FINANCIAL CONDITION REPORTING ISSUES IN GENERAL INSURANCE: CHALLENGES FOR ACTUARIES

By:

Thomas E. Power[1]
[thomas.power@bearingpoint.com]

Written for and presented at 7th Global Conference of Actuaries, New Delhi

Subject Code (B) : Subject Group : General Insurance

Abstract
Before the mid-1970s, the function of the actuarial profession in the insurance sector was largely limited to rendering opinions and certifications in life and annuity insurance and in general insurance rate-making. This role began to expand through the requirement for certification of general insurance loss reserves. Then came the appointed actuary concept. Now, actuaries have become involved at all levels of the industry. This paper focuses on some of the challenges to actuaries in financial condition reporting. Too often in the insurance sector, the primacy of the function of accurate, informative and timely financial reporting is given to the regulators and not to insurance company management. This paper maintains the dual perspective of reporting to management and regulators. The author examines issues such as asset valuation, liquidity and duration analyses, foreign exchange risks caused by currency mismatching, and numerous types of reserve classifications – particularly case-basis estimates made by company claim departments, reserves for unexpired risks, IBNR, loss adjustment expenses, catastrophe reserves and insurance-linked securities. The matter of unlimited liability for TPL in India is also discussed.

Introduction

In the past 20 to 30 years, the responsibilities that actuaries have assumed (or have had placed upon them by regulatory action) have increased substantially. Before the mid-1970s, the function of the actuarial profession in the insurance sector was largely limited to rendering opinions and certifications on life and annuity reserves, designing net-level premium life and annuity products, providing rate-making data for general insurance products, and occasionally calculating loss reserves for certain general insurance products

---

[1] Mr. Power is Senior Manager in the Emerging Markets Practice of BearingPoint. He has been actively involved in insurance and pension supervision and management for almost 40 years. He was for 12 years the Chief Insurance Examiner and Chief Actuary for the State of Wyoming in the USA. Later, he was a member of the Faculty of Arts and Sciences at Harvard University. He is the engagement manager for a technical assistance project between IRDA and BearingPoint, funded by the United States Agency for International Development. He has been doing international work for the past 19 years. He has consulted in some 60 countries, including the past four years in India.

(such as workmen's compensation and long-term disability income policies). However, in the mid-1970s, a movement began in regulatory circles to require that reserves for general insurance be certified by a "qualified loss reserve specialist." This most often meant that an actuary had to certify the loss reserves reported in the annual financial statements of a general insurance company.

That initial expansion has now become an explosion and so those days of minimal involvement of actuaries in financial statement preparation and attestation have long since passed – today the actuarial profession is intimately involved with almost every aspect of the major operational and reporting cycles of the insurance sector. For example, many jurisdictions have adopted the concept of the "appointed actuary." In most versions of such regulations, the appointed actuary has a professional obligation (and corresponding authority) to review virtually any transaction or management policy or action of an insurance company and is shouldered with a responsibility to report to regulators and others material irregularities in the affairs of the insurer for whom he serves as appointed actuary.

The purpose of this paper is not to discuss specifically the appointed actuary concept[2] -- the main focus is the degree to which the actuarial profession has become more integrally involved in financial condition reporting in general insurance. This expanded role extends beyond that of the appointed actuary – it includes the actuarial department of every general insurance company and all consulting actuaries and represents a challenge to the profession.

Finally, there are of course too many issues involving the role of actuaries in financial condition reporting to mention in this brief treatment of the issues. My intent is to focus on the items that are "cutting-edge" and which demand the thoughtful consideration of the profession.

Financial Condition Reporting – An Overview

One of the main currents in insurance regulatory practice includes a major shift in regulatory emphasis from compliance-based supervision to a new paradigm of risk-based regulation. The process of risk-based supervision does not ignore the need for assessing compliance by insurance companies with statutory requirements – it merely supplements what is assumed to be sound insurance law and regulations with a focus on the dynamic events and circumstances of the insurance business that can affect solvency and ability to meet contractual obligations. These risks are often not susceptible of statutory or regulatory quantification, guidance or proscription. Concomitant with this shift has come a shift of responsibilities. Regulators now rely more heavily on self-regulatory organizations and "independent professionals" (such as actuaries, accountants and attorneys) for both compliance as well as risk-based supervisory analyses and actions.

[2] . However, the advent of the appointed actuary has contributed to the expanded role of the actuary in the conduct and supervision of the business of insurance and so it is important to keep that in mind.

