

The Actuary as a Player in the ART Program

Veterans of the alternative risk transfer scene can generally rattle off a list of the most common actuary jokes out there, and newcomers to the arena usually hear them in fairly short order. Whether it's the difference between an introverted and an extroverted actuary (the extrovert looks at your shoes when talking to you), the reason the actuary didn't become an accountant (didn't have the personality), or what to call an actuary talking to someone (popular), the list goes on and on. With this kind of stereotype, some may be left wondering whether actuaries are really a necessary piece in the process of establishing alternative risk structures. So just what is it that actuaries do?

The overview

The quick summary is that actuaries use a variety of skills to measure and manage risk and ensure the ongoing financial strength of an alternative risk transfer program. More specifically, they develop loss forecasts, establish premium rates, determine recommended capitalization requirements, and work with regulators to obtain the approval necessary to implement a sound ART strategy. Additionally, actuaries are called upon to render opinions as to the adequacy of loss and loss expense reserves and unearned premium reserves shown in the statutorily-required year-end financial statements of captive insurers.

What makes an actuary?

Most captive domiciles, including the District of Columbia, require that actuaries be approved by the department of insurance. In general, actuarial services must be provided by a member of one or more of several actuarial organizations that have established qualification standards for actuaries. The Society of Actuaries for life, health, and pension actuaries, and the Casualty Actuarial Society for property and casualty actuaries have each developed a series of examinations required for professional certification. These examinations cover a variety of topics including higher mathematics, economics and finance, and insurance ratemaking and reserving. On average, completion of this examination process takes 8 to 10 years. Membership in the American Academy of Actuaries is generally granted to those completing the certification requirements of the Society of Actuaries and/or Casualty Actuarial Society.

The role of the actuary

In the ART world, actuaries are most commonly hired to complete a feasibility study to review the economic advantages of forming a captive, or other alternative risk transfer vehicle. The feasibility study forms an integral part of the application to the department of insurance to establish a captive program.

One of the major components of any feasibility study is the analysis and quantification of losses and associated claim expenses related to exposure from the insurance risk under

consideration. Typically, the actuary's forecasts will derive expected loss estimates for the first 12-month period of the captive. Loss estimates for subsequent years are often based upon anticipated changes in operations of the parent, changes in the economic and social environment, and changes in the provisions of policy contracts issued by the captive.

In loss forecasting, the actuary attempts to quantify all claims that the captive will be obligated to pay under the terms of a 12-month contract. Several forecasts are often necessary to properly evaluate different possible policy provisions under consideration, such as per occurrence and annual aggregate retentions and the form of excess insurance/reinsurance covers for the captive itself.

Loss projections enter the captive planning process at several steps. Bottom line analysis of the economic feasibility of alternative risk transfer programs is one of the first steps in this process. Losses represent the largest component of expenses associated with the insurable risks under consideration.

Trial financial statements, incorporating cash flow analyses, balance sheets and income statements are important in any economic feasibility study considering the establishment of a captive insurance program. As management reviews potential balance sheet projections, point loss forecasts represent best estimates of values for the loss components of the liability accounts. But the planning should also include reviewing scenarios based upon ranges of estimates resulting from the variability in loss forecasts.

Pricing involves developing the annual premium that the captive will charge under its insurance contract to the parent. Establishing premium level flows naturally from the previous step of reviewing loss and claim expense projections. Premiums should equal an estimated loss component loaded for anticipated operational expenses, including reinsurance charges. Variability in loss projections will lead to different premium scenarios.

Finally, determination of the amount of initial capitalization for the captive insurance company is critical to financial solidity. Obviously, the amount of capital must satisfy regulatory standards. The actuary's loss projection models can assist management in arriving at an acceptable level for initial capitalization. Actuarial models are often employed to derive loss amounts at levels that are possible, but not probable, in order to test the future financial strength of the captive program under adverse loss experience and various capitalization scenarios.

What do I really want in an actuary?

Actuaries that assist in the establishment of alternative risk transfer programs are, of necessity, a different breed from the actuary exemplified by the stereotype at the beginning of this article. ART actuaries need to combine the strong technical skills any credentialed actuary possesses with a strong understanding of the "big picture" purpose for the exploration and eventual establishment of an alternative risk transfer program.

Unlike the commercial insurance world, where many actuaries rarely come into contact with the public or even other professional disciplines, actuaries involved in the captive market need to be able to use their work product to provide meaningful consultative services to the prospective captive owner and understanding to even the least insurance-savvy individuals.

Often, the actuary is the first point of contact for the prospective captive owner or self-insurer. The actuary can be a good source of information and advice in exploring the alternative risk management vehicles available and the advantages and disadvantages of each. Additionally, the ART actuary is often called upon to help bring together the team of service providers critical to the establishment of a solid captive program.

At the end of the day, any good actuary can analyze a pile of data and come up with a number. But a great actuary will use that number as a stepping stone to help craft a meaningful and valuable solution to the alternative risk management client.