REPORT

FINAL REPORT OF THE TASK FORCE ON PENSION PLAN FUNDING

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MEMORANDUM

TO: Fellows, Associates and Correspondents of the Canadian Institute of Actuaries

FROM: Shiraz Bharmal, Chairperson, Task Force on Pension Plan Funding

DATE: January 30, 2003

SUBJECT: Final Report of the CIA Task Force on Pension Plan Funding

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We are delighted to enclose the final report of our task force, which presents the unanimous views of all the task force members. The report also contains summaries of alternative views.

With the publication of this report, the work of the task force is complete. Our report will provide useful input to the newly appointed Task Force on Public Policy Principles of Pension Plan Funding, chaired by David Brown and reporting directly to the Board. The mandate of the new task force is as follows:

"Making use of the Report of the Task Force on Pension Plan Funding and the Task Force on Multi-Employer Pension Plans as reference points and through discussion within the profession and with external stakeholders – plan sponsors, employee groups, and regulators – recommend what the CIA's reporting and certification of pension funding should convey to our publics and, therefore, what its accepted actuarial practice standard should be."

Our report raises some fundamental questions regarding pension funding that we, as a profession, must resolve, and resolve sooner rather than later. We hope that our deliberations will provide a springboard for the resolution.

We urge each of you to reflect seriously on the contents of the report and participate fully in the debate. It is critical that you formulate and articulate your own views, and make them known.

We have enjoyed our task and are thankful for the opportunity to share our thinking and research with you.

SYB

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A. INTRODUCTION

The Task Force on Pension Plan Funding is pleased to present its final report.

The task force began its work in the spring of 1998, having been appointed by the former Council in late 1997.[1] Since then we have published the following materials:

- A discussion paper entitled *Pension Plan Funding: A Fresh Approach*, October 1998 (the "Discussion Paper");
- A report on *Response to Membership Feedback on Discussion Paper*, June 2001 –Document 20155, which included research results on back testing and margins (the "Feedback Response")

We have received considerable feedback on our papers, and have had extensive discussions in writing, electronically through the Institute's listserver, in person at seven sessions of the Institute, as well as at a special meeting in September 2001 of a cross-section of experienced actuaries.

Although we have had some support for our recommended approach, a significant portion of the members who have responded have had serious reservations about our central proposal. The task force has made some changes to its original proposal as a result of the received input. But, after considerable deliberation and reflection, we remain thoroughly convinced that our fundamental approach is sound. This is a unanimous conclusion of the task force. As a result, we are uncertain as to how the Practice Standards Council (PSC) and the Board would like us to proceed.

The purpose of this report is to describe our modified approach, provide our rationale, and identify as best we can the alternatives put forward by actuaries who do not share our views. We have also identified what we view is the basic philosophical issue that needs to be resolved within the Institute. We hope this will provide sufficient information to the PSC and the Board as they decide upon further action.

We have enjoyed, and are thankful for, the opportunity to delve into this critical matter and to share our thinking and research.

B. KEY PHILOSOPHICAL QUESTION

The task force believes that we need to address the following key philosophical question:

"What role should the profession play in the reporting and certification of pension plan funding? Is it only to provide expertise and an acceptable process for measuring the level of funding achieved compared to given objectives? Or is it to provide a professional opinion about the efficacy of funding by establishing bounds outside of which it is not prepared to lend its Accepted Actuarial Practice (AAP) imprimatur?"

In our discussions, we have observed a dichotomy of views and discerned two distinct schools of thought:

- One school of thought proposes that actuaries should not set a funding standard, but only a reporting standard. Actuaries measure the degree of funding achieved based on objectives set by plan sponsors and stakeholders for calculating and reporting funded levels and funding requirements. In providing this measure, an actuary would translate pension funding objectives and the pension deal in actuarial terms, perform measurements using actuarial benchmarks, and report the results. In many cases, the funding target and the accumulated fund will exceed wind-up sufficiency. In other cases, where the fund target is less than wind-up sufficiency or the fund is not sufficient to cover the wind-up liability, there would be a clear disclosure of the

[1] See Appendix A for Terms of Reference.

shortfall. The pension plan is a long-term commitment, the probability of wind-up is minimal and the probability of a wind-up combined with plan sponsor insolvency is even more remote. Therefore, the going-concern approach combined with the "fair and clear warning" of any wind-up insufficiency should be enough for the actuary to certify that the funding regime meets AAP.

