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FINANCIAL REPORTING UPDATE

Moderator: JAN L. POLLNOW
Panelists: GARY CORBETT
J. PETER DURAN
STUART F. WASON
Recorder: MICHAEL B. COLBURN

This session will be devoted to providing brief updates on the status and future impacts of new and emerging issues in financial reporting. The Canadian update will include the potential implications for U.S. reporting.

Expected topics, subject to late breaking changes, are:

U.S. GAAP – FASB, AICPA, ASB

- Fair-value accounting
- Reinsurance
- Additional GAAP disclosure
- Mutual company developments
- Actuarial Standards Board (ASB) pronouncements

U.S. Statutory

- Valuation actuary requirements
- State adoption status and deviations from model
- Actuarial liability (i.e., California versus elsewhere)
- Risk-based capital (RBC)
- Asset Valuation Reserve (AVR)/Interest Maintenance Reserve (IMR)
- Annuity valuation
- Valuation of nonlevel premiums and/or benefits

Canadian

- Changing responsibility of the appointed actuary
- Policy Premium Method (PPM) Valuation
 - Sensitivity of assumptions
 - Reserving for participating policies
- Minimum Continuing Capital and Surplus Requirements (MCCSR)
 - Status
 - Regulatory reaction

MR. JAN L. POLLNOW: I'm vice president and actuary in the corporate actuarial department at the Hartford, and in the last couple of years, I've been on the American Council of Life Insurance (ACLI) Actuarial Committee and have been Treasurer of the Financial Reporting Section of the Society.

The objective of this session is to raise your awareness level on a number of different topics.

We have three excellent panelists. Peter Duran is a partner in the New York office of Ernst and Young. His emphasis is on financial issues. Peter currently is chairperson of the Society of Actuaries Committee on Valuation and Related Areas, also known

as COVARA. Peter will be talking about U.S. GAAP and his emphasis is going to be on fair-value accounting, GAAP for mutuals, and reinsurance accounting.

Second, Gary Corbett is senior vice president and chief actuary of the Equitable. Gary is involved in all the actuarial areas at the Equitable, and most recently was involved in the company's conversion from a mutual to a stock company. Gary is a Past President of the Society and is on the Actuarial Standards Board. He's also on the Industry Advisory Committee on Risk-Based Capital, and one of his topics will be risk-based capital. He'll also be covering appointed actuary opinions and the asset valuation reserve/interest maintenance reserve. I'll be following up after Gary with a couple of remarks on regulatory issues coming out of the Life Health Actuarial Task Force of the National Electronic Information Corporation (NEIC).

Stuart Wason, who recently joined William Mercer's consulting unit in Toronto after spending 19 years with Crown Life, is our last speaker. Stuart currently is chairperson of the Canadian Institute Committee on Life Insurance Financial Reporting. Stuart will comment on things that are happening in Canada in relation to what's going on in the United States.

MR. J. PETER DURAN: I'm going to talk about what's been happening over the last year with respect to GAAP financial reporting. I think that the issue of probably the greatest general interest is the Financial Accounting Standards Board's (FASB) project on financial instruments, which began in 1986 and has three phases.

The first phase, the disclosure phase of the project, is essentially complete at this point. The disclosure phase of the project addressed the issue of what kinds of disclosures about financial instruments should accompany GAAP financial statements. Two pronouncements have been issued. Financial Accounting Standard (*FAS 105*) has to do with concentrations of credit risk. *FAS 107* has to do with disclosures of fair values.

The second phase of the project is the one that the FASB is very active in at the moment. It has to do with recognition and measurement of financial instruments and financial statements, the question being how to value financial instruments both at the time they're acquired and subsequently. There are some very controversial issues here centering around fair-value accounting.

The third phase of the project is currently dormant. It has to do with distinguishing between liabilities and equity in financial statements.

The definition of a financial instrument I've reproduced here is as follows: A financial instrument is cash, evidence of an ownership interest in any entity, or a contract that:

1. imposes on one entity a contractual obligation to deliver cash or another financial instrument to a second entity, or to exchange other financial instruments on potentially unfavorable terms with the second entity, and
2. conveys to that second entity a contractual right to receive cash or another financial instrument from the first entity or to exchange other financial instruments on potentially favorable terms with the first entity.

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It's a very broad definition and encompasses a lot more than, for instance, stocks and bonds. It encompasses insurance contracts. "Insurance contract" clearly meets the definition of financial instruments, as it imposes on one entity, the insurance company, the obligation to deliver cash to another entity, the insured. These pronouncements, and all these deliberations, therefore affect both the left-hand and the right-hand side of the balance sheet.

I want to say a few things about *FAS 107*, which has to do with disclosures of fair values of financial instruments and financial statements. It was issued in December 1991 and is effective for year-end 1992. It requires that companies disclose in their GAAP financial statements the fair value of all financial instruments (with certain exceptions). This affects insurance companies tremendously. The big exception is for insurance contracts other than investment contracts. If you think in terms of *FAS 97* versus *FAS 60*, *FAS 97* basically addresses only contracts such as universal life, limited pay, and investment contracts. The mandatory disclosures really center on investment contracts only. Therefore, insurance contracts (for example, traditional whole-life contracts) are excluded from the scope of *FAS 107* in terms of mandatory disclosures. There are optional disclosures. Companies may disclose fair values of financial instruments other than the ones they're required to disclose.

