

Regulatory Reform for Defined Benefit Pension Plans and Target Benefit Multi- Employer Pension Plans

**Ministry of Finance
Major Projects Meeting
Date: May 11, 2017**

Appendices

Appendix A: Overview of Consultation Paper

- The consultation paper released on July 26, 2016 was intended to solicit feedback from affected stakeholders; it did not indicate a preferred approach.
 - To date, over 90 submissions have been received.
- Stated objectives include:
 - Ensuring that benefit security is maintained by requiring adequate and appropriate funding of pension plans.
 - Creating a funding framework for pension plans that will reduce both contribution amounts and volatility.
 - Encouraging current plan sponsors to maintain existing workplace pension plans and incent the growth of the voluntary employment pension system.
 - Increasing the transparency of the funding rules.
 - Balancing stakeholder interests.

Appendix A: Overview of Consultation Paper (cont'd)

Proposals under **Approach A** – Modified Solvency Funding

- Use three-year average of the solvency ratio: Bases solvency funding on the average of the last three years' solvency position.
- Fund solvency deficiencies over a longer period.
- Allow solvency deficiencies to be consolidated and re-amortized.
- Normal retirement benefits funded on a going concern basis only.
- Funding a percentage lower than 100% of the solvency liabilities (e.g., 80%).
- Introduce solvency reserve accounts.
- A higher limit on the use of letters of credit: Currently sponsors may obtain a letter of credit in lieu of making solvency payments, as long as value of all letters of credit does not exceed 15% of solvency liabilities.

Appendix A: Overview of Consultation Paper (cont'd)

Proposals under **Approach B** – Enhanced Going Concern Funding (elimination of solvency funding)

- Require funding for a provision for adverse deviation (PfAD): Employers would have to fund an additional liability on a going concern basis not presently required.
- Fund going concern deficiencies over a shorter period.
- Restrict return on Investment assumptions (e.g., ceiling on interest rate).
- Additional funding requirements if plan solvency position falls below a threshold (e.g., 80%).
- Enhance PBGF by adjusting both coverage and assessments.

Additional Reform Measures (could be included with either approach)

- Annual filing of actuarial valuation reports on consistent dates.
- Filing of governance and funding policies.
- Modified commuted value payout rules on member termination.
- Restrict contribution holidays and strengthen funding requirements for benefit improvements.
- Administrator discharge for annuity buyouts after certain conditions are met.
- Increase PBGF assessments and increase the \$1,000 PBGF cap.

Appendix B: Details of Actuarial Analysis for Approach A

- The following three options under Approach A, Modified Solvency Funding, were effective, when modelled as stand-alone measures, in achieving at least one of the following objectives:
 - Reducing contribution amounts;
 - Reducing contribution volatility; and
 - Increasing transparency.
 - None of the options achieved the objective of increasing benefit security.
- 1. Move to three-year average solvency ratio (federal approach).
 - This model maintains benefit security while somewhat reducing contribution volatility but is quite complex and did not reduce contributions.
- 2. Extend the amortization period for solvency deficiencies to eight to 10 years.
 - This option generally reduced volatility significantly, for both eight and 10 year periods.
 - However, when compared to options under Approach B, Strengthened Going-Concern, volatility was reduced to a lesser extent over the 10-year projection period, but achieved a better wind-up funding levels after 10 years.
 - This model reduced the total amount of contributions over the near term, but not the longer term. Reductions were slightly greater for a 10-year amortization period.
 - However, the outcomes under this model reduced benefit security moderately over the near term and minimally over the long term compared to the current funding framework.

Appendix B: Details of Actuarial Analysis for Approach A (cont'd)

3. Reduce the solvency funding target below 100% (e.g., 80%).
 - Threshold of 80% reduced the total amount of contributions significantly, but funded position of plans did not improve as much as with other options considered under Approach A.
 - Contributions remained relatively volatile for plans funded below 80% due to the continued requirement that they amortize special payments over five years.
- The three options above, when modelled as stand alone measures, did not result in significantly lower contribution requirements over the 10-year projection period compared to options under Approach B, Strengthened Going Concern.
- As a result, the Ministry requested additional analysis on the following funding options:
 - A solvency funding trigger of 85%.
 - Relative to the 80% threshold, benefit security is improved somewhat; however, there is no improvement in contribution volatility for poorly funded plans.
 - A combination of a 10-year amortization, a fresh start at each valuation, and introduction of solvency reserve accounts.
 - The combination of a 10-year amortization period and a fresh start further reduced contribution levels and volatility, and eased administration. However, depending on the plan, in some instances it also slightly reduced the funded position.
 - A combination of a 10-year amortization and a solvency funding target of 85%.
 - Significantly lower contribution volatility but benefit security was similar to a target of 80%.