- The other school of thought is rooted in the belief that the primary reason for setting assets aside for pensions is to provide security for promised benefits, in particular if the plan sponsor becomes insolvent. A plan member would expect that a plan that is being funded in accordance with AAP would deliver substantially what they have been promised in most circumstances. The only circumstance where benefit security is put to test is when the plan is wound up because of plan sponsor insolvency. Sufficiency of assets on wind-up, therefore, is the critical measure of benefit security. The plan sponsor may have other or additional objectives which may result in a funding target that is more or less than the wind-up sufficiency. The actuary can certify that the plan is being funded in accordance with AAP only if the contributions being made to the plan would ensure that the plan achieves or maintains wind-up sufficiency over a reasonable period of time. Otherwise, the actuary may report that the degree of funding achieved is in line with the other objectives, if that is the case.

The task force supports the second approach. We believe that, given the reliance put on the actuary's certificate by plan members and other stakeholders, an AAP endorsement should signify a high, but reasonable, probability that the funds will always be sufficient to provide for the promised benefits.

C. NEED AND TIMING OF REVIEW

The task force believes that change is warranted in our approach to reporting on pension funding and our standard should be overhauled within a reasonably short period.

Rationale

The current pension funding standard has remained essentially unchanged since it was first introduced in June 1981. Although there was a restatement in 1994 (to accommodate requirements of accounting bodies) and again this year in conjunction with the Consolidated Standards of Practice, no substantive changes have been made. Except for the Valuation Technique Paper on Wind-up and Solvency Valuation for Registered Pension Plans, introduced in December 1999, no other guidance has been issued. This in spite of the following situation:

- The wording of the twin fundamental objectives of funding incorporated in the standard[2] is open to interpretation because it lacks specificity and definition. For example, there is no elaboration of what is meant by "systematic accumulation," no guidance as to what level would be sufficient to "secure" accrued benefits, and no criteria for an "orderly and rational" allocation of contributions to time periods.
- There is no specific guidance for the setting of economic and other assumptions or for the provision for adverse deviation (margins).

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[2] These are:

a) the systematic accumulation over time of dedicated assets which, without recourse to the employer's assets, secure the plan's benefits in respect of members' service already rendered, and

b) the orderly and rational allocation of contributions among time periods.

The task force recognizes that over the last two decades there has not been a glut of pension plans winding up with insufficient assets and that pension plans have by and large delivered on their promises. We believe, however, that this happy circumstance is more due to the cushioning provided by the following events than to the efficacy of our standard:

- Most regulators have introduced requirements for solvency funding minimum for registered pension plans. They presumably found that the results of current going concern valuation standard fell short of their needs for many plans. The task force does not take comfort from the fact that our standard had to be supplemented by regulations.
- Except for the recent couple of years, the investment markets in the preceding twenty years have provided plan sponsors with very buoyant returns. Over that period, pension fund returns have averaged a significant margin over inflation (about 8% annually for a balanced fund). The task force believes it is most unlikely that returns approaching that level will sustain in the future. The recent experience has demonstrated that investment returns can be fickle.

In the period since the standard was first introduced, there have been significant developments that also lead us to conclude that the standard warrants a review.

- Pension plans have matured and aged along with the aging of the population and of some industries. It is not uncommon today to find that already-retired employees account for well over half of a pension plan's obligations. Or to find that a plan's liabilities are a very significant multiple of the employer's annual payroll (sometimes four or more times). Since a pension plan sponsor must finance the risks of the plan as a whole from the labour of only the active employees, the risk levels today are higher than in the past.
- The accounting bodies have introduced pension accounting standards, separate from our standard, that have ushered in a significant change in the way pension costs are recognized in the sponsor's financial statements. In particular, accounting rules require assumptions and asset values to be adjusted to prevailing market conditions at the time of reporting.

  The funding objective of "orderly and rational allocation of contributions among time periods" was made a fundamental part of our existing standard presumably because, until late 1980s, pension funding results were typically also used for recognizing costs in the sponsor's financial statement. With the introduction of separate accounting rules, we need to review the necessity of treating this particular objective as a "fundamental" objective for *funding* purposes.[3]
- The continued brisk rate of change in and volatility of asset values, market returns and interest rates, magnified by recent major strides in technology and globalization, have increasingly led other financial disciplines to adopt a dynamic approach for evaluating financial obligations and instruments. Under this approach, the values of financial obligations and instruments are "marked to market"–continually adjusted to the prevailing market conditions. The mark-to-market approach is meant to ensure that the values are fair and transparent. We note, incidentally, that the accounting bodies have preferred to proceed on their own accord rather than depending on our current going concern standard and practices that often bear little resemblance to prevailing market conditions.

[3] The task force believes that this particular objective need not be a "fundamental" part of our objectives for reporting on funding level and that the benefit security objective be paramount in assessing whether a funding regime meets Accepted Actuarial Practice. This will be discussed in a later section.