How is fair value measured? It's basically measured on a sort of hierarchy. The first thing to look to is quoted market prices on a per-unit basis, which is good if you want to measure the fair value of, say publicly traded common stock. If that doesn't exist, then you look to sales of comparable financial instruments. If there are none of those, then you get into present value techniques. The standard doesn't give a lot of help in terms of showing us how to do the calculations, so there's going to be a lot of variation in practice. Investment contracts are included, as are policy loans. There is, however, a practicability exception. If it is not practicable to do this, then it may not be required. Basically, practicable means "that the estimate can be made without incurring excessive costs." That's probably an item for each company to discuss with its auditors.

I'll move now to the recognition and measurement phase of the project. In 1991, a very comprehensive discussion memorandum was issued by the FASB on financial instruments that sets forth the issues involved with recognition and measurement of financial instruments in financial statements and takes a building-block approach. In other words, they look at perhaps five elementary categories of financial instruments and then build or break down other financial instruments in terms of those five building blocks. One building block would be unconditional receivables and payables. Financial option contracts would be another one. Financial futures would be a third. Financial guarantees would be a fourth, and conditional receivables and payables would be another one.

FASB also issues a research report that specifically looks at issues relating to hedging. That should give people an idea of what the FASB is thinking about.

Regarding matters that may be of more immediate interest or concern, there have been a couple of exposure drafts issued recently. The first one has to do with loan impairments and the other has to do with marketable debt and equity securities. The loan impairments exposure draft was issued in June 1992. As written, it would be

effective beginning with the 1994 GAAP financial statement if your fiscal year equals your calendar year. It applies to loans, other than debt securities, which are held as assets. For example, mortgage loans would be covered by this exposure draft, and the basic question that it deals with is how to measure impairments of such loans. Two kinds of impairments are looked at if it's probable that amounts will not be collected according to the terms of the loan. One type of impairment occurs when the loan has not yet been restructured, but the company believes that the payments will not be made according to the original terms of the loan. To measure the impairment, the present value of the expected cash flows on the loan is calculated at the original effective rate of the loan. Any change in interest rates from the time the loan was originally made to the time it becomes impaired is not reflected in the measurement.

Those loan impairments are distinguished from what are called trouble debt restructurings. A troubled debt restructuring occurs when there is a formal change in the terms of the loan. In that case the impairment is measured based on the present value of cash flow at today's market rate. Therefore, a loan would likely become impaired before there would be a restructuring. One thing that is important to note is that the exposure draft as it's currently written requires remeasurement of all impairment restructuring that has happened in the past. This could be a monumental task for some companies here, because it just doesn't apply to loans that became impaired beginning, for instance, in 1994. Because any loans that became impaired or were restructured that are still on the books of the company also need to have the impairment remeasured, there's a cumulative catch-up in the financial statement.

The second area likely to be of concern to many companies is the exposure draft on marketable debt and equity securities, which was just issued in September 1992 (with an expected effective date of December 31, 1994).

The genesis of this exposure draft goes back to the discussions that the FASB and the SEC were having about fair-value reporting. At some point early in 1992, there was a critical note circulating with FASB suggesting it not look at assets; rather, it should look at liabilities when considering fair-value reporting. They instead came out with this exposure draft, which is aimed at eliminating certain "abuses" (primarily gains trading, i.e., the taking of realized capital gains on a selective basis to enhance income/reported income).

The exposure draft doesn't really appear to solve this problem, however.

In the exposure draft, debt securities and equity securities are classified into three buckets. Depending on which bucket the security falls into, the accounting and financial reporting differs.

The first bucket applies to debt securities only and is the category called "held to maturity." In order to be classified in the category of "held to maturity," the positive intent and ability to hold the security to maturity is required. For securities that fall into the bucket, the accounting is the standard amortized cost basis of accounting. The test is, however, very severe. The exposure draft talks about things that would disqualify a security from being classified as held to maturity. For instance, if the security might be sold due to changes in market interest rates, to manage prepayment

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risk, to manage asset/liability risk, or as part of a tax-planning strategy, then it's not held to maturity. This will disqualify a lot of securities from falling into that bucket.

The second bucket is "held for trading." These are securities (debt securities and equity securities) that are held for current resale. These would be held or recorded at fair value, and the unrealized gains and losses would be reported in income, not equity. There are presumably not a lot of assets that would fall into this category.

The third category is everything else and is entitled "available for sale." These assets also are carried at fair value and the unrealized gains and losses are recorded through equity. Therefore, if you have a public bond portfolio, and you sell some of those bonds to manage asset/liability risk, they would presumably fall into the "available-for-sale category." As a result, they would be recorded at fair value, going up and down as interest rates do. That could be troubling to a number of companies because nothing is happening at all on the liability side of the balance sheet. It also may be worth questioning whether the FASB, in fact, accomplished its objective of avoiding gains trading. They may not have because what may happen is that a lot of bonds will be moved over to the available-for-sale category, where changes in unrealized gains will not be reported in income. These changes will be reported in equity, so equity will bounce all around, while income will be more stable. When gains are realized, however, they'll flow through income, which may result in the exact same potential for gains trading as before. If so, they didn't solve that problem.

One other point that is important is that if there is an "other-than-temporary" decline in the value of a security then that is reported through income. What is an "other-than-temporary" decline? It is not necessarily a permanent decline. It's a more stringent definition than that. The SEC lately has been using a period of six months as indicative of an other-than-temporary decline. In other words, if a bond is impaired because of credit rating and the market value of the bond is under water for a period of time, say, more than six months, then the SEC has been taking the position that this is an other-than-temporary decline. One potentially troubling thing is that there is no distinction at all in the exposure draft between other-than-temporary declines caused by credit problems and other-than-temporary declines caused by interest rates. In other words, the exposure draft seems to lead to the conclusion that if interest rates go up for some extended period of time (and, therefore, the bond portfolio goes "under water") then it's an other-than-temporary decline – a possibly disturbing conclusion.

