ACTUARIAL EVIDENCE SEMINAR, SEPTEMBER 8 - 9, 2000

Plenary Session 8 ; Choosing And Disclosing Assumptions

Outline Of Ian Karp's Remarks

Introduction

Definition Of "Under CSOP"
I'll be speaking about certain aspects of the proposals under CSOP, relevant to choosing and disclosing assumptions. When I say "under CSOP", I refer to:

i. The current draft re general standards (issued August, 1999) together with the Actuarial Evidence Committee's comments on that draft.

ii. The current draft re actuarial evidence practice - specific standards (dated June, 1998), together with the Actuarial Evidence Committee's comments on that draft.

The handout for my comments on CSOP this morning contains further detail on the above drafts and comments. Also, Bob Thiessen and I dealt with this topic at the June, 2000 C.I.A. meeting session, "CSOP For Actuarial Evidence". The tape of that session is available for purchase from the C.I.A.

Definition Of "Biased", "Unbiased"
As explained later, it's relevant to examine the exact meaning of "biased" and/or "unbiased". My dictionary defines bias (in part) as follows:
"... inclination, predisposition (towards) ; prejudice; influence."

In practical terms, I think the best test of whether an assumption selected by the actuary is unbiased is as follows:
The assumption is the actuary's best estimate. Also, if faced with a similar case, where the actuary was retained by the other side, the actuary would make exactly the same assumption.

Description Of Proposals Under CSOP Discussed Herein
CSOP proposes the following:

P1. Assumptions selected by the client (i.e. client instructions) cannot be grossly unreasonable.

P2. Subject to P1. above, client instructions can be biased.

P3. Assumptions selected by the actuary cannot contain any bias.

P4. The actuary's report must clearly describe which assumptions have been selected by the actuary, and which assumptions have been selected by the client.

Why I Support P1- P4

Achieves Appropriate Balance

I agree with the following statement made in 1997 by the then Actuarial Evidence Committee chairperson Tom Walker.

"The objectivity definition(s) must be strong enough that the actuary is prevented from changing his or her "opinion" from case to case yet not so restrictive that the actuary cannot legitimately present feasible alternatives as required. In all situations, it is important that the actuary disclose the terms of reference for the assignment."

The reference to objectivity is not in the current CSOP draft, but it was in prior drafts, hence Tom Walker's reference to it three years ago. I think very strongly that the current CSOP draft , and P1 - P4 in particular, meets this goal. I believe that it strikes the right balance, between giving actuaries freedom to compete legitimately, and putting limits to prevent actuaries from competing in ways that are not as appropriate

Consistent With Court's Expectations

Pursuant to P4 above, a useful layout for an actuarial report is to first set out the assumptions selected by the client, and then set out the assumptions determined by the actuary. This is consistent with the views of Canada's Chief Justice, Beverley McLachlin, as set forth in a speech that she wrote for a lawyers' group in March, 1989, and presented to the March, 1989 C.I.A. Whistler meeting. Chief Justice McLachlin stated:

"Care must be taken to ensure the facts - proven and unproven - are distinguished from inferences. In this exercise, the hypothetical question - an almost forgotten adversarial art - [is] sans pareil. An expert report that lumps facts which the judge and jury may or may not accept indiscriminately with inferences based on those facts, as though all are worthy of the same credence, is likely to be tossed out of court on the ground that it is calculated to mislead."

"(W)here the facts and inferences are within the realm of common, properly instructed, understanding, there can be no better guide [than that] laid down in the early cases ...

distinguish between the fact, which must be proved in the ordinary way by admissible evidence, and inferences from those facts, which may sometimes call for learned, expert opinion."

So, if we look at the delineation between client selected and actuary selected assumptions, in Judge McLachlin's terms, facts equal assumptions selected by the client, and inferences, in Judge McLachlin's terms, equal assumptions selected by the actuary, together with the relevant calculations and reporting.

Note that Judge McLachlin refers to the possibility of a user of an actuarial report being misled, and the importance of preventing this. The CIA's Rule 7 states:

"A member shall not perform professional services when the member has reason to believe that they may be used to mislead or to violate or evade the law."

Do These Proposals Differ From Our Current Standards?

I think an important feature of CSOP (the general standards in particular) is that it tries to spell out clearly fundamental principles, which may be implicit in our current standards but not clearly spelled out. Because of this, and because the organization of CSOP is different from that of the current standards, it is very difficult to clearly identify similarities and differences. However, my view is that the above proposals P1 - P4 are consistent with the letter and spirit of the current standards. For example:

i. The current (1988) Actuarial Evidence ("AE") standard states as follows (paragraph 4.01, titled "Best Estimate").
"...the [actuary's] calculations should represent his best estimate of future events affecting the related actuarial value."

ii. The current (1993) Marriage Breakdown ("MB") standard states:
"This standard of practice represents a basis that is not biased in respect of either the plan member or the spouse of the plan member." (p.3)

"The results reported by the actuary should be independent, regardless of whether the actuary has been engaged by the plan member (or the plan member's counsel) or by the spouse of the plan member (or the counsel of the plan member's spouse)." (pp. 3-4)

"The underlying principle in this standard of practice is that the reported present value shall be determined in a manner which is equitable to both the plan member and the plan member's spouse." (p.6)

Criticisms Directed At These Proposals (P1- P4); My Replies

This section is based on concerns raised in the question period at the above - mentioned June, 2000 meeting session.

