness of the profession and the groups I propose to comment on a little more detail are the general public, undergraduates, company directors and journalists.

With regard to the general public, over 60% of the profession believes that the general public should be aware of us, but why? We offer few services direct to the public. Where the public might need our services they would be referred to us by another professional adviser e.g. for valuation of pension rights in accordance with the Family Law (Scotland Act) 1985, the reference would usually be by a solicitor.

With regard to undergraduates, my initial reaction is that the questionnaire should have referred to undergraduates studying for a mathematics degree, admittedly it qualifies the description with words "potential results". In which case, were the findings misleading in that mathematics undergraduates are

probably somewhat more aware than the general body of undergraduates? However, I have subsequently studied the recently published Ivanhoe Guide produced by a publisher specialising in career books and note that in 1989 the Faculty recruited 26 graduates from other disciplines, that is over 20% of our recruits did not come with a mathematics degree. I imagine the Institute would have had a similar experience. On the subject of recruitment the profession appoints to each of the universities and polytechnics liaison officers from its membership and the President has made comments on their work. The profession has produced a series of career videos over the last 10 years with copies distributed to the Universities Appointment Boards. The profession has held conferences for those Appointment Boards' officers. Furthermore the profession participates in the production of the Ivanhoe Guide to which I have already referred. It can be seen therefore that a lot has been done to promote the profession amongst undergraduates, but against the background of the Faculty's recent recruitment perhaps we have focused our efforts on too small a sector in the past, that is undergraduates studying maths. Perhaps we should as suggested by Malcolm Murray widen our horizons.

The survey implied that most of the membership believed that company directors should be very aware of the profession, but is that necessary? Any underwriter will tell you that the company director is probably the most commonly encountered occupation. It covers a wide variety of people from directors of public companies to directors of small family businesses such as local traders who operate as a limited company in order to obtain that limitation. The latter is unlikely to have any more demand for actuarial services than the general public and if he does, for example in connection with a small self administered pension scheme, his financial adviser will affect the necessary introductions. I would agree that at the other extreme it is essential that the finance directors of public companies should be very aware of our services and as suggested by Fraser Low the services of an actuary should come first hand to him not as a second thought.

The Group carried out an interesting study into our press exposure and compared it to that given to both the legal and the accountancy professions. One must remember that a journalist's livelihood depends ultimately on sales.

Unfortunately actuarial work rarely makes the headlines. A notable exception was the work done on AIDS which attracted public interest in 1987/1988. In comparison, legal work in particular because of court activity invites constant interest. I accept that the same is not true for accountants but their overall exposure was less than one third of the lawyers. In this context Mr Breingan brought attention to the breadth of tasks undertaken by accountants and that this must be a factor reflected in their coverage. The accountants will gain benefit also from the PR activities of their parent employers, the accountancy firms, whereas most actuaries are identified with insurance companies and press comment usually links the individual with the insurance industry rather than the actuarial profession. The Group has drawn attention to unusual and derogatory remarks in the press and this in turn has attracted a number of comments this evening. Although as indicated by Peter Tompkins the actual number of such comments only forms as a small proportion of the total comments, I feel unlike Peter that such descriptive remarks do nothing to improve the public's awareness of our profession. In fact they act to the contrary. This problem would best be tackled by educating the journalists with the following objectives.

We should discourage the misleading use of the words 'actuary' or 'actuarial' and improve general public awareness if this is to be considered necessary. Whilst the Faculty makes efforts to maintain contact with the Scottish press it is not so easy as regards journalists based elsewhere. I am pleased that David Appleton of *The Scotsman* is with us tonight and that the editor of *Money Marketing*, Tim Potter, has made the journey north today. Many of his contemporaries are not prepared to make the effort. Most of the journalists are based in the London area and we must seek to co-operate with the Institute in educating them. I understand that occasionally press briefings are held at Staple Inn for example on the subject of AIDS, but there are many commercial organisations who hold PR lunches of a general nature and I believe that the profession should probably do likewise. It appears that there is a lot to be done in the PR area to improve our image and to improve communications.

Mr Macharg drew attention to the problems of improving awareness. It is no good the Faculty tackling this problem alone, we must do it in co-operation with the Institute.

In response to the Group's enquiries, members indicated that they wanted to devote more resources to improving awareness. Unfortunately the membership was not asked to quantify how much. Both Councils are concerned at the increase in subscriptions sought recently, these have to a certain extent been driven by increases in property costs. I believe that there is a reluctance to increase subscriptions on account of nebulous concepts such as improving communications or increasing public awareness.

I would now like to revert to the 40% of the people who did not complete the questionnaire, possibly

because of complacency to which the Group referred or possibly through apathy. Whilst Appointed Actuaries and members aspiring to that responsibility, together with certain members working in the pensions area, need to be members of one of the professional bodies, there are many members doing jobs for which they do not need to continue their membership, for example in the investment area. Some of these could be in that missing 40%. There is a risk that a sharp increase in subscriptions may lead to a loss of members from this group. On the other hand, the prospect of practising certificates for Appointed Actuaries may lead to a re-distribution of financial burden, I hope not.

To sum up, I believe that the Research Group have demonstrated that our image is perceived to be poor, the level and quality of press coverage endorses this view. There are things that can be done albeit at a cost. I understand that this paper is going to be discussed by the Institute early in the New Year and that the Institute PR Committee have already agreed to discuss the paper at their next meeting. Hopefully they will come up with a plan to take action in these various areas. The Faculty must play its part.