We have the potential for wide swings on the left-hand side of the balance sheet unaccompanied by any swings on the right-hand side of the balance sheet. So, with the FASB off the idea (at least temporarily) of complete fair-value accounting and onto these more limited scope projects on loan impairments and debt securities, it's not at all clear that what appears to be coming out of this is better in any sense of the word than what fair-value accounting itself would have been.

APPLICABILITY OF GAAP TO MUTUALS

As I'm sure many of you know, many auditor's opinions on statutory statements of mutual companies have said something to the extent that those statements are prepared in conformity with statutory principles which are for mutual companies generally accepted principles. This has been industry practice for many years, but

something happened in June 1992 where the FASB suddenly moved on this with lightning speed. There was, in July, an informal meeting at the FASB with mutual companies and others to talk about the issue. There's now an exposure draft that came out in August, (less than a month between the informal meeting and the publication of exposure draft) the comment deadline ends November 16, 1992, and the proposed effective date will be December 31, 1993. What it says is basically that if a financial statement is not prepared in accordance with all the applicable GAAP pronouncements, then the auditors cannot say that it is in conformity with GAAP. To the FASB this is apparently a very cut-and-dried type of issue, although the mutual companies are arguing with them about it.

There are a few *FAS 12*, *60* and *97* statements, which do exempt mutual life insurance companies. *FAS 12* has to do with asset valuation, but it's going to be superseded by the exposure draft on loan impairments. For practical purposes, only *FAS 60* and *97* exempt mutual life insurance companies. So, it's impossible (unless statutory principles change radically), for a statutory statement to be prepared in accordance with all the applicable GAAP pronouncements. The asset valuation requirements for STAT and GAAP are different. If the exposure draft on debt securities and the exposure draft on loan impairments actually get passed the way they are, it will become even more different. *FAS 106* is a GAAP pronouncement, but my understanding is that the National Association of Insurance Commissioners (NAIC) is moving towards something other than *FAS 106* for statutory reporting. *FAS 109*, deferred taxes, is required for GAAP and for more purposes not allowed for statutory.

Another one not yet mentioned is the standard concerned with consolidation of majority-owned subsidiaries. Statutory statements do not consolidate majority-owned subsidiaries, they carry them on an equity method. GAAP requires that all majority-owned subsidiaries be consolidated. Therefore, there is no way that a statutory statement will possibly conform to GAAP. We'll just have to see what happens on that one.

GAAP DISCLOSURES

There is a new Standard of Practice (SOP) from the AICPA on GAAP disclosures. It addresses the issues such as nature of operations, volatility of property and casualty loss reserves, differences between statutory and GAAP, and asset/liability matching exposures. One important thing about GAAP disclosures now is that they affect everybody because the NAIC has issued an auditing interpretation that was actually effective in 1991 that requires the same kinds of disclosures in audited statutory financial statements as there are in audited GAAP financial statements. Mutuals, therefore, don't escape the disclosure requirements.

REINSURANCE

The reinsurance exposure draft, which would be effective for December 31, 1993, was designed with property and casualty companies in mind. Most observers would comment that it does not adequately address life insurance. It's not clear what it says about how to account for reinsurance with respect to life insurance contracts, but it does seem clear that one of the intents is to disallow immediate recognition of gain or loss due to a reinsurance transaction (even a reinsurance transaction that

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essentially reinsures all the risk out). For example, on a transaction of 99% coinsurance, you would not be allowed to recognize a gain.

MR. GARY CORBETT: I'm going to discuss three areas where actions by the NAIC will affect the statutory reporting of life insurance companies. The first is a requirement for the appointed actuary opinion on reserves. The second is risk-based capital, and the third is the IMR/AVR. Jan will then complete our update on statutory accounting with some comments on the valuation of annuities and on nonlevel premiums and benefits.

Let me start with the appointed actuary opinion. In 1975, the NAIC began requiring that a statement of actuarial opinion as to reserves and related actuarial items be included in the annual statement filed by life and health insurance companies. The form and content of this actuarial opinion, as specified by the instructions to the annual statement, dealt specifically with reserves and did not explicitly address the adequacy of the assets supporting these reserves to meet the obligations of the company. Although not explicitly required to do so by the opinion or by then existing professional standards, some actuaries did begin to analyze the adequacy of assets in forming their opinions. In addition, when New York adopted the 1980 amendments to the Standard Valuation Law, it, with Regulation 126, established an optional valuation basis for annuities which permitted lower reserves, provided that an asset adequacy analysis supported the actuarial opinion with respect to such reserves. Now such asset adequacy testing is really required for essentially all annuities and single premiums in New York.

In December 1990, the NAIC amended the Standard Valuation Law and, in June 1991, the NAIC adopted the supporting Model Regulation. The most significant changes made by the NAIC were that companies are now required to name an appointed actuary and, except for exempted companies, statements of actuarial opinion as to reserve adequacy are required to be based on an asset adequacy analysis described in a supporting memorandum. The asset adequacy analysis required by the regulation must conform to the standards of practice promulgated from time to time by the Actuarial Standards Board. Even those companies exempted from asset adequacy tests still require the opinion of the appointed actuary that the reserves are calculated in accord with the Standard Valuation Law and supporting regulations.

