

Some Comments on the Interim Assessment Report of the Morris Review of the Actuarial Profession

We wish to submit the following comments on the first part of Chapter 6 of this report which deals with actuarial education.

A. Corrections

1. Page 105, paragraph 6.71. The University of Warwick does not offer a degree in actuarial science. However, it does offer a degree in mathematics combined with its applications to economics, finance and management. This degree, whose full title is Mathematics, Operational Research, Statistics and Economics (abbreviated to MORSE), does offer some options that provide exemptions from the professional actuarial examinations. The degree is quite popular with many actuarial recruiters and Warwick has been one of the top providers of new actuarial recruits in recent years. As the two people who were responsible for the introduction and planning of this degree, we feel we are in a position to make some useful comments about actuarial education.

2. Page 105, paragraph 6.73. This states *"Each university sets its own curriculum and designs and updates its own course materials."* In fact, universities must follow the syllabus laid down by the Institute in order to obtain an exemption. The Institute specifies that 90% coverage of the professional syllabus is required for an exemption from a professional examination and the profession also lays down rules about the method of assessment.

B. Comments on international experience, paragraphs 6.80-6.82

The comparison with Australia has fundamental problems. In the UK, there is a rigid hierarchy of universities. It is very, very unlikely that either Cambridge or Oxford will ever start a degree in actuarial science. This implies that if the profession were to move to a system where new entrants were expected to attend a university actuarial science degree, then it would be eliminating two of the largest suppliers of really good recruits. In the long term, this would have a very large negative effect on the reputation of the profession.

In the UK, the profession is perceived as very narrow and this means that actuarial training is also perceived as very narrow. Substantially increasing the number of students with actuarial science degrees would not be in the interests of those students who graduate with such a degree and who do not achieve a position as a trainee actuary. The broadening of the profession is needed *before* a substantial expansion in the number of students graduating with actuarial science degrees.

C. General Comments on comparing University and Work-based learning

The report fails to remark on the fundamental differences in objectives between a university and a professional education. Universities aim to provide an education which equips a student for life by stretching the minds of even the very best students, by trying to encourage an interest in the subject, which will last after graduation, and by developing their study skills and independence. The best universities take pride in the fact that they keep their syllabi up to date with current research - indeed they are praised for doing precisely this by QAA (the body which inspects university degrees). A professional qualification has very different objectives that are quite incompatible with the objectives of leading universities. A professional syllabus concentrates on the material that is useful today. University syllabi can change from one year to the next if new developments make this desirable whilst a professional syllabus usually takes many years to change.

D. Qualification Time and Examinations

Paragraph 6.48 states *"the profession has acknowledged that it would like to reduce qualification times."* The fundamental question surely should be: Is it really necessary for actuaries to take such a long series of examinations? In practice, the majority of actuaries use only a small part of the syllabus. We reckon that

the number of examinations could easily be reduced from 15 to 10 without any deleterious effects on the training of the majority of student actuaries. It is difficult to escape the conclusion that one of the primary objectives of the actuarial education system is to maintain the exclusivity of the profession. Reducing the number of examinations to 10 and, for example, agreeing that every economics graduate with an upper second or better should automatically get exemptions from the economics and statistics papers should encourage many more economics graduates because they would know that passing the remaining examinations is customary in under 3 years. Of course, a reduced syllabus would not be adequate for actuaries involved in the more technical work in the research departments of the big firms. But the current syllabus is also inadequate for this.

Executive summary paragraph 5. *"The first concern is that the profession has been too insular with insufficient contact with other professions and has been too slow to adopt new approaches and techniques."*

Executive summary paragraph 21. *"...a profession that has been too introspective, not forward-looking enough and slow to modernize."*

We maintain that the education system has contributed to all of the above. Indeed, it is not difficult to find staff in universities who believe that the new syllabus is old-fashioned and out-of-date.

The long time to qualification and numerous examinations have several implications:

- (1) They encourage the belief that the syllabus covers all that an actuary can possibly need.
- (2) Student actuaries working on technical problems or interested in developing new results do not have the time or energy to obtain the knowledge to get to the forefront of knowledge in more specialised areas. Instead they must spend many years trying to pass the professional examinations.
- (3) The very tight control that the profession exerts on the syllabus, which does not allow freedom of experimentation to universities, leads to a profession that, in the words of the report, is *"not forward-looking enough and slow to modernize."* In the particular case of Warwick's Statistics Department, the profession specifies how various topics in statistics must be taught even though it is one of the largest and best departments in the country and has greater expertise in some of these areas than exists in the actuarial profession.

E. Final comments

1. Paragraph 6.91. The report states *"It is currently difficult for students to work out what exemptions they will receive if they decide to pursue a particular course of study, as exemptions are decided by the profession on a case-by-case basis."* We confirm that this is a problem.

2. Paragraph 9.72. Current actuarial training does not ensure qualified actuaries are experts in demography.

3. The National Savings web site states that actuaries check premium bond winning numbers for randomness. There is nothing in the actuarial syllabus that equips them to do this and we believe that the methodology that is used to carry out this statistical problem should be published and so opened up to scrutiny.

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