R. J. H. Milne, closing the discussion, said:—I think if our reward is an active discussion then the Research Group should be well satisfied tonight. The hour is already running a little late so I will try and run through these as quickly as possible. First of all the opener—more discussion on aspects of the predictor questionnaires. Our problem with this paper was constantly one of keeping to a reasonable length, we were always conscious that if we ran to 150 pages it would be read by even less people than it presently is or less of it would be read by the people who read it. Including a copy of the predictor questionnaires themselves is one thing that we didn't think would be worthwhile. Sex, well with hindsight we probably should have had sex in the questionnaire. There is not really a defence for that one.

Appendix 5—"were there no complimentary remarks on the profession?" For my sins I had the task of going through the press cuttings and trying to analyse them and I was conscious of a possible bias through being too sensitive, so I listed all of the remarks so that the other Group members could go through them. There were no complimentary remarks but then there were really no complimentary remarks about accountants or solicitors either.

Mr Macharg said that you could throw a lot of money down the PR drain and yes I have to agree with that, you can waste some money on PR but some of it is effective and it can be effective. Otherwise the industry wouldn't still be surviving. You wouldn't have reputable companies including the major life offices putting such money into public relations and also I'd make the point here that we have some talent within the profession. We as actuaries have been getting into other areas. Marketing and PR is such an area into and possibly the Faculty and Institute could access more of the talent available on a voluntary basis.

Mr Macharg mentioned a good recruitment video and recruitment literature. I was surprised only last week to see the range of recruitment material that we have and I really wonder how many of us have seen the recruitment literature. It doesn't appear to have been distributed very widely amongst the profession. We are the mouth piece of the profession out there amongst the general public and perhaps we should have some of the material.

On behalf of the Group I think we are encouraged by the comments by Chris Daykin and Hugh Scurfield about a strategy being developed for the profession. Some of the research that didn't get into the paper concerned mission statements. We discovered mission statements in some of the accounting and legal bodies but we couldn't track one down for the actuarial profession.

Ronnie Sloan suggested that public awareness wouldn't be a great advantage as the public don't use our services directly and that was picked up by other people as well. I think the most important point here is that public awareness feeds through to assistance in the recruitment area. I fully accept that the public don't use our services but in terms of graduate recruitment I would imagine graduates are going to ask around and say "what is an actuary?" They are probably going to ask their relatives and their friends and if we don't have public awareness it will make the recruitment task harder.

The 'stress' point in the North American 'Jobs Rated' Survey came out, mentioned by a couple of speakers. We too were surprised that we are put down as having a less stressful occupation and certainly that was mentioned at the time when it achieved coverage in the UK—what little coverage it did achieve.

Mr Smith suggested we had a problem in our technique in giving equal weight to the views of the membership. I could say that we should be democratic in this but perhaps I'll pass over that point by just asking him if he has any better technique. Could he let us have it please? It does matter that the general public image is low. Why should that matter? Well, we were conscious of the trap that if you were to say to

somebody “would you like more money” the automatic answer is “yes I would like more money please” and that is why we asked the resources question of the membership so that instead of just saying “would you like higher public awareness” to which the automatic answer would be yes we said “well do you think more resources should be allocated to that area?” We couldn’t address the question of where those resources should come from, we considered questions such as “should the subscription be increased?” but then again you might fall into the problem of people saying “yes I think it should be increased” and when it came to the crunch they disagreed with that earlier statement. Mr Smith suggested that the reason there are smaller numbers of actuaries on boards of companies is that there aren’t actuaries in their staff. I wonder whether there is an assumption that all board members come from the staff of the company, that’s not necessarily the case, board members usually come from outwith the company.

Peter Tompkins suggested the derogatory remarks were not too many in absolute terms. I think I and the other members of the group would side more with Paul Grace on that point. 4% applied to the number of references that we should achieve is a significant number of unusual or derogatory remarks again. One of the items that didn’t get into the paper due to length was the unusual and derogatory comments on the accountants and solicitors and I think if they had been in you would have seen that we were bending over backwards not to be biased. We were digging up remarks and classifying them as derogatory for accountants and solicitors when they were really quite tame. Again, in the analysis the relative size of the profession was not taken into account—a couple of speakers picked up on that one. Unfortunately you can’t look globally at that particular table, you can’t just say because we have only 3,000 Fellows in the UK and the accountants number some 90,000 that there should be a similar rate in terms of press coverage there. You can look at individual categories and we did try to do this and suggest that professional body references should be in proportion to the size of the PR Budget, but then we didn’t think anyone would tell us what their PR Budget was.

Mr Taylor, said “its an introspective look at ourselves, we should look at the customer”, I think I should say quite strongly that we felt that in this first stage to the research that the membership were customers for the PR activity of the profession so we did class ourselves as customers in that respect. The recommendation that he was searching for is 1.4.2 where we suggest a further stage to the research would be to undertake surveys to determine the views of some or all of the target groups.

Mr Grace said it was a pity that the PR Committee responses weren’t analysed, and with hindsight, we probably agree with that. They could have been included as a sub-group to highlight differences. The original plan was to include the predictions from the PR Committee and the Marketing Research Group themselves, symmetry suggested that we delete both if we are deleting the PR Committee, the fact that our predictions were poorer than the Faculty and Institute Councils’ had nothing to do with that! The rest of Mr Grace’s comments we would agree with. Contrary to some of the earlier speakers we feel there is a message from the membership in the results of this survey—that we should be increasing our PR activity, educating journalists which in turn will filter through to the general public. We probably should hold more press lunches if that’s what it takes, and quantifying the resources, well that is a difficult question, certainly not one that we can address. It’s a question for the governing bodies.

One thank you which is missing from the credits at the beginning of the paper, to two people—two Presidents of the Faculty. We were encouraged through myself by Bill Morrison in the early days and by Jim Souness who was very encouraging and concerned about this issue. Thank you.