To date, 15 states have amended their valuation laws to essentially conform to the model law. In 10 of these states, the new requirements become effective with the December 31, 1992 annual statements; in the other five states they're effective from December 31, 1993. However, in the first 10 states, there are many large states, including California, so for most companies they will be exposed to this requirement for this year.

Since the amended Model Law states that the actuarial opinions required by the law must conform to standards of practice promulgated by the Actuarial Standards Board, the ASB's Life Operating Committee undertook to develop these necessary standards early this year. Early in 1992 the ASB exposed a draft standard called "Statutory Statements of Opinion by Appointed Actuaries for Life or Health Insurers." This draft contained a requirement that an appointed actuary for a company exempt from

Section 8 (what we call Section 7 companies) and, therefore, exempt from the requirement for asset adequacy test, still has to satisfy himself as to the adequacy of reserves. The actuary did not necessarily have to perform the asset adequacy test required of nonexempt companies, but gross premium reserve tests might be necessary. Also, there was no waiver of the Actuarial Standard of Practice number 14 on when to do cash-flow testing.

The ASB believed they had no choice but to require this statement of reserve adequacy, even from these exempted companies, since there was a requirement in the model regulation (as it existed at that time) that the appointed actuary, even for these exempted companies, state in his or her opinion that reserves "are computed in accordance with presently accepted actuarial standards consistently applied and are fairly stated in accordance with sound actuarial principles." The board did not believe an actuary could make such a statement unless he or she were satisfied that the reserves were, indeed, adequate. Following the exposure of this standard, a number of regulators told us that this requirement of the ASB violated an agreement that had been reached with the industry and with certain numbers of the profession when the revised Standard Valuation Law and Model Regulation were developed. This compromise was that exempted companies would not have to test reserves for adequacy, but would simply have to follow the statutory rules. A few regulators did support what the ASB had done, but the final resolution was to drop the requirement in the standard that will be exposed next month; namely, the section 7b opinion refer to sound actuarial principles and, broadly, to presently accepted actuarial standards. I'm not sure at this stage whether this language is simply going to be deleted from the model regulation or replaced with something like (for the Section 7 companies) "reserves are computed in accordance with those presently accepted actuarial standards which specifically relate to the opinion required under this Section," which would say that all other actuarial standards would not apply if they weren't specific to this section.

The ASB has decided to break the proposed standard into two pieces: an Actuarial Standard of Practice for Section 8 companies and an Actuarial Compliance Guideline for Section 7 companies. I should say that Actuarial Compliance Guidelines are just as binding on actuaries as are Actuarial Standards of Practice. The Standard of Practice for the nonexempt companies, which will be exposed in November, is much the same as in the previous draft, except for the deletion of references to the Section 7 opinions. The Actuarial Compliance Guideline will be exposed early in 1993. Generally speaking, this guideline will require that reserves be calculated in accordance with law and regulations, but it will make no reference to the adequacy or sufficiency of reserves or the assets backing those reserves.

Let me now talk briefly about the potential liability of the appointed actuary in rendering such opinions. The revised Standard Valuation Law says, "Except in cases of fraud or willful misconduct, the qualified actuary shall not be liable for damages to any person (other than the insurance company and the commissioner) for any act, error, omission, decision, or conduct with respect to the actuary's opinion." This language, as far as I know, has survived intact in 12 of the 15 states that I mentioned have passed this law, but in three states (Florida, Vermont and California) this provision has been deleted. If the law is silent as to the liability of the appointed actuary, it would simply go by the common law in those three states. This is an

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improvement in California, where the law as originally passed would put the actuary's liability to a much more stringent test.

I strongly feel, and am supported in this by the ASB generally, that the appointed actuary's opinion should clearly state to whom he or she is rendering the opinion and what it does and does not say about the adequacy of reserves. Therefore, I've recommended to the NAIC Life and Health Actuarial Task Force that, at the beginning of both Section 7 and Section 8 opinions, there be language inserted to the effect that the opinion is for the use of company management and insurance regulators, and is not intended for the use of, and should not be relied upon by others (for example, policyholders, shareholders, and the general public). The purpose of this language would be to support the provision in the law describing to whom the actuary is liable in the absence of fraud or willful misconduct.

Also, I've recommended that the phrase in the Opinion "adequate provision" regarding reserves be defined as meaning that the assets supporting the reserves are adequate to cover obligations under "moderately adverse, but not all conditions." I think that it is very important that we get in somehow that reserves are not intended to cover 100% of all possible situations, the concern being that the test will be applied in hindsight when a company has gone insolvent. The exposure draft of the standard will require that reserves be "adequate to cover obligations under moderately adverse conditions" (the wording that the board agreed upon last month).

A number of board members are concerned that appointed actuaries will have considerable difficulty in determining just what "moderately adverse conditions" means, but none of us are comfortable with replacing this phrase with any type of confidence level. The only level that we think can really be defined is best estimate, or 50%, and that's too low a level for reserves. However, there is little agreement, even among regulators, on what confidence level should be provided for by reserves (as opposed to the surplus of the company) and a concern that, even if such a level were determined, our current state of knowledge does not enable us to calculate reserves for all policies to obtain that desired result. The important thing here is that it's not just the reserves or the assets backing the reserves that are available to the companies to meet their liabilities. Surplus is a very important part of this, and that's an obvious segue to the next subject: risk-based capital.