But paramount in the financial condition reporting process is, of course, the core focus of insurers, supporting professionals, and regulators – the ability of insurers to meet their contractual obligations.

The reasons for increasing reliance (or collaboration) with the supporting professions of the business of insurance are mainly that insurance regulators are not ordinarily in the best position to determine business risk because of their remoteness from actual transactions and events; regulators do not know first-hand what is needed for sufficiently informative disclosures in an insurer's financial statements; and the professionals have ready access to information. What is even more important is that these professions are presumably more closely in contact with senior management and thus in a better position to be aware of management's operational responses to material events. Insurance regulatory authorities are not responsible for insurance company management nor are they involved in the decision making process – theoretically, at least, the "professionals" are better situated and more involved.

In any case, it is too often forgotten that the most crucial purpose of accurate and incisive financial reporting is to inform insurance company management. Since management is ultimately responsible for solvency, statutory compliance and fiduciary stewardship, it is the most important "end-user" of financial statements. Too often in the insurance sector, the primacy of the function of accurate, informative and timely financial reporting is given to the regulators and not to insurance company management. Accordingly, it is important to remember that actuaries – to the extent that they are involved in financial reporting – also need to be concerned with reporting to management. Perhaps they ought to be more even concerned since if an actuary is engaged as a consultant or as an employee, he is in privity with management and is thus bound to a higher legal standard.

Finally, management is ultimately responsible for the integrity of financial statements submitted to regulators and others. Managers have to be able to rely upon the expertise of actuaries and others so that financial statements are fairly presented.

Thus, as the challenges to the actuarial profession which are arising in the area of financial reporting are considered in this paper, it is to be hoped that this dual perspective (reporting to the regulator and to management) will prevail.

ASSET VALUATION

Actuaries understand the importance of having sufficient assets backing liabilities. With the emergence of investment vehicles such as derivatives which often fluctuate in value or where fair market value is difficult to determine, actuaries need to become even more aware of the fundamentals of value and liquidity – particularly in general insurance. The profession must, I believe, be even more prepared than it is today to study and adopt new standards of practice that recognize the purpose for most insurance assets (i.e., to satisfy present and prospective liabilities) and to work with the accounting profession and the

various regulatory agencies to promulgate rules that will allow **all** users of financial statements to understand the basis for asset valuations.

Much as sophisticated observers of the insurance sector understand that a good deal of the liability-side of a general insurer's balance sheet are estimates based upon – we trust – sound actuarial principles, so too must there be a corresponding recognition (and **disclaimer**) that asset values may also be based upon estimates. Reasonably detailed explanations of the methodology used in valuing assets must be available for the actuary if he is to be able to discharge the full scope of his obligations.

LIQUIDITY AND DURATION ANALYSIS

It is becoming more common for insurance regulators to require reporting by general insurers respecting liquidity of assets including preparation of a duration analysis. Admittedly, this issue has not been as much in the forefront in general insurance as it has been in life and annuity insurance, but it is still be an issue – particularly as liquidity relates to short-tail or fast-track coverages and to the extent that insurers have obligations for long-term disability claims[3]. Moreover, even if regulators are not requiring such reporting, the managers of general insurance companies need to have these types of data. Typically, management will have adopted an investment strategy and ideally that strategy will reflect the cash-flow and asset/liability matching requirements of its particular risk profile. Actuaries need to be able to provide management an evaluation of the success of an investment strategy in meeting stated goals and of prudent levels of liquidity.

FOREIGN EXCHANGE RISK

The business of insurance is global and it deals in a multitude of currencies. Through both direct and reinsurance business, a general insurer may face a situation where it has liabilities that are payable in a currency other than its functional currency. The global currencies environment is volatile and actuaries need to be aware that prices or reserves that they establish in a functional currency based on rates of exchange existing at any particular time may change. There are really only two ways to protect the insurer against risk arising from fluctuations in foreign exchange – either hold assets in the particular currency in which the insurer has liabilities or purchase swaps (forward contracts) in order to hedge foreign exchange exposures.

