



AMERICAN ACADEMY *of* ACTUARIES

June 6, 2005

Ms. Christine Kuduk
Economist
Government Accountability Office
441 G St., NW
Washington, DC 20548

Dear Ms. Kuduk,

Members of the American Academy of Actuaries¹ met with representatives from the Government Accountability Office (GAO) via conference call on March 31, 2005, to discuss a broad range of questions regarding actuarial activities, insurance products, insurance regulation, and other issues. As part of that conference call, the Academy members agreed to provide a written response to the GAO. We note that the responses below are with respect to actuaries working in the realm of insurance, and not necessarily other arenas such as pensions, employee benefits, or non-traditional fields. The Academy greatly appreciates the opportunity to meet with the GAO, and we hope the following comments will prove useful to the GAO's work on insurance issues.

Questions from Phone Conference with GAO On March 31, 2005

1. A brief background on broad categories of actuarial activities.

Generally speaking, actuaries play a central role in protecting the financial solvency of insurance companies. This includes design and pricing of products and evaluating the appropriate reserve and capital levels the company should have. Assessment of risk and managing that risk through measures such as underwriting and asset liability management also fall within the actuary's area of activity. It is helpful to think of "being an actuary" as belonging to a profession that is associated with certain skills and abilities, rather than as a job title or precisely defined occupational function. There are a wide variety of functions that actuaries perform, and while our comments will not address every role or circumstance, they are intended to provide a general sense of actuarial practice (as illustrated in the following outline):

¹ *The American Academy of Actuaries is the public policy organization for actuaries practicing in all specialties within the United States. A major purpose of the Academy is to act as the public information organization for the actuarial profession. The Academy is non-partisan and assists the public policy process through the presentation of clear and objective actuarial analysis. The Academy regularly prepares testimony for Congress, provides information to federal elected officials, comments on proposed federal regulations, and works closely with state officials on issues related to insurance. The Academy also develops and upholds actuarial standards of conduct, qualification and practice, and the Code of Professional Conduct for all actuaries practicing in the United States.*

- a. Protection of the financial solvency of insurance companies.
 - i. Design and pricing of products.
 - ii. Evaluation of the adequacy of reserve and capital levels.
- b. Assessment and management of risk.
 - i. Asset/liability management.
 - ii. Identification and mitigation of catastrophe exposure.
- c. Collection and analysis of data, such as mortality or motor vehicle damagability.
- d. Analysis of public policy issues, such as Social Security, terrorism risk, and building code effectiveness.

2. *Also please briefly highlight the differences in actuarial activities between life, health and property-casualty insurance.*

Each branch of the profession is concerned with product pricing and risk management. Likewise, life, health and property/casualty actuaries are closely involved in estimating liabilities, which requires skill in analyzing historical data to help financially prepare an insurer for a future event. Life insurance actuaries tend to be more concerned with reserves for future claims and expenses (to provide for a contingency that is likely to happen over a long period of time, but where the claim payment is a specified amount or series of specified amounts). Property/casualty actuaries, however, tend to be more concerned with the cost of claims that have already happened (to provide for a contingency that may or may not happen over a short period of time, but where the claim payment is an unspecified amount). Health actuaries may be concerned with either or both of these scenarios depending on the coverage. For example, long-term care and disability income insurance have substantial reserves for both future and past claims. Health actuaries also address the process of transferring risk to provider groups (e.g., capitation plans).

Actuarial practice is also commonly associated with certifying, developing, or opining on policy and claim reserves for insurers. These terms are often used interchangeably, which is not an accurate reflection of actual practice. It is important to distinguish the way in which each area of the profession is involved in the reserving process. However, the nuances of actuarial practice and responsibility with regard to reserves go well beyond the scope of these comments. As such, it should be understood that along with every reference to "reserves" is the recognition that actuaries in each line of insurance play distinctly different roles in the process that ultimately yields a reserve estimate. These different roles are the result of regulatory requirements, accounting guidance, the nature of the different insurance lines, actuarial standards of practice, and other factors. We would be glad to discuss this subject in more depth at some future time.