The current NAIC initiative on risk-based capital commenced on Halloween Day in 1990. On that date, in Kansas City, Terry Lennon of the New York Insurance Department called together a group of regulators and company representatives to discuss risk-based capital for life insurance companies. Following that meeting, the NAIC charged two working groups (one life and one property and casualty) to develop risk-based capital formulas to be used as part of the insurance regulatory structure. The actual working groups were composed of regulators, but the actual development work was assigned to industry advisory committees.

The Life Advisory Committee, which was chaired by Steven Steinig of New York Life, initially consisted of 50 or so members assigned to a number of subcommittees. Today the Advisory Committee is much smaller -- the 12 members who were the chairs of the old subcommittees.

The Life Advisory Committee produced a comprehensive report in November 1991, that was presented at a number of meetings. All of the key aspects of the current formula were in that report. This year, 1992, has been devoted to (1) refining the formulas (there are changes, but I would not say they are significant), (2) reviewing the over 150 comment letters we received and incorporating some of the suggestions into the formulas, (3) testing the application of the formulas to 1990 and 1991 year-end statements, (4) refining the actions that should take place by regulators at varying risk-based capital ratio levels, and (5) drafting a model law that will implement this.

This work culminated in a final report we submitted to the Life Working Group in September. This report, along with supporting documents, was adopted for exposure by the working group and, subsequently, by the NAIC (FX4) Task Force. The exposure period is going to end with a November 9 hearing in Boston. If the proposal is adopted by the NAIC in December at their annual meeting in Atlanta, it will be effective in each state at the end of the year in which that state enacts the legislation. However, if a state enacts the legislation in 1993, actions based on 1993 year-end statements will be transitional, with the law taking full effect with the 1994 statements. I'll describe those transitional arrangements in a minute.

Risk-based capital formula provides for the traditional C-1, C-2 and C-3 risks. The only C-4 risk provided for is guaranteed fund assessments. C-1 and C-3 are assumed to be perfectly correlated, and C-2 is uncorrelated with either C-1 or C-3. The C-4 risk is then simply added to the combined C-1, C-2 and C-3 risk.

The draft law provides for four levels of action by regulators, depending on a company's risk-based capital ratio. If it is between 75% and 100%, the company must submit a plan to get above 100%; if it's from 50% to 75% the regulators can insist on specific actions to restore the company to financial health; from 35% to 50% the regulator can take the company over; below 35% the regulator must take the company over.

During the transition year, all actions are one level less severe than they would be ultimately. In other words, there's no action taken between 75% and 100%, you have to submit a plan if it's between 50% and 75%, there's corrective action between 35% and 50%, and then an optional takeover below 35%. In the first year, there would be no mandatory takeover of the companies even if they were below the 35%. If a state passes this law in 1994, however, it's in full effect immediately, so it's only to 1993 year-end statements actions taken in early 1994 that this transition applies.

The draft law contains provisions to protect the confidentiality of all risk-based capital reports and plans (except for the very limited information that will be in the annual statement) and to prevent the advertising of any company's risk-based capital ratio by any person engaged in the insurance business.

There are a number of issues concerning the new risk-based capital measures. First, is the use of the formula to rank healthy companies. I will emphasize, and Terry Lennon emphasized at every possibility, that his formula is designed only to identify weakly capitalized companies; it does not work for healthy companies. It was never

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tested to work for healthy companies. It was designed to be used, and we believe can only properly be used, to identify weakly capitalized companies.

Another issue is going to be consistency with property and casualty where the developments are at least six months behind life.

A third issue is a long-term issue. Once risk-based capital is established as a regulatory tool, will there be a move to reduce reserve requirements so that reserves become closer to best estimates with surplus providing for adverse experience? For example, should the AVR really be a part of surplus rather than a reserve? I would support this. I think we would become much more consistent with other financial institutions if our reserves were much closer to best estimate. Our true surplus position would be better disclosed and the industry would look relatively healthier. However, before regulators are willing to move in this direction they must have confidence that risk-based capital has teeth and will be used.

Let me just conclude with a few remarks on the interest maintenance reserve (IMR) and asset valuation reserve (AVR). I've not been as close to this personally in recent months as I have to the other two issues I've discussed, so my remarks will be more brief and I'll warn you that I'm less knowledgeable on this subject.

You probably all know that the old Mandatory Securities Valuation Reserve (MSVR) disappears as of the end of the year, to be replaced by the IMR and AVR. The IMR is designed to capture, for all types of fixed-income investments, realized capital gains and losses which result from changes in the overall level of interest rates, and to amortize these capital gains or losses into income over the remaining life of the sold investment. The intent is to leave the company in essentially the same position as it would have been if they had not sold the security.

The Industry Advisory Committee has proposed that the IMR not be subject to any maximum or minimum, but that any negative values would require an actuarial opinion stating that the policy and claim reserves reduced by the negative IMR do make adequate provision for the liabilities. However, the NAIC has not yet agreed that the IMR can be negative and no negative IMR will be permitted at the end of 1992 (or perhaps ever). The AVR is analogous to the old MSVR and is designed to capture all other capital gains and losses and to build up a reserve against which such losses can be charged. One major difference from the old MSVR is that the AVR covers real estate, both equities and mortgages. There will be two major components to the AVR: a default component covering bonds, preferred stocks, and mortgages, and an equity component covering common stock and equity real estate and other investment assets. In general, all credit-related recognized gains and losses (whether realized or not) are captured in the appropriate subcomponent of the AVR. An annual contribution is made to each subcomponent, and voluntary contributions and limited transfers between subcomponents are permitted.