C1. Re P1 above, our job as actuaries is to value scenarios. Any discussion of which scenarios are more reasonable than others should be in educational notes, not in our standards.

Reply: The discussion of this in CSOP amplifies Rules 1 and 7. Whether it tightens or loosens the potential applicability of Rules 1 and 7 in a particular situation where the actuary acts on a clearly unreasonable client instruction is arguable.

I think Rules 1 and 7 (uphold profession's dignity, don't mislead), as well as the Court's expectations, do require that we exercise, to some degree, a gatekeeper function to keep out wildly unreasonable scenarios. The Chief Justice Of the B.C. Court Of Appeal, Allan MacEachern, stated in a 1985 speech to the Vancouver Actuaries Club:

"I think it is essential, if the high regard we all have for actuaries is not to be diluted, for expert witnesses to be models of objectivity and reasonableness. I suspect many of you have been asked to express opinions based upon specious assumptions. ...It is all very well to say that you are only applying your skills objectively to a set of pre-selected assumptions, and you can include all the appropriate disclaimers in your report. But your reputation is at stake whenever you give such an opinion...I suggest that you give careful thought to whether you should associate yourself with such a process. Professional independence is an invaluable asset and you should exercise it reasonably and responsibly in defence of your reputation. Taking a hike out of an uncomfortable situation before you are committed is very good for the soul."

C2. Re P2, relying on client instructions can be used as a means for the actuary to duck the responsibility he / she ought to accept for his / her report, by foisting this responsibility onto the lawyer. Consider as an example an injury case involving the determination of the plaintiff's annual projected earnings, had the accident not occurred. Suppose both actuaries allow the lawyer to select the assumption ; $20,000 according to defence counsel, and $100,000 according to plaintiff's counsel. The two actuaries will appear foolish. Instead, each actuary should have selected his / her own assumption.

Reply:

According to CSOP, an assumption re projected annual earnings is neither "obviously actuarial" nor "obviously legal". It is in the "grey zone" where it is perfectly acceptable

either for the actuary to select the assumption, or to allow the client to do so. There are strong views favouring each approach, as described above, and CSOP rightly accommodates both. I practice in B.C. In B.C., the Courts have consciously limited the role of experts. In particular, the B.C. Courts have often applied the "ultimate issue rule"; an expert should not be expressing an opinion directly on the point which the Court is called upon to decide. I have never practiced in Ontario, but based on my conversations with Ontario actuaries, the Ontario courts are apparently more accepting of actuaries offering opinions in such areas. Thus an actuary practicing in Ontario would be more likely to hold the view in C2 than an actuary practicing in B.C.

Thus, keeping in mind that CSOP deals with minimum standards, not "best practices", there is nothing wrong with actuaries relying on client instructions, even if a very wide range of answers results, unless (per P1 above) one or both of the instructions is clearly unreasonable. However, from a "best practices" point of view, and keeping in mind Judge MacEachern's comments, I think actuaries should strongly encourage clients giving extreme instructions to moderate them. If actuaries do so, a narrower range of answers will result.

However, in some cases, a wide range of answers is quite justifiable. For example (the example is inspired by an actual case I recently worked on), suppose a seriously injured plaintiff's historical earnings are about 100% of the average wage, from operating a relatively unsuccessful business, average earnings for people with his qualifications are 200% of the average wage, and when injured he was employed on a temporary contract in a remote location earning 300% of the average wage. From a B.C. perspective, I would have no criticism of an actuary who accepted plaintiff's counsel's instruction to assume 300% of the average wage, nor would I criticize an actuary who accepted defence counsel's instruction to assume 100% of the average wage. The judge's decision on this is going to reflect numerous details regarding the case, and could come in anywhere between the two extremes, depending upon those details and the judge's evaluation of them.

C3. (This criticism is made together with C2 above). Re P3, requiring zero bias is artificial and unrealistic. To continue the "$20,000/$100,000" example set forth in discussing C2. above, if the actuary's finding is that annual projected earnings are in the range of $40,000 - $50,000, there is nothing wrong with the actuary reporting a "final answer" of $40,000 if retained by the defence, or $50,000 if retained by the plaintiff (rather than the $45,000 "midpoint"). The resulting degree of bias is very small compared to the (de facto) bias

when each side's actuary "cops out", and lets the client choose the assumption.

Reply:
Even accepting that the final outcome results in a relatively fair result, this would be contrary to Tom Walker's 1997 comment that the actuary needs to be prevented from changing his/her opinion from case to case. I believe very strongly that CSOP cannot permit the concept of "limited bias" or "only a slight tilt", or "so long as it's within the range". (The latter philosophy is prevalent in the pension area). This appears to open the door to bias only very slightly, but then all sorts of bias could stream through that door. For example, it would justify the following practices:

i. B.C. Life Tables when retained by plaintiff, Canadian Life Tables when retained by defendant. (Both fall within reasonable range of mortality tables).

ii. Assumed annual price inflation (affecting amount of income tax gross - up), 3% when retained by plaintiff, 2% when retained by defendant. (Both fall within reasonable range of assumptions).

If CSOP permitted such practices, I think it could have very adverse implications for the actuarial profession's continued participation in actuarial evidence work.

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