3. *Please briefly describe the role actuaries of an insurance company have on the product development (form) side.*

Based on information from agents or other sources, actuaries may design the features of a product (this is more common for life actuaries than for property/casualty actuaries), evaluate the financial and product cost implications of various product features, identify cost-benefit trade offs (some features may be cost prohibitive), and perform the detailed pricing based on the features of the product. For life insurance products, which are sold mostly to individuals, the detailed pricing will generally vary by age, sex and underwriting class. Life actuaries also develop the calculation for the non-forfeiture values (minimum cash values or equivalents that policyholders would get if they terminated certain types of life and a few health policies) and ensure that these are consistent with the law. They serve as the experts on risk assessment and therefore will be closely involved in establishing underwriting policies for each

product. For health insurance products that are sold to groups, the characteristics of a group (but not necessarily individual group members) are important. For property/casualty insurance products, there are significant differences between property risks and casualty risks. Pricing also depends on what reserves will need to be set aside for that risk (which as noted above is a process involving actuaries), the investment income provided by those funds, and how the design of other product elements affect cost.

With regard to product form filing, actuaries are involved to varying degrees depending on the area of practice. For life actuaries, the main function is to prepare the actuarial memorandum that discloses the formula and assumptions for the calculation of the non-forfeiture values. Health actuaries are typically involved in developing health premium rates where required, and property/casualty actuaries play a secondary role to the legal profession in adhering to filing requirements, but are closely involved when pricing a product.

Premium rates are generally not filed for life insurance products. Actuaries may also be involved in developing the product-filing package or answering questions from regulators on some of the more complicated design features of the product.

An actuary will also function as the Illustration Actuary for a company's life insurance that has dividends or other types of non-guaranteed elements (e.g., actual versus minimum interest rates for deferred annuities). In this role, the actuary is responsible for annually certifying that the illustrations used by the company to sell its products meet the requirements of the model illustration regulation promulgated by the National Association of Insurance Commissioners (NAIC) and the company's state of domicile.

4. Please describe the role actuaries have in the insurance regulatory process.

The regulatory actuary's job is to confirm that the company actuary properly complies with the laws and requirements of the state.

For life insurance, regulatory actuaries review minimum non-forfeiture values and reserves. For property/casualty insurance, the regulatory actuary's role is much broader due to extensive regulation of rates and classification systems. Some health lines (e.g., individual major medical, LTC and Medicare Supplement) are also subject to rate filing and approval while others (e.g., large group major medical) are frequently exempted. Staff lawyers working for the state review all the provisions in the product filing to ensure that they comply with legal requirements, and they may consult with the regulatory actuaries on complicated or new provisions.

Regulatory actuaries also get involved in analyzing proposed legislation that affects pricing and reserves. They are mostly concerned about the effect of legislation on consumers and the solvency of companies and often work with the company actuaries who are also concerned about the effect of legislation on marketing new products and the cost/value proposition.

In property/casualty lines subject to catastrophic perils, regulatory actuaries also review insurers' ability to withstand large losses and the adequacy of reinsurance coverage. For health lines, when the entity contracts with providers to pay on a basis other than as services are incurred, the states will also review the adequacy of the provider network and their financial capabilities. The health actuary is frequently involved in both the finalization of such contracts (including reimbursement rates) and the review of the group's financial stability.

For information on the roles actuaries should play under a federal regulatory system, if such a system evolves, please refer to the Academy's monograph, "The Role of the Actuary Under Federal Insurance Regulation," available on the Academy's website:

http://www.actuary.org/pdf/finreport/federal_april03.pdf

5. *Are there elements that make a line of insurance a commercial product instead of a personal product, other than that the coverage is for a place of business?*

Typically for life and health insurance, a personal product is for an individual while a commercial product is for a group of individuals (such as all the employees of a corporation or members of an association).