The existing MSVR balance can be transferred to the AVR component-by-component (common stock and bond components exist in the old MSVR) or allocated pro rata to the maximum of the four subcomponents of the new AVR (common stock, bonds, mortgages and equity real estate). The AVR maximums for 1992 are as follows: for bonds and preferred stock they are the same as in 1991 in the MSVR. Mortgages

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are 3.5% of statement value multiplied by an experience factor unique to the company which can cause the actual factor to range from 1.75% to as high as 10.5%. Common stock are basically 20% for publicly traded stocks (with an adjustment to reflect the relative volatility of the portfolio). Real estate is 7.5% of statement value. Schedule BA assets are included in the real estate component, but with a maximum that reflects the true nature of the assets.

The annual contribution for 1992 is 10% of the excess of the maximum for a subcomponent over the accumulated balance in that subcomponent. Higher percentages will be proposed for subsequent years.

MR. POLLNOW: I want to bring you up-to-date on a few of the issues that are before the Life Health Actuarial Task Force. All of these are in various stages of development and exposure, so I'm not going to dwell on anything that's completed. For those of you that might not be familiar with it, the NAIC does have a subscription service with an actuarial piece to it; you can get on that mailing list if you're interested in keeping up on actuarial subjects.

I also would like to thank Doug Doll at Tillinghast and Esther Milnes with Prudential for getting me some of the information that I'm going to report; they did attend the last Life Health Actuarial Task Force meeting.

One of the things that's going on is something that you may have heard referred to as Guideline XXX. It was later changed to the NAIC Model Regulation for Valuing Life Insurance Policies. This particular guideline was aimed at nonlevel premium and nonlevel benefit policies, such as term insurance and graded premium whole life. There were some that felt that the reserves being held on these types of contracts were often too low. This proposal now also includes 15-year select mortality factors that can be applied to valuation. Guideline XXX did not apply to universal life contracts, because they were specifically excluded. There is, however, a Guideline EEE that says that the same type of approach should be applied to universal life. The NAIC exposed this and got a lot of comments back. As a result they're going to leave this open until a December meeting, at which time it will be discussed further.

I'll go on to Guideline GGG. This guideline addresses two-tiered annuities. Again there were a lot of objections from the industry on this particular one. The regulators appear to feel that there is a problem and as a result they have decided to form an Industry Advisory Committee which is going to report back to them in December. I do not know who the chairperson of that committee is, but I believe Tony Spano is a committee member. If you're interested in that committee, you might contact him. There's also an advisory committee addressing a new valuation basis; that particular advisory committee is chaired by Denny Stanley of Newman and Robertson. I understand that they're going to have another meeting at the O'Hare Hilton on November 5. A couple of items they're looking at are accumulation annuities separate from payout annuities. They may suggest something such as rolling valuation interest rate for payout annuities, with interest rates perhaps changing as frequently as monthly. I guess there's some concern that we set the rates once a year and there can be a wide variation in actual interest rates during the year restricting to only one valuation rate.

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Another topic is annuity nonforfeiture. Again, there's an industry group chaired by Howard Kayton that is in the process of reviewing comments and recommendations from others. Things they're looking at include lowering the minimum interest rate from 3% to 2% or a five-year treasury rate. They also are considering having the same loads for flexible pay annuities as for single pay. I think there was a lot of what might be perceived as abuse there with companies selling essentially what amounted to single premium annuities but using the loads for flex annuities.

Finally, I'd like to mention the standard nonforfeiture law. There's going to be yet another draft presented at the December meeting and they still appear to be a long way from adoption.

MR. STUART F. WASON: I'm going to talk about three broad areas affecting Canadian financial reporting. One is the changing responsibility of the appointed actuary. The second one is changes occurring in the area of the valuation method itself, the policy premium method, which is a gross premium method. Finally, I'll look at what's happening in the area of solvency standards. I think there are parallels to some of these debates in the United States which you heard about already. You may find these developments interesting.

Starting with the changing responsibility of the appointed actuary, the proclamation this year of the new Insurance Companies Act in Canada requires insurers to appoint an actuary of the company and to notify the Superintendent of Financial Institutions (the federal regulatory body) of the appointment. There are also notification requirements on the termination of such an appointed actuary. The statutory duties of the appointed actuary are to express an opinion on the results of an annual valuation of policy liabilities and any other matter directed by the Superintendent of Financial Institutions. In addition, the act requires the actuary to express an opinion with regard to the allocation of dividends and investment income, and transfers from the participating account to the shareholder's account.

The appointments and termination procedures for the appointed actuary under the new Act are similar to those pertaining to the valuation actuary under the old act, but a number of aspects have been made more formal (for example, the requirements for notifying the Superintendent, the qualifications of the candidate, etc., are all more specifically laid out in the act). In addition, there are several new requirements relative to the appointed actuary pertaining to such matters as access to information, reporting by the appointed actuary to management and to the board, and provision of various opinions by the appointed actuary.

The actuary, of course, must be a Fellow of the Canadian Institute of Actuaries with the necessary experience and training. The act specifies the procedure to be followed when the actuary ceases to hold office for any reason, including the process for appointment of a new actuary, and the notification of the superintendent of both the termination and the new appointment.

The CIA has also developed standards for the appointed actuary which provide additional direction to that given in the act. One of the requirements of the standards is to ensure that the Board of Directors of the company understands the duties of the appointed actuary before accepting the appointment of the actuary.

Now I'll turn to valuations and reports as they're affected by the act.