- Ontario and Nova Scotia have mandated "grow-in" provisions which have made a significant change in plan members' benefit entitlement on plant closures, layoffs and on partial or full plan wind-ups.[4] A considerable dichotomy has been created between going concern and plan wind-up benefits because of this change. Our existing funding standard, which is based on a going concern approach, does not expressly require inclusion of these benefits, which can often create a substantially increased obligation on wind-up–except indirectly through the requirements for meeting legislated minimum solvency regulations or when wind-up has taken place or is imminent.

Alternative Views

Many actuaries believe that the current combination of our pension funding standard and the regulated minimum solvency requirements serve us well, and should be left unchanged. There is no need to fix a system that is working satisfactorily as evidenced by very few employees losing benefits in the past. Also, frequent changes to our standards would lead to disruption and questions about the credibility of our profession. Most actuaries agree that disclosure of a pension plan's wind-up position should be strengthened by making it explicit and specific.

D. FUNDING OBJECTIVES AND RANGE OF FUNDING

Plan sponsors have a myriad of objectives for funding pension plans. They can include, for example, one or more of the following:

- security of promised benefits;
- uniform allocation of costs to different generations of membership either to enhance inter-generational fairness (for example, where the financing risk of the plan is being shared by the employer and employees); or to sustain affordability of plan benefits in the future, especially where future inflation increases or aging membership is an issue;
- management of cash flows, either to stabilize the flow of future contributions and ameliorate the impact of volatility, or to match contributions to a desired pattern; or to maximize economic returns;
- tax planning;
- coordination with the pattern of benefit accruals of members, to ensure that sufficient funds are built up gradually up to the projected date of termination or retirement;
- coordination with the costs of the plan accruing in the sponsor's financial statements to minimize differences or to optimize the balance between cash flow requirements and cost accrual or to meet broader corporate objectives;
- meeting liquidity requirements for promised benefits; and
- meeting the requirements of laws and regulations.

In considering the relevance of the funding objectives, the task force makes a distinction between the processes for:

- providing actuarial advice for the selection of the appropriate funding regime; and
- providing actuarial opinion as to whether the funded status and contribution requirements meet the AAP standard.

[4] See, for example, Section 74 of the Pension Benefits Act of Ontario.

When providing *actuarial advice* on the appropriate funding regime, the actuary would help the plan sponsor and stakeholders identify all the pertinent objectives in the context of plan circumstances. The actuary would translate the objectives into actuarial terms. Based on appropriate actuarial methodology, the actuary would then compute the appropriate benchmarks to assess the funding level already achieved and future contribution requirements, and report the results to the appropriate parties. The task force believes that this process is actuarial work falling within the ambit of general standards of practice.

The task force believes that when providing *an opinion* as to whether the funding regime meets AAP, the actuary should have regard to benefit security as the paramount objective for funding. Given the tax-favoured status of pension plans, albeit within limits, the actuary should also address the issue of an unwarranted build up of assets in excess of the needs of the plan. The task force, therefore, proposes that AAP standard should comprise a normative funding range. The lower bound (the minimum) of the range should address the benefit security objective. The upper bound (the maximum) would preclude unwarranted build up of assets in excess of plan needs.

Rationale

Our mandate focuses exclusively on the funding issue–the setting aside of assets in a separate fund.[5] It excludes accounting and other issues. The primary reason for setting monies aside is to provide security for the promised benefits. Plan members and other interested parties rely on actuarial opinion about the level of security being provided. We have concluded then that for purposes of actuarial reporting on funding status and contribution requirements, benefit security is the paramount funding objective.

Plan sponsors have additional goals and objectives. The actuary can assess whether these objectives can be accommodated within AAP. If the resulting funding regime falls outside the range, the actuary must state that the regime does not meet the AAP standard. However, the actuary can state that the regime is appropriate to the selected objectives and the calculated contributions meet the requirements of the plan and the applicable legislation, if that is the case. The actuary must disclose the current and the projected shortfall compared to the AAP standard.

Alternative Views

Many actuaries have put forward the view that the AAP should focus primarily on the going concern scenario. In this context, they believe that the twin fundamental funding objectives incorporated in our current standard remain valid.

There is a suggestion that we should add a third objective: a reasonable level of inter-generational equity. The task force agrees that inter-generational equity between plan members is an important consideration in the funding of multi-employer pension plans (MEPPs) (with negotiated contributions) and in pension plans where employees pay a fixed proportion of the total contribution. But, equity between generations of plan members should not be a concern for actuaries for the funding of other pension plans where the sponsor underwrites the financial risk and the value for each generation of members is set by plan terms, not by the plan's funded status. Equity between different generations of shareholders, as reflected in the plan sponsor's income statement and balance sheet, is determined by valuations performed for accounting, not funding purposes. As such, equity between different generations of shareholders can neither be achieved nor disrupted by the Institute's funding standards.