It is inherently unhealthy for insurance companies to be speculating in foreign exchange and that is exactly what any insurer is doing if it has a net open position in foreign exchange that exceeds a rather minor percentage of its capitalization. If a company has substantial liabilities in a currency other than its functional currency and it does not hold assets equal to that exposure or has not concluded swap transactions to hedge that

[3] The importance of duration analysis obtains equally to short-term and long-term policy liabilities. Too often it is forgotten that mismatching can be as harmful to a short-term portfolio of obligations as it can to a longer term portfolio.

exposure, that company is speculating in foreign exchange. With the myriad risks that the insurance sector is exposed to, it makes little sense to invite additional risk when it is not necessary.

The actuarial profession must be mindful, then, of the potential mischief that can be worked by foreign exchange speculation. For example, the decisions that an actuary may make in pricing general insurance policies that will be denominated in foreign exchange can be rendered feeble if investment policies of an insurer do not insulate the transactions from foreign exchange fluctuations.

The actuarial profession must continue to insist that if such risks exist, they must be disclosed in reports both to management and regulators.

LOSS RESERVES IN GENERAL

In general insurance, the issue of determining and reporting reserves for losses is obviously the area in which the actuarial profession is most intimately involved. In this section, a number of important reporting issues will be discussed:

Reserves for reported claims

Historically, the reserve estimates for reported claims – ordinarily produced by an insurer's claim department – were accepted "as is" by the actuaries for the purpose of reporting reserves for losses and loss adjustment expenses.[4] However, when the actuary is certifying the reserves, it is important, at least on "post audit" basis, for there to be some assessment of how accurately the estimated reserves were when compared to actual results. It is probably not practical nor particularly efficient to have actuaries reviewing case-basis claim files – however it is quite important to evaluate the accuracy of the case-basis reserves. This will assist the actuary in future periods and it will assist management by adding strength to the control process. This is a fundamental responsibility of management in its capacity as corporate "risk manager." There is a threat to company solvency if there is a dysfunction in the claims department that is producing inaccurate claim estimates.

Reserves for Unearned Premiums and Unexpired Risks

Traditionally, insurance company management and insurance regulators assumed that unearned premium reserves adequately provided for the unexpired risks on policies that were in-force at any particular reporting date. However, the accounting standards of many jurisdictions require that general insurance company financial statements – particularly those of publicly-traded firms – indicate that provisions be made for any unexpired risk in excess of unearned premium reserves.

---

[4] The entire topic of reserves for loss adjustment expenses will be treated separately.

That being said, the methodology for reasonably calculating unexpired risks is one upon which I believe a good deal more investigation needs to be undertaken. For example, the mere timing of claim occurrences under certain types of coverages could trigger a possible exposure in excess of pro-rata unearned premium reserve calculation. For over a century, it has been recognized that some ocean marine insurance required the maintenance of a reserve for unexpired risk until there was final portage. In mortgage guaranty insurance and in title insurance, the nature of the risk assumed has prudently lead to a provisioning against future losses though premium reserves not linked essentially to the lapse of time. In professional liability insurance (such as physicians and surgeons) there is a need to recognize an extended discovery period through either premium reserving methods or other reserving techniques. Even claims-made policies for these long-tail lines must be examined in this regard, particularly if there is a contractual right for the insured to purchase a "reporting endorsement."

In sum, each line of general insurance business carries with it some unique risk factors that can affect the manner in which provisions against future losses ought to be recognized in the financial statements. I trust that the actuarial profession will once again be in the vanguard on these types of issues in order to insure that policyholders and the public are adequately protected.

Reserves for Claims Incurred But Not Reported

The fundamentals behind the concept of IBNR are universally recognized. What remains a challenge to the actuarial profession is the methodology for estimating the IBNR at any reporting date.

My own view is that there a number of reasonable methods and as long as a method is consistently applied and based upon correctly derived underlying data, the differences between methods will ordinarily be immaterial. The challenge to the actuarial profession is making sure that the data with which it is working are accurate. In other words, insurers should be producing data that will allow actuaries to identify past IBNR results for each line of business and use that experience to project future IBNR. Actuaries must also keep a careful eye cast upon claims that are closed but subsequently reopened. If there is a pattern of such conduct – for whatever reason – that calls into question the integrity of the basic data being furnished by an insurer's claims department.

Reserves for Loss Adjustment Expenses

In my international work, I have noticed that many jurisdictions have not given enough attention to this issue. For some lines of insurance, loss adjustment expenses may be as important a factor as indemnity payments. Even insurers making provision for IBNR on claims reported but not yet paid were not reserving for loss adjustment expenses on claims IBNR.

Loss adjustment expense reserves are of importance to regulators since they need to be recognized in order fairly to present financial condition – but, they are also important to insurance company management and to actuaries who are engaged in premium rate-making.