Appendix C: Details of Actuarial Analysis for Approach B

- Except for indexed plans, compared to the current funding framework and most options under Approach A, the two funding options under Approach B (Quebec approach; and Quebec approach with 85% solvency trigger) resulted in:
 - Less volatile employer contributions;
 - Less improvement in a plan's wind-up funded position.
 - However, there would be a greater improvement in a plan's wind-up funded position compared to the Modified Solvency Funding option requiring a plan to fund to only 85%.
 - For more poorly funded plans, lower employer contributions and generally higher PBGF assessments.
 - For better funded plans (especially those that are 100% solvency funded), similar or slightly higher total contributions.
- For indexed plans (such as those in the BPS) contribution requirements and funded ratios are generally higher under Strengthened Going Concern than Modified Solvency Rules.
 - The exception to this is under the federal option under Approach A because indexation is funded on a solvency basis federally.

Appendix C: Details of Actuarial Analysis for Approach B (cont'd)

- Under the Quebec Approach (funding a PfAD and going concern deficiencies with a “fresh start” over a shorter period), there is no recognition of wind-up cost in funding. As a result, it would not necessarily be sufficient to ensure that a plan’s assets would provide for all benefits if the plan were to actually wind up.
- Quebec Approach with Solvency Trigger (additional funding requirements if a plan’s solvency position fell below 80%) would provide some improvement in benefit security; however, the 80% level did not generally provide a significant improvement in funding levels, compared to enhanced going concern funding alone.
 - A trigger of 85% resulted in higher contribution requirements and a further improvement in benefit security.
 - In some scenarios, the level of benefit security is similar to that achieved by extending the solvency amortization period to 10 years and allowing a fresh start, per the Modified Solvency Rules options.

Appendix D: Modifying DB Plan Wind Up

- The cost of settling benefits on wind up is based on the premiums insurance companies charge to provide pensions and the basis used to determine lump sum commuted values.
 - In both cases, the cost of settlement is tied to Government of Canada (GoC) bond yields.
 - As a hypothetical wind up valuation, a solvency valuation uses a discount rate based on GoC bond yields that is consistent with how benefits are settled on wind up.
- The CME has proposed altering plan wind up by creating an agency that would assume the assets and liabilities of plans with an insolvent sponsor.
 - The agency would administer these plans indefinitely.
 - This would immediately change the solvency discount rate to reflect a risk premium based on the agency's investment policy, which would permit significant equity exposure.
 - The PBGF would continue to provide additional funding on wind up.
- Reflecting the equity risk premium in the discount rate results in advanced recognition of the expected additional return without putting a value on the additional risk that is taken.
 - Since there is no sponsor, this would transfer risk to plan beneficiaries or the PBGF.
- If the risk premium is periodically not realized by the agency, benefits would have to be reduced or additional funding from the PBGF could be required.
 - Given the reduced funding, increases in PBGF assessments would be necessary for the PBGF to meet its responsibilities without government assistance.

Appendix E: Wind Up Regimes – the Pension Benefits Guaranty Corporation (PBGC)

- Established in 1974, the PBGC covers 40 million workers in 24,000 private-sector DB plans in the United States and is responsible for benefit payments to more than 1.5 million people in failed plans.
- The PBGC has separate programs for single-employer and multi-employer plans:
 - Takes over management of failed single-employer plans, investing their assets and directly paying benefits due to retirees (and future retirees) up to the PBGC guaranteed benefits.
 - Provides financial assistance to failing multi-employer plans, which continue to remain responsible for paying benefits.
- For single-employer plans, the maximum guarantee is currently \$5,011 a month and for multi-employer plans, the maximum guarantee is \$1,072 a month.
 - The single employer maximum is adjusted annually; the multi-employer maximum is not.
- Plan sponsors are charged a per-participant flat rate premium of \$69 for single-employer plans and \$28 for multi-employer plans.
 - In addition, single-employer plans are charged a variable-rate premium of \$34 per \$1000 of unfunded vested benefits (capped at \$517 multiplied by the number of participants).
- The PBGC invests roughly \$100 billion in assets from its single-employer and multi-employer programs which are both currently in deficit.
 - The single employer program has a deficit of \$20.6 billion (FY 2016) and its fiscal position is estimated to improve over the next decade.
 - The multi-employer program, with a deficit of \$58.8 billion (FY 2016), is projected to run out of money by the end of 2025.