The act requires that the appointed actuary have access to information at all levels of the company to enable him or her to carry out the duties which center around the valuation of the policy liabilities. The act requires the appointed actuary to report to the CEO and chief financial officer (CFO) any matters coming to his or her attention that could have a material adverse affect on the financial position of the company, and to provide a copy of any such report to the Board of Directors. Where suitable action is not taken, the appointed actuary is required to send a copy of the report to the superintendent.

While valuation work is normally done only at year-end, CIA standards require the actuary to consider at all time, not just at year-end, whether a report on an adverse affect needs to be made. The act requires the appointed actuary to meet once a year with the Board of Directors, or at its option the Audit Committee of the Board, to report on the financial condition of the company. CIA standards call for the actuary to also report on the expected future financial condition of the company. This is expected to be a report on the expected future minimum continuing capital and surplus requirement position of the company under a variety of alternative scenarios. This type of a report should demonstrate the sensitivities that the company may have. This type of reporting is also provided for under the act, but it's only at the superintendent's discretion. However, it is expected that a blanket direction requiring such a request of the actuary will be made by regulation at some point.

OPINIONS ON OTHER MATTERS

While not as fundamental as reports on the present and expected future financial condition of the company, the appointed actuary is also required under the new act to provide opinions on a number of other matters such as (1) an annual report on the fairness of the method of allocating investment income to the participating account, (2) an annual report on the fairness of the method of allocating expenses to the participating account, (3) an annual report as to whether the payment of an amount from the participating account would affect the company's ability to continue to comply with its dividend policy or to maintain the level of dividends to its policyholders, and (4) a report as to whether a policyholder dividend scale is in accordance with the company's dividend policy (the act requires that the Board of Directors of the company establish such a dividend policy).

The new act provides the actuary with some significant legal protection which was not there previously. Any oral or written statement or report made under the act by the actuary has qualified privilege in the eyes of the law. In other words, the actuary is protected from suits of liable or slander. In addition, the act provides protection from civil action for damages to the actuary making such a report in good faith. Note that good faith does not protect negligence or incompetence.

I'll now turn to my second topic, the method of valuation in Canada. The valuation method to be used by Canadian life insurers is the policy premium method (PPM). Following extended research and discussion with the CIA and the Canadian Institute of Chartered Accountants (CICA), this method has been adopted as part of generally accepted accounting principles in Canada.

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The new Insurance Companies Act has allowed federally registered life companies to adopt this method for 1992 financial reporting. Quebec registered insurers adopted this method in 1991. The key element here is that the valuation method is no longer described in the act, instead the method is described by regulation.

PPM is a gross premium valuation method similar to U.S. GAAP. The actuary must make an explicit assumption for each contingency that would materially affect the policy liabilities; items such as mortality, morbidity, lapse, expenses, or interest. Each assumption must contain an expected component as well as a margin for adverse deviation. The Canadian Institute of Actuaries has published a variety of Standards of Practice in the area of nonparticipating individual insurance to assist the actuary in setting both the expected and the margin for adverse deviations for each assumption.

Unlike U.S. GAAP, the Canadian actuary must review each of the valuation assumptions periodically in light of current experience.

Three additional Canadian Institute of Actuaries' standards of practice affecting the valuation of liabilities are in various stages of development at this time. A valuation technique paper on the valuation of single-premium annuities will likely be adopted in early 1993. This paper describes a cash-flow valuation method which requires that the liability for these products be determined in aggregate using asset adequacy testing.

Additionally, two papers, one on the valuation of universal life and one on the valuation of participating insurance, are in the early stages of development. At the earliest, these papers will be adopted late in 1993.

By far, the most controversial of the three papers is the one on participating insurance. This paper attempts to define the implications of PPM for participating products. A key ingredient of the draft paper is that "the actuary should make provision in the participating policy liabilities for reasonable policyholder expectations with respect to participating policies in a manner that is consistent with the valuation of assets." This technique would require the actuary to include in the valuation all types of dividends for which there are reasonable policyholder expectations. This would include annual as well as terminal dividends.

The provision for adverse deviations in the paper on participating policies is still being developed, but at this time we are leaning towards margins for adverse deviation which are the same as for an equivalent nonparticipating policy where no dividends are expected to be paid. Conversely, where the dividends are sufficiently large to dampen most adverse experience, the margins for adverse deviation should be some portion (in other words, lower) of the nonparticipating margins for adverse deviation. These margins should be greater than zero due to the practical realities of a competitive market in immediately reflecting experience gains and losses in the dividend scale.

The third and last major topic is an update on Canada's solvency standards.

The need for Canadian GAAP policy liabilities to remain appropriate for both solvency and income reporting purposes has led to the development of both a dynamic and a static solvency assessment process.

The CIA has adopted a standard of practice on dynamic solvency testing (DST) effective for year-end 1991. DST requires the actuary to examine not only the company's current financial position but also its future ability to withstand future threats to solvency.

This annual investigation should consider the sensitivity of surplus in the future of changes in various experience factors and management policies. In addition to the base scenario normally underlying the company's business plan, a minimum of ten other scenarios are suggested for investigation, as well as additional scenarios the actuary considers appropriate. Investigations should include both the business in force and anticipated new business. The actuary should provide a written report to the Board of Directors each year outlining the investigation performed and presenting the significant findings and conclusion.

In addition to DST, the regulators in the insurance industry have also been developing, jointly, a static test of solvency called the Minimum Continuing Capital and Surplus Retirement (MCCSR). The test defines a risk-based formula for determining how much capital is required. The test also defines the types of capital that can be used to meet the requirement.