In property/casualty insurance, the legal nature of the entity being insured (an individual vs. a corporation) is a key determinant of personal or commercial status due to a host of statutory requirements (workers compensation for businesses, for example). Policies are tailored to provide protection for the different legal exposures of individuals and businesses. Another significant determinant of whether a product is commercial or personal is the size of the entity. The larger size of some commercial entities allows for different types of pricing, such as experience rating or large deductibles.

For property/casualty insurance, the degree of rate regulation differs significantly between personal and commercial products. Generally, the regulatory structure assumes that commercial buyers are more sophisticated, requiring significantly less oversight on pricing and classification.

6. *With respect to the three financial service areas of insurance, banking and securities, we would like to have a more inclusive list of competing and hybrid products:*

Bank CD's and mutual funds are competition for a deferred annuity and sometimes for single premium life products. In the property/casualty world, catastrophe bonds might be considered a hybrid product in straddling the line between capital markets and the reinsurance market.

a. *What are the bank products and securities products that have insurance features and are regulated by more than one functional regulator? We recognize that at some philosophical level every financial product has a risk transfer/insurance feature so our focus here is placed on those hybrid products with multiple functional regulators.*

With respect to life insurance, variable annuity products and variable life insurance products are regulated by the states (as are non-variable products) and the Securities and Exchange Commission (because there is a security component). In general, the SEC regulations require a prospectus and put limits on the fees that can be charged to clients.

Certain kinds of annuities (annuities without life contingencies) may be regulated as insurance policies although they might not technically meet the definition of insurance.

7. *In general, when is pricing more a function of a state's public policy/regulatory philosophy than a function of actuarial activities?*

- a. *Historically, what have been the public policy goals/regulatory philosophies that have frequently driven pricing among states in the past?*

For health coverage, the ability to vary rates and to underwrite applicants are significant variables by state. They vary from allowing full underwriting and rates that vary by age, sex and prior health conditions to optional open enrollment with rates for any class not to exceed a factor times the best rate to continuous open enrollment and community rates.

Theoretically, pricing for life insurance is not regulated by the states, but there may be certain situations where the state's policy may affect price. One way this could happen is through limitations on underwriting classes such as the requirement to use unisex premium rates in Montana. Another way state requirements affect price is through reserve or minimum capital requirements. The higher the reserve or capital requirement in the state, the higher the price must be. While most states have the same requirements, occasional differences do arise between states, particularly for a product that is new in the market. The introduction of Regulation XXX concerning reserves for term insurance increased the price of that product in the entire market. Other constraints in pricing have been requirements to include non-forfeiture provisions (to avoid lapse supported policies) and to annually apportion dividends (to avoid tontines or management squandering money). While there is generally little difference between states on these requirements, without these provisions, prices would generally be lower but the policyholder would be worse off.

For property/casualty insurance there is a considerable degree of price regulation. In addition, some states have taken an activist role in reviewing classification systems and new technologies such as credit scoring and catastrophe modeling. States have also become deeply involved in actions that indirectly affect market pricing through the creation of subsidized residual markets in automobile and homeowners.

8. *What are some of the academic definitions of "insurance" (We are aware of NAIC's White Paper, Gramm-Leach-Bliley, Internal Revenue Code, Terri Vaughan's textbook), and what would you describe as the major or necessary elements?*

The definition of insurance depends on the intent behind defining it, and as such, the Academy has not attempted to develop a single definition for insurance. However, in terms of academic definitions, there are definitions in accounting standards to distinguish insurance from investments (see FAS 97 or IFRS 4) and in the IRS tax code for the purposes of tax collection. There are many other definitions, generally having an aspect of risk in them.

We appreciate the opportunity to discuss these issues with the GAO, and we hope our input will be useful in your work. If you have any questions regarding these comments, please contact Ethan Sonnichsen, the Academy's Policy Analyst for Risk Management and Financial Reporting at (202) 223-8196 or sonnichsen@actuary.org