Appendix E: Wind Up Regimes – the Pension Protection Fund (PPF)

- Established in 2005, the PPF covers approximately 11 million workers with defined pension plans or DB part of hybrid plans.
 - The PPF is responsible for the benefit payments of 225,534 people in failed plans (105,491 deferred and 120,043 pensioner members) and the estimated value of these existing liabilities is £18.3 billion (as of March 31, 2016).
- After the wind-up of an insolvent pension plan, the PPF takes over the plans' assets and pays the plan members the following upon retirement:
 - 100% of the current level of pensions already in payment and 90% of the pension owed for workers not yet receiving a pension.
 - The compensation payment cap is £38,505.61 (65 year old pensioner), which is adjusted yearly for inflation.
- Plan sponsors are charged a scheme-based levy (20% of levy) and a risk-based levy (80% of levy).
 - Scheme based: determined by the plan's liabilities and number of members.
 - Risk Based: risk measured using a statistical model developed specifically for the fund that accounts for risk of the sponsor becoming insolvent and the potential size of that claim.
- The PPF invests roughly £23.4 billion and has a surplus of £5.3 billion (FY 2015-16).
- The PPF is currently funded at 116.3% (calculated on actuarial basis at March 31, 2016).
 - Considering that the PPF was recently established, it may be premature to draw conclusions on the fund's long-term sustainability.

Appendix E: Wind Up Regimes - Retraite Québec

- On wind up of an underfunded pension plan, Québec provides retirees the choice to either transfer the administration of their benefits to Retraite Québec or have an annuity purchased to provide their benefits.
 - Only retirees or others in receipt of a pension (e.g., survivors) can choose the transfer option.
- As Québec does not have a pension guarantee, under both options, a retiree's pension is reduced by multiplying it by the funded ratio of the plan at wind up.
 - If a retiree chooses to transfer the administration of their benefits to Retraite Québec, their pension may increase or decrease if the plan experiences gains or losses.
 - Under the annuity option, this calculated benefit will not change.
- Retraite Québec is required to annuitize any pensions within 10 years after administration of the pensions were transferred to it.
- While administering funds transferred to it, Retraite Québec is responsible for performing administrative functions (i.e. annual statements, information meetings, valuation reports, annual financial statements).
- In an environment with low interest rates, providing a 10-year delay before the purchasing of annuities would allow individuals to benefit from any increase in interest rates that may occur over that time period.
 - It is also possible that individuals could end up with a reduced pension, as poor investment performance could affect the final pension amount.

Appendix F: Select SOMEPP Funding Status

	Membership Active & Inactive	Solvency Ratio	Going Concern Ratio
PLANS WITH A SOLVENCY RATIO OF LESS THAN 60%			
Canadian Commercial Workers Industry Pension Plan	391,113	45.0%	72.6%
International Painters and Allied Trades Industry Pension Plan (Canada)	20,467	46.5%	90.6%
Multi Sector Pension Plan	15,188	46.9%	91.5%
Sheet Metal Workers' Local Union 285 Pension Plan	2,665	47.6%	97.8%
Ontario United Food and Commercial Workers Pension Plan	7,381	48.2%	82.1%
I.B.E.W. Local 353 Pension Plan	14,595	52.2%	86.1%
Sheet Metal Workers Local Union 30 Pension Plan	4,071	53.1%	91.6%
Insulators Local 95 Pension Plan	3,221	54.0%	94.0%
Drywall, Acoustic, Lathing and Insulation Local 675 Pension Plan	13,952	55.4%	92.6%
Rules and Regulations of the Labourers' Pension Fund of Central and Eastern Canada	105,856	56.0%	88.3%
International Union of Painters and Allied Trades Province of Ontario Pension Plan	18,322	56.1%	97.0%
I.B.E.W. Local 1687 Pension Plan	1,287	57.5%	1.00%
Plumbers' and Pipefitters' Local Union 800 Pension Plan	566	58.4%	99.1%
The IUOE Local 793 Pension Plan For Operating Engineers in Ontario	31,382	58.6%	96.9%

Appendix F: Select SOMEPP Funding Status (cont'd)

	Membership Active & Inactive	Solvency Ratio	Going Concern Ratio
PLANS WITH A SOLVENCY RATIO OF LESS THAN 60%			
Plumbers' and Steamfitters' Local 527 Pension Plan	1,851	58.8%	85.4%
Plumbers' and Pipefitters' Local Union 508 Pension Plan	326	58.8%	99.7%
Pension Plan for Members of the Sheet Metal Workers' International Association, Local Union No. 397	508	59.2%	92.4%
Nursing Homes and Related Industries Pension Plan	65,510	59.9%	1.00%
LARGEST PLAN WITH SOLVENCY RATIO B/W 61-