As a former regulator, the rule of thumb was that the loss adjustment expense factors that were developed for paid claims could be applied 50% for claims reported but still unpaid and 100% for IBNR. This was then, and still is, an effective quick test of the adequacy of such reserves.

Catastrophe Reserves

The issue of adequate reserves for catastrophic claims is one that affects not only financial condition reporting but also is integral to the rate-making process.

In the past, the "rule of thumb" practiced by many insurers was to load pure premium 1% to provide for catastrophes. Unfortunately, most of these same insurers did not accumulate this provision in an ear-marked reserve account and often time the funds, by flowing through to the general funds of the company, were used for other purposes.

The more recent approach is to make provisions for catastrophe losses based up a twenty- or thirty-year rolling average of actual catastrophe claims as a percentage of pure premiums. However, in many jurisdictions where this method is used, there is often not a corresponding reserve account established that accumulates these catastrophic reserves.

Since for many types of insurance for which catastrophic claims are appropriate (such as automobile comprehensive or homeowners) there is a public and political sensitivity to premium rates, it is often difficult for prudent insurance companies to accumulate such reserves. Too often there is a mentality afoot in the political world that focuses exclusively on short-term underwriting results. Moreover, most tax authorities have a visceral hatred of any general insurance company reserves.

If the actuarial profession can assist insurance company management (and enlightened regulators and politicians) in making the case that there is a real need to make provisions for future catastrophic events, such would be a very positive step in financial reporting and in strengthening insurance company solvency.

Unlimited Liability in TPL in India

As students of insurance well know, a risk for which there is no limit regarding the amount of the insurance company's liability is a classically uninsurable risk. However, India has chosen to impose no liability limits with regard to Third Party Liability and so actuaries are faced with a challenge in reserving for TPL in India. Fortunately, or unfortunately, since TPL rates are not set by the market and are subject to tariff, the matter of how to price a product without liability limits is not currently an issue.

Given the inherent nature of an uninsurable risk, actuaries need to meet this challenge using tools that they would utilize in a competitive insurance market where perhaps automobile liability was compulsory for certain minimum limits and claim information and rates for "excess limits" coverages are derived by use of "shock loss" data. All that the profession can do is attempt to use an arbitrary "minimum limits" amount of coverage and then gather data for losses in excess of those notional minimum limits in order to project theoretically infinite losses. What is important is that **some** provision must be made in the financial statements for the possibility of essentially catastrophic payments under TPL.

INSURANCE-LINKED SECURITIES

Without going into the very complex substance of issuing and administering Insurance-Linked Securities (ILS), the main focus in the insurance sector has been the use of ILS as another modality for transferring risk. There has been a significant increase in so-called CAT Bonds as a method of transferring certain types of catastrophic risks.

The actuarial profession thus far has weighed in on the issue respecting the treatment of some of these transaction as highly effective hedges. In the United States, the American Institute of Certified Public Accountants has included in its audit guide two alternative methods for determining if such transactions are "highly effective hedges." The American Academy of Actuaries has taken a differing position and believes that a two-stage test be applied involving Tail Value at Risk and standard deviation measures.

Irrespective of how that particular issue is resolved, I hope that the actuarial profession will become involved beyond the accounting issues and subject the issue of "risk transfer" to strict scrutiny. Unfortunately, we suffer from an embarrassment of riches, so to speak. The most recent paper on ILS issued by the IAIS noted that "investors have not experienced any losses."[5] So, we are working with a "coverage" that has not yet been tested by the need for performance under the contract. While such contracts are theoretically fully funded by the investors, there is no way of predicting what legal challenges may arise when losses inevitably occur.

In the meantime, it is important for actuaries to understand any such contracts that their clients enter into and be sure that the substantial elements of such agreements are adequately disclosed and that they make necessary disclaimers relative to their reliance on such instruments.

CONCLUSION

Admittedly, we have only "identified" the general insurance company financial condition reporting issues that face the actuarial profession. Each of these issues requires forceful involvement of the actuarial profession. There are not any quick answers. However, what can be said most convincingly is that the role of actuaries is likely to be expanding

[5] IAIS Issues Paper on Non-Life Insurance Securitisation, October 2003, page 30.

as both regulators and management demand answers to questions and the highest degree of professionalism in the insurance sector. So, even addressing these challenges will only clear the decks for what is surely to follow.