[5] See Appendix B for our scope and definitions.

Some actuaries also propose that in interpreting the requirement for security of accrued benefits, the actuary should maintain a balance between:

- on the one hand, the need for sustaining and encouraging provision of benefit for employees in the context of the long-term deal between the employers and the employees; and,
- on the other hand, the level of security provided in the short term, given that the combined probability of the wind-up of a plan and employer insolvency is very small.

Some actuaries believe our standards of practice should be confined to dealing with the appropriateness of actuarial work and on reporting how the funding compares with several benchmarks based on both going concern and wind-up scenarios and statutory requirements; we should not set a funding standard *per se*. Some other actuaries warn that unduly stringent standards of practice would increase our professional liability exposure in an increasingly litigious environment; we should be mindful of such costs and exposures when developing our standards.

E. MINIMUM FUNDING TARGET

The task force believes that given the primary objective of benefit security, the minimum funded target should be based on the wind-up status of a pension plan. Specifically, we propose the following:

- *Minimum Funding Target at Valuation Date*

  The funding target as of the valuation date should be the wind-up liability plus a margin.

- *Minimum Contributions Target Based on Projected Funding Targets*

  The minimum target for contributions over the ensuing five years would be determined as the periodic contribution that would be needed to keep the pension fund at, or move it to, the funding target, over the five-year period. The five-year horizon reflects a reasonable correction period in the context of business cycles.

  When computing future funding targets, the actuary would assume that the plan's experience in the intervening period is consistent with market expectations on the valuation date, or, in the absence of information on market expectations, the actuary's best judgement of the plan's experience during the period. Where benefits are related to salaries or are indexed, the actuary should include expected increases in salaries and/or the appropriate index at the projection date of each funding target. In determining the expected rate of return during the intervening period, the actuary would take account of the composition of the asset portfolio. For example, any expected premium could be added for projecting expected return from the equity component of the portfolio.

- *Treatment of Funding Target Shortfalls and Excesses*

  The preceding process implies that if the assets as of the valuation date fall short of the then minimum funding target, the shortfall is amortized over five years.

  Similarly, if the assets as of the valuation date exceed the minimum funding target, the excess would serve to reduce or eliminate minimum contribution requirements over the intervening period.

If there is still any remaining excess, after taking account of the amount required to maintain the pension fund at the projected minimum funding targets including the margin over the next five years, such excess is not needed for benefit security purposes. The excess can be withdrawn and paid to the plan sponsor and/or plan members, depending on who is assuming the financial risk, or in accordance with any overriding contractual terms.

The withdrawal may be limited to the excess of any going-concern or alternative funding target adopted by the plan sponsor in accordance with its overall objectives.

- *Plan Improvements*

The additional liability created because of plan improvements or establishment of new plans with credit for past service, would also, under the above process, be amortized over five years. The plan sponsor may prefer or the minimum statutory requirements may permit longer amortization periods. The actuary can opine that such longer amortization is appropriate in the circumstances, but must state that it does not meet the AAP standard.

- *Margin*

A margin is required because the degree of mismatch between pension assets and liabilities is usually very high. The purpose of the margin is to provide plan members with a reasonable assurance that events occurring after the valuation date will not cause an unacceptable deterioration in the plan's funded status. The actuary should choose a margin that ensures that, if the funding method is pursued indefinitely, wind-up deficiencies are infrequent and, when they occur, are small.

In setting the margin, the actuary should consider:

- the plan's investment policy and the nature of its liabilities;
- the asset valuation method;
- the period over which deficiencies are amortized; and
- the frequency of valuations.

The task force conducted research to test reasonableness of such margins. The results of this research were provided in our Feedback Response paper and the reader should refer to that paper for complete information.

For our research, we modeled a final average pay plan over a very long time horizon. Because of the focus on wind-up liability in our minimum funding target, results are not affected significantly by plan design. For test purposes, we considered an approach where benefit security is measured in relation to an expected loss to members upon plan wind-up (other equally valid benchmarks can be set). We defined expected loss as the product of the probability of deficit times the average size of the deficit when they do occur. We set the target for expected loss as 1.5% of wind-up benefits. We focused on the asset-mix–the mismatch between assets and liabilities–as by far the most significant factor. The other factors would result in variations within a narrow range. The results of our modeling demonstrated that a 10% margin would be sufficient for a fund with 50% equity content and 50% immunized portfolio. For higher or lower equity content, the margin would be correspondingly higher or lower. We concluded that it would be possible to both quantify and provide guidance on margins within a reasonable range and in a simple manner for a clearly defined objective.

