

Information for Insurance Supervisors

Actuarial Capacity and “Certified Actuarial Analysts”

INTRODUCTION

In many World Bank client countries, a shortage of actuarial resources is an issue of concern to both insurers and supervisors. One of the possible steps toward a solution could be the newly developed “Certified Actuarial Analyst” or “CAA” qualification. The Institute and Faculty of Actuaries (IFoA), the UK-based global actuarial professional body, has established the “CAA” qualification. This qualification could well be useful to insurance supervisors looking to introduce enhanced actuarial roles as part of their regulatory system.

WHAT IS A “CAA”?

The set of actuarial skills that the qualification provides represents coverage of the range of actuarial calculations that are needed to be done in most situations. For example, CAA qualified people should have the necessary skills and understanding to carry out calculations used to determine premiums that provide benefits on contingent events; technical provisions that providers of such benefits need to hold to meet future liabilities; and to value assets that providers of benefits might use to invest their technical provisions.

Before commencing, candidates have to pass an entry level test of mathematical skills (Module 0). After this, in whatever order they wish, they can study modules 1 to 4:

- Module 1: Finance and Financial Mathematics
- Module 2: Statistics and Models
- Module 3: Long Term Actuarial Mathematics
- Module 4: Short Term Actuarial Mathematics

Module 5: Models and Audit Trails, is taken after all earlier modules have been completed.

An online professional awareness test (OPAT) is a requirement to be taken within one year of finishing the other modules. Candidates must also demonstrate evidence of one year of work experience in an actuarial or other relevant support role before qualifying.

Worldwide examination centers conveniently located

The IFoA has established examination centres through an organization called “Pearson VUE” which

has examination centres widely distributed around the world, in 175 countries. It is possible to check the location of such centres via Pearson VUE's web site <http://www.pearsonvue.com/ifo/> and the link "Locate a test center" (on the right hand side). For example, there are two test centers in Kigali, Rwanda and two in Papua New Guinea. This small review suggests that the CAA is very accessible in emerging markets, usually in the capital and sometimes elsewhere as well, in the country.

How long might it take?

The IFoA estimates that it would take between 2 and 3 years to achieve the CAA qualification whilst also working full-time.

It expects that potential candidates for the CAA will come from existing groups of Fellowship candidates who wish to complete a qualification in a shorter period, degree qualified graduates with an interest in actuarial work, and strong mathematically oriented school leavers without the desire or resources to pursue a degree. Also, people who are working in insurance companies in other related roles might be well placed to take these exams and take a larger role supporting the actuarial work in the organization.

At this stage, there is a process where current Fellowship candidates can convert to the CAA path and qualify for exemptions from certain modules in line with the exams they have passed.

One other option might be that CAA candidates might complete the CAA then wish to continue to become a fully qualified actuary. This is not currently part of the IFoA process as they wanted to develop the FIA/FFA and CAA as two separate qualifications to ensure that the CAA received recognition in its own right. However, the IFoA have said that they will look at the potential for a bridge from CAA to FIA/FFA in the near future, as there is likely to be demand for this.

CAA candidates, after passing the "Module 0", are eligible to join the IFoA.

The total cost to qualify as a CAA includes four components: (1) the IFoA admission fee, currently £99; (2) an annual student subscription fee, currently £170 per year, although there is a concessional rate of £69 per year in emerging markets; (3) exam fees; and (4) the fee for approval of the work based skills requirement.

As a result, the total cost depends on how long a student takes and whether or not they re-sit any of the exams. For the full course of examinations (all modules so no exemptions) without re-sits, the exam fees are £814 (£379 at the concessional rate)¹.

HOW MIGHT THE CAA BE RELEVANT FOR SUPERVISORS?

An absence of actuarial capacity concerns many supervisors. The IAIS notes that actuarial capacity is a "pre-condition" for effective insurance supervision, stating²...

"A well developed public infrastructure needs to comprise the following elements, which if not adequately provided, can contribute to the weakening of financial systems and markets or frustrate their improvement: ...

- the availability of skilled, competent, independent and experienced actuaries, accountants and auditors, whose work complies with transparent technical and ethical standards set and enforced by official or professional bodies in line with international standards and is subject to appropriate oversight;"*

The pre-condition calls a numerical supply, technical capacity, ethical and professional standards for an actuarial profession normally provided by a fully operational professional body of the form that would meet the membership criteria of the International Actuarial Association (IAA). This is a long distance from reality in many countries.

So here are just some ideas of how the CAA

¹ Note all fees quoted are correct at time of preparation of this note (December 2014).

² in paragraph 22 of the introduction to the ICPs

qualification might be “part of the solution”.

Localizing actuarial work as part of an overall regime of official roles for actuaries.

Some supervisors make a decision to require actuarial roles under their legislation even though there are few if any actuaries in the country. Insurers, as a result, usually start by getting consulting actuaries from outside the country. When considering introducing an official actuarial role, a common concern is a very limited or complete absence of supply of actuaries in a country.

With the CAA qualification, a good deal of the work required can be carried out locally leaving the actuary to oversee and review the work instead, bringing the capacity into local companies and allowing them to build up their skills and familiarity progressively. It can also be cost effective to do this.

Improving access to insurance in proportionate ways

Increasingly, it is recognized that “full functioning” insurers need actuarial support. However, for smaller, simpler insurers, it may be possible to constrain their activities to reduce the need for actuarial work in-house. But a good deal of flexibility can be retained if competent actuarial skills are retained in the form of the CAA, able to conduct some important calculations and investigations for regulatory reporting needs. Through such a CAA approach, some proportionate benefits could be developed.

Defined actuarial calculations can be included in regulations

Having CAAs can make it possible, and practical, to implement some solutions to regulatory problems. All of these would require the development of instructions or specifications in

regulations or other guidance. Often, in more developed regimes, the actuarial professional association might be asked to develop such approaches. In regimes where the actuarial association is less developed, it is quite sensible that the regulatory system fills that role in the meantime.

For example, some regulatory approaches:

- to consumer protection such as minimum surrender or paid up values for traditional endowment and whole life insurances include actuarial calculations on a defined basis;
- for valuation reporting on a more frequent basis, the official actuary might be asked to define the basis that a CAA would implement more frequently;
- where more CAA resources are available, stress testing and alternative valuation calculations could be completed more effectively, and when supplemented by the commentary of the official actuary, could increase the relevance of actuarial work to risk management at board and senior management levels. The same can be said for helping to implement and monitor risk management within an organization.

CAAs ARE MEMBERS OF THE IFoA

Some of the professionalism requirements envisaged by the IAIS pre-conditions can be recognized by the fact that CAAs are members of the IFoA and are therefore subject to their code of practice and disciplinary scheme.

A VISION OF THE PATHWAY

So what might be useful to do as first steps? Here are just a couple of ideas to make a start.

- Supervisors can discuss the CAA opportunities with the industry and seek further input from the IFoA regarding how it can be advanced in their jurisdiction;
- Supervisors could offer their own staff who might be interested and suitable, incentives to sit and

pass the CAA examinations;

- Industry could look to establish their own incentive scheme for new staff, and could establish a collectively funded scholarship fund for students who perform well in the examinations.

FOR MORE INFORMATION

To discuss how the CAA could be part of the regulatory system in a country or a way to reduce barriers to access to insurance contact:

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For more information on the CAA process and requirements from the IFoA, see <http://www.actuaries.org.uk/becoming-actuary/caa>