The MCCSR test, in many respects, is similar to the NAIC risk-based capital requirement. I'll try to give you an overview of the calculation and a comparison of the two. First, you have to define the available capital to meet the formulas and then you must determine what the required capital is.

AVAILABLE CAPITAL

The MCCSR available capital consists of two tiers, Tier 1 is core capital and Tier 2 is supplementary capital. The distinction between the tiers relates to the degree of permanence of the capital.

Tier 1 capital consists of:

- common shareholders' equity,
- qualifying perpetual preferred shares,
- various surplus appropriations required for Canadian statutory and foreign jurisdictions, and
- realized unamortized gains and losses on stocks and real estate

Note that in Canada, gains and losses on assets are amortized into income over several years.

Tier 2 capital consists of:

- hybrid capital (capital with debt and equity features such as some types of perpetual preferred shares),
- limited life instruments (e.g., some types of redeemable preferred shares),
- 50% of the cash value deficiency surplus appropriation,
- 50% of the participating transitional solvency provision,
- 45% of the unrealized unamortized gains or loss on stocks,
- exclusion of writedowns in the value of foreclosed real estate, and
- restrictions on the value of capital invested in subsidiary companies to avoid double counting of capital.

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The capital available for the NAIC risk-based capital requirement consists of

- capital and surplus,
- MSVR,
- voluntary investment reserves, and
- 50% of the dividend liability.

Let's turn now to required capital. For both the MCCSR and the NAIC risk-based capital requirements, provision is made for C-1, C-2, and C-3 risk. The risk-based capital requirements also provide in some measure for C-4 risk. While the formula for the MCCSR and risk-based capital requirements are a bit different, I think you'll see in a minute that the approaches are really not too dissimilar. In Canada, while the industry and the regulators seem close to agreement at this time on the MCCSR, it appears that much discussion remains on the proper balance in these risks between what's in surplus and what should be provided for in the liabilities.

Turning first to the C-1, the asset default required capital, Table 1 shows a quick comparison of the rates under both categories. Table 2 shows commercial mortgages and real estate. For mortgages and real estate, the similarities between the two sets are again evident. Note that the risk-based capital factors will permit some recognition of company experience while, at the present time, the MCCSR does not. The risk-based capital factors also provide for an additional requirement if assets are unduly concentrated in single exposures.

TABLE 1
Solvency Standards

C-1 Required Capital		
Bonds	MCCSR	RBC
National Government	0.00%	0.00%
Other Government	N/A	0.00
AAA	0.25	0.30
AA	0.50	0.30
A	1.00	0.30
BBB	2.00	1.00

TABLE 2
Solvency Standards

C-1 Required Capital		
	MCCSR	RBC
Commercial Mortgages		
Healthy	4.00%	3.00%
In Arrears	17.00	6.00
In Foreclosure	17.00	20.00
Real Estate		
Income Producing	7.00%	10.00
Foreclosed	15.00	15.00

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Turning to C-2, required capital, the MCCR and the RBC formulas both provide for mortality and morbidity risks (Table 3). The MCCR factors vary by product type, depending on the adjustability of the product pricing. Both approaches apply a volume adjustment to reflect the credibility of company experience. Only the MCCR provides for an interest margin risk. This component is zero for GIC-type deposits.

TABLE 3
Solvency Standards
C-2 Required Capital

	MCCR	RBC
Mortality	1-2.5 per 1,000 net amount at risk	0.5-1.5 per 1,000 net amount at risk
Interest Margin	0-1% of liabilities	N/A

Table 4 shows the comparison for the factors for the morbidity component.

TABLE 4
Solvency Standards
C-2 Required Capital

	MCCR	RBC
Morbidity	12-40% of premiums	8-25% of premiums
	2-8% of claim reserve	5% of claim reserve

Turning to the C-3 risk, the MCCR formula requirement for C-3 risk varies by product type from about 0.5% all the way up to 5%. On Table 5, you'll note that there are some terms used: type A, B or C accumulation funds. Those terms, even though they're used in Canada, have essentially the same meaning as you use in the states under the Standard Valuation Law for the same type of contracts. And just a reminder for you, there are the factors to be used under the NAIC risk-based capital formula. The risks are broken into low risk, medium and high risk. The range of factors here for C-3 risk is a little bit narrower than it is in Canada.

I'll turn now to C-4. The C-4 component in Canada has no requirement comparable to that under the risk-based capital requirement. Essentially, the RBC formula makes some provision for entity assessments (Table 6).

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TABLE 5
Solvency Standards

C-3 Required Capital	
MCCSR	
Life & Health	1-5% of liabilities
SPIAs & Claim Liabilities	1% of liabilities
Accumulation Fund:	
Short-term Guarantee	0.5% of liabilities
Type A or B < 10 years guarantee	1% of liabilities
Type C < 10 year guarantee	5% of liabilities
RBC	
Low risk	0.5% of liabilities
Medium risk	1% of liabilities
High risk	2% of liabilities

TABLE 6
Solvency Standards

C-4 Required Capital	
MCCSR	RBC
None	% of premiums subject to guarantee fund assessment

In summary, these developments have created new roles and challenges for those actuaries responsible for financial reporting in Canada. There are parallels to many of these developments for actuaries practicing in the United States (developments such as risk-based capital and dynamic solvency testing). The strength of the actuarial profession in Canada, as well as the cooperative relationship with regulators, has contributed much to resolving the issues to the general satisfaction of all concerned.