- *Measurement of Wind-up Liability for the Minimum Target*

  The measurement of wind-up liability should include all benefits that crystallize if the plan were wound up on the measurement date. They should include wind-up obligations dictated by both the plan provisions and by the relevant laws and regulations. They would include all the grow-in, plant closure and consent benefits as well as any other statutory enhancements. If the wind-up provisions of a final pay plan limit wind-up benefits to salaries accrued to date, the actuary should not reflect future salary increases in wind-up obligations beyond the measurement date. But if the plan's wind-up provisions require continued indexation to inflationary or general wage increases, these should be reflected. If the actuary is uncertain as to the meaning of plan provisions or applicable legislation, or how a court might interpret them, and if these uncertainties are material, the actuary should seek and can rely on legal advice.

  The funds required to discharge a pension plan's wind-up obligations will depend upon economic conditions prevailing or projected to prevail at the measurement date, actuarial standards (for the calculation of commuted values) and decision made by members concerning the form of benefit they will take (lump sum, deferred pension or immediate pension).

  When determining wind-up obligations, the actuary should compute benefit entitlements as if the plan had neither surplus nor deficit. The actuary should ignore wind-up provisions that would reduce benefits if there is a shortfall in assets or would improve them if there is a surplus.

  The assumptions chosen by the actuary should be consistent with market conditions or market expectations on the measurement date. Assumptions for events unrelated to market expectations should be based on the actuary's best judgement of a reasonably realistic view of the plan's future experience. The actuary should make an explicit provision for wind-up expenses.

- *Valuing Wind-up Assets*

  Plan assets should be valued at market on the valuation date. The actuary may value equities at a market-related value which spreads gains and losses relative to expected returns over periods of up to five-years, as long as a consistent adjustment is made to the margin.

  If the pension plan has illiquid assets for which market values are not available, the actuary can rely on the appraisal of a suitably qualified expert.

  If a material portion of the pension fund is invested in securities issued by the plan sponsor, or real estate leased to, or occupied by, the plan sponsor, the actuary should identify the nature and the value of such investments, disclose the information in the actuarial opinion and note that these assets would be impaired if the plan sponsor becomes insolvent.

Rationale

The minimum funding target should be consistent with the paramount objective of benefit security. This begs the question as to what would be a reasonable level of security for the benefits promised to members. Our thinking is as follows.

Plan members have been promised pensions in exchange of their labour. Money is set aside to secure this promise. The amount set aside has been determined by the actuary to be sufficient in accordance with AAP. At a minimum, plan members should expect to receive *substantially what they have been promised in most circumstances*. This is the benchmark we have used.

While a plan continues as a going concern, benefit security is not an issue, because members can rely on the continuing contributions from the employer. When a pension plan is wound up by a solvent plan sponsor, the plan sponsor is often responsible for paying off any deficiency. Once again, the members need not rely solely on the pension fund for the delivery of their benefits.

The only circumstance when members must rely solely on the pension fund is when a plan is wound up by an insolvent plan sponsor. If the plan has sufficient assets, members will receive what they have been promised. Otherwise, they do not receive all the promised benefits.

Our minimum target addresses this fundamental security issue. The objective is to provide an *acceptable* level of assurance that plan members will receive substantially what they have been promised in most circumstances. Since there will always be a possibility of circumstances where events conspire against full security, the actuarial method should be designed to minimize the probability of a material loss of benefits, irrespective of the financial condition of the plan sponsor.

The minimum funding target and related matters have evoked the following concerns:

- The minimum target substantially raises the funding bar for many flat benefit and career-pay plans. This is especially the case for plans which are affected by "grow-in" requirements. The "grow-in" requirements were not part of the plan provisions contracted by employers, but were imposed unilaterally and unreasonably by certain governments. They should not be included in the minimum target.

  The task force is aware of this issue. However, we believe that the additional statutory benefits are part of wind-up entitlements, regardless of their origin, and affect benefit security. The actuary's job is to value the benefits as they exist, not to redefine them. The definition of benefits must be left to the parties to the contract and the law.

  We do not advocate that statutory funding requirements be brought into line with our proposed AAP minimum. Regulators have already exempted certain legislated wind-up benefits from their solvency funding requirements. If a plan sponsor chooses to fund at the statutory minimum level, the actuary can report that the resulting funding status and contribution requirements are appropriate to the selected objective and statutory requirements. We do not see anything wrong with this. But, under our proposal, the actuary must state that the funding does not meet the AAP standard. We would also stipulate that the actuary should disclose the wind-up funded status at the valuation date and projected five year hence, computed in accordance with the proposed AAP minimum.

  Some plan sponsors may well choose to fund at the AAP level especially if they have reasonable assurance that they can withdraw funds that are eventually proven to be excessive.

- There is a concern that the minimum standard would lower the bar for final-pay plans. If plan sponsors choose to fund at the minimum target level, funding practices would be weakened, because of the lack of projection of salaries beyond the five-year period.

  We reiterate that if plan provisions require continued wage or inflation indexation post wind-up, our proposed minimum target would reflect the projection. In absence of such provision, however, artificially inflating the minimum is not justified and would not serve to increase wind-up benefits.

  We believe that most final-pay plan sponsors will prefer to fund at a level higher than the minimum to reduce future costs or to stabilize future contributions or to meet other objectives already discussed. In providing actuarial advice about the appropriate funding regime, the actuary would have addressed all the objectives of the plan sponsor and stakeholders, and taken account of plan circumstances.

  A plan sponsor who is assuming all the financial risk of the plan and is not encumbered by other considerations (for example, the inability to withstand the volatility inherent in the minimum funding) may choose to contribute the smallest amount consistent with its contractual, statutory and fiduciary obligations. The minimum funding target provides an appropriate AAP lower bound for this purpose.

- Another concern relates to the treatment of funding excesses (surplus) and deficiencies. The concern is not with the principle. In fact, most actuaries[6] agree in principle that consistent treatment of pension fund excesses and deficiencies is critical to ensure correction in both directions as otherwise the methodology will create a continuing and unreasonable bias toward over-funding. This bias is not peculiar to our proposal. It already exists in the current environment. Also, our position about surplus withdrawal is consistent with the position set out in the September 1991 paper on Pension Plan Surplus published by the Institute. Rather, the concern lies in the obstacles created by regulation and jurisprudence. Many actuaries believe that the task force is, to put it mildly, over-optimistic that surplus withdrawals would ever be allowed from continuing plans. We note, however, that Ontario has recently introduced a bill that would allow surplus withdrawals from a continuing plan, even though it could entail a complex process.

- There is also a concern that the minimum funding target will produce highly volatile results from valuation to valuation and have a negative impact on the sponsorship and investment of pension plans.

  For those plan sponsors who adopt the minimum approach, this will indeed be the case. Volatility is inherent in the behaviour of financial and economic markets. Unless assets and liabilities are perfectly matched, these variations will affect all measurements, including going concern valuations (see the results of our "back testing" in the research section of our Feedback Response paper). The minimum funding target is directly affected by market variations, except for the spreading of the variations over five years, and will be highly volatile. We expect that, generally speaking, plan sponsors would want to adopt a funding regime that builds reserves higher than the minimum target. The cushion in the higher target will allow them to manage the effects of volatility, by using smoothing techniques. This process will still allow them to ensure that the fund remains at or above the minimum target.

  If our proposed minimum target is adopted, some sponsors may review and change their investment policy away from equities. However, we believe that the trend will be small given the long-term salutary impact of higher expected returns from equities. Accounting rules cause considerable volatility in the reporting of pension expense in the financial statements of plan sponsors. This has not led to a flight from equity investment.

[6] A few actuaries would contend that pension contributions are deferred wages and belong to plan members.

Alternative Views

Many actuaries believe that it would be inappropriate to drop the explicit requirement for a going concern valuation and base the minimum funding target only on the wind-up scenario. The funding standard should continue to be based on the going concern approach to reflect the long-term and going concern nature of pensions. The combination of our existing standard and the legislated minimum solvency funding has proved sufficient for purposes of meeting plan needs and providing an appropriate level of benefit security. The Institute should consider discussing ideas for improving the statutory solvency funding requirements with the regulators. Some actuaries would enshrine the legislated minimum solvency requirements in our standard so it would apply to all plans regardless of statutory requirements.

Most actuaries would be in favour of strengthening disclosure requirements for wind-up deficiencies, especially where they are a chronic phenomenon.

Some actuaries have suggested that there should be separate funding and a corresponding funding standard for securing grow-in benefits. Any deficiency for such benefits then would not impinge on the security of the contractual pension benefits.

There was a suggestion that the Institute should explore the idea of a broad-based insurance arrangement that would cover wind-up deficiency in case of an actual wind-up of a plan where the plan sponsor was insolvent. We note that should such an insurance arrangement ever get established at some future date, and address the benefit security objective, a review of the Institute's funding standard would be warranted at that time.

Some actuaries have suggested that surplus under the wind-up of a final pay plan should first be used to provide salary-inflation related increases. A plan that freezes accrued benefits on wind-up essentially reduces promised benefits and creates "windfall surplus." Regulators should be lobbied or educated on this matter.

Some actuaries object to a margin that increases with the degree of asset/liability mismatch. The asset/liability mismatch is appropriate in the long-term context of a pension plan as investment in equities provides higher returns over the long term, results in cost efficiencies and improves affordability of larger pension benefits. Some actuaries would eliminate the margin where employers and employees share the risk and expressly agree on margin-less funding. Other actuaries would relate margins to the financial strength of the sponsor, for example, no margin where a government is the plan sponsor.

F. MAXIMUM FUNDING TARGET

The task force believes that the maximum funding target should be based on the most conservative going concern accrual method with full indexation for salaries and inflation.

Specifically, the target should be computed using the following:

- accrued benefit or entry age normal method of costing;
- discount rate based on the risk-free market interest rate, such as the rate implicit in the long-term Government of Canada bonds;
- provision for full indexation of benefits, both pre-retirement and post-retirement, regardless of the terms of the plan;
- assets at market value or market-related value which smooths the values over a period of up to five years;
- other assumptions based on the actuary's best judgement using a reasonably realistic view of the future experience; and
- no explicit margin is necessary because of the conservative method of funding, the risk-free discount rate and the full provision of indexation.

In the rare event that the minimum exceeds the maximum, the minimum would prevail.

Rationale

The upper bound should provide for all the possible plan improvements and contingencies, using a conservative method and approach. Any additional provision beyond that would be excessive and would not be reasonably required for the purposes of the plan.

Alternative Views

There was a limited view that there should be no upper bound.

G. SPECIAL ISSUES

Negotiated Contribution Multi-Employer Pension Plans (MEPPs)

Negotiated contribution multi-employer pension plans (referred to as MEPPs for simplicity) have special characteristics compared to the single employer defined benefit plan. Some significant differences:

- Contributions are negotiated between employers and bargaining agents on behalf of members. At the same time, the benefit is also defined, as determined by a group of trustees who have no power to force either the employer or the members to increase contributions.
- Because they cover many employers, the occasional withdrawal or insolvency of one employer may not have a significant effect on their solvency. Although some MEPPs do wind up, they are not nearly as likely to wind up as single employer plans.
- If a plan is wound-up in a deficit position, benefits are reduced.

Should the same AAP standard apply to MEPPs?

The former CIA Council established a task force in 1999, "to study the general principles of multi-employer pension plans including the suitability of current funding *regulations…*" (emphasis added). The Task Force on MEPPs submitted its report in May 2001.

In the context of the current funding regulations, the Task Force on MEPPs states that:

"The introduction of solvency tests, predicated on a hypothetical wind-up of the plan, has caused problems. This is particularly true in provinces where "grow-in" rules apply on plan wind-up. Solvency tests cause problems principally for three reasons:

1. They may force the actuary to value liabilities using lower discount rates than can reasonably be expected in the long term and they depend on current interest and annuity purchase rates that are inherently volatile, whereas, the negotiated contribution rates are fixed;
2. They require that the actuary value benefits that will, in all probability, never be received; and
3. They are "front-loaded," (i.e., solvency deficiencies must be funded over a five-year period, after which, the required funding decreases significantly), whereas, negotiated contribution rates are usually level."

The Task Force on MEPPs has then provided an illustration of how application of solvency rules could unduly limit the amount of pension promise that can be provided on an ongoing basis.

We conclude that the Task Force on MEPPs would have the same difficulty with our minimum funding target, unless the going concern target appropriate for a MEPP is in most circumstances in excess of the proposed minimum.

At the same time, the Task Force on MEPPs has asserted that, "Members of a MEPP rely on the benefits that have been promised. If in a certain situation, such as a wind-up, the MEPP is unable to pay the benefits promised, the members must be informed. Trustees and actuaries should work together to minimize such situations in the best long-term interest of the members."

Our task force agrees with that assertion. We stated in our Feedback Report that, "…we believe that MEPP participants would have no less expectation of their benefit promise being honoured than participants of other types of plans, *unless there is explicit and clear disclosure about the wind-up position and an acceptance by the members that benefits would be reduced if the plan winds up with a deficit.* If a different funding regime is to apply for MEPPs, it is critical that members be given this information in advance and in unambiguous terms."

As we also stated in the Feedback Response, "We agree that volatility inherent in a funding regime based on a wind-up scenario is a valid concern for MEPPs," and have noted "…the legitimacy of not requiring adherence to the (proposed) minimum AAP funding standard in statutory funding requirements for MEPPs. We note, however, that the volatility can also be mitigated through higher reserves…"

"We can envision a regime in which the minimum AAP funded level would be disclosed in the actuarial report but not necessarily required by legislation. In cases where the existing funding level meets or exceeds the minimum AAP funding, such information would in itself provide a higher level of comfort to plan members."

We are, therefore, in concurrence with the Task Force on MEPPs' suggested approach for *regulatory funding requirements*. The approach suggested by the Task Force on MEPPs includes the following key elements:

- Going concern approach with unfunded liability being amortized over a 15-year period, using assumptions that include an appropriate provision for adverse deviations.
- Disclosure of the plan termination funded ratio and an opinion on the reduced level of benefits if the plan were to be wound up on the valuation date. (Strict adherence to our proposed AAP would require disclosure of projected wind-up funded position five years hence.)

In principle, we believe that unless the paramount objectives differ between MEPPs and non-MEPPs, no difference in AAP is warranted. Under this scenario, the actuary would report that the funding regime meets the plan sponsor and statutory requirements, but not AAP and provide disclosure of the current and the projected wind-up status.

However, we are inferring that the Task Force on MEPPs considers fairness of allocation of benefits to a different generation of members to be a higher order objective than the objective of benefit security. We would be comfortable accepting this distinction if the principles for achieving the fair allocation objective, including benchmarks for determining benefits commensurate with realistically projected contributions, are clearly and explicitly set out. In any event, we believe that there should always be an explicit disclosure of the wind-up position as defined in the proposed AAP.

Supplementary Employee Retirement Plans (SERPs)

SERPs are typically exempted from statutory minimum funding requirements, and the funds set aside do not qualify for preferred income tax treatment. Consequently, these plans are frequently not funded or funded at a lower level than registered plans. In some cases, the plan documents may specifically limit the employer's funding obligation.

We believe the same AAP requirements should apply to these plans as to registered plans (subject to appropriate account being taken of the different tax treatment applicable to a non-registered funded plan). Fundamentally, when such plans are funded, the primary benefit security objective is no different.

The actuary may properly report the funding status and contribution requirements commensurate with the objectives of the employer or the stipulation in the plan document. However, the actuary must state that the funding regime does not meet the AAP standard. In addition, the actuary should disclose the wind-up liability at the valuation date and projected five years hence, determined in accordance with the proposed AAP.

The documentation of a SERP may not clearly state the benefits that would be provided in the event of plan wind-up on the employer's insolvency, or the basis for lump sum settlements (in particular, whether the basis should take account of the fact that such settlements may not be tax-sheltered). Consequently, in reporting AAP minimum targets, it is important for the actuary to have obtained confirmation as to the veracity of wind-up benefits from the plan sponsor. The actuary must also clearly disclose the wind-up benefits that were taken into account.

H. CONCLUDING REMARKS

We look forward to participating in the continuing debate on the important subject of pension funding. We would reiterate that this report represents the unanimous view of the Task Force on Pension Plan Funding,[7] after much reflection and discourse. We hope that our views will be considered accordingly.

We would be pleased to make ourselves available in case any matter needs clarification or amplification. Again, we are grateful for the opportunity to make this contribution.

[7] Besides pension practitioners from large, medium and small firms, the Task Force on Pension Plan Funding also includes an actuary previously employed in the social security arena and an actuary now employed in the investment industry.

APPENDIX A

TASK FORCE ON PENSION PLAN FUNDING'S TERMS OF REFERENCE

- Review the issues in the funding of pension plans, in particular, review/confirm the two underlying funding objectives, notably benefit security for members and an orderly and rational contribution pattern.
- Articulate and gain consensus on what is meant by "benefit security" and "orderly and rational"; and develop guidance for the realization of these objectives in practice, including the striking of a balance between the objectives which will be commonly accepted within the Institute and rooted in the specifics of the plans involved.
- Prepare a research paper to address these issues in sufficient detail for all pension practitioners in Canada to be able to have a clear understanding of the issues involved.
- Take all reasonable steps to get input from members of the CIA, pension regulators and any other interested parties through special meetings and any other appropriate means.
- Analyze all comments received in connection with these matters and to make recommendations to the Committee on Pension Plan Financial Reporting for appropriate changes to the standards of practice that relate to pension plan valuations.

APPENDIX B

SCOPE AND DEFINITIONS

- The task force's mandate pertains specifically to pension funding.
- We have defined funding as the setting aside of assets in a fund kept separate from the plan sponsor's assets and against which members have the first right of claim for satisfaction of their promised pension entitlements.
- Our mandate does not consider the issue of recognizing pension costs in the financial statements of the plan sponsor or other accounting issues. We have focused on the funding issue alone.
- Our mandate does not include comment on appropriateness or inappropriateness of a plan's benefit entitlements. In addressing the funding issue, we considered all benefits without distinction. Benefit entitlements may arise from voluntary plan sponsor action, agreements or arrangements between plan sponsor and plan participants, or legislated requirements.
- We did not draw any distinction between registered plans which can be funded on tax-assisted basis and plans that are not accorded this favourable tax treatment; or between plans sponsored by private sector employers or associations and plan sponsored by public sector organizations for their employees.
- We have not addressed broad-based social security plans because of their unique nature.
- We have focused on plans that are of defined benefit variety or those which have a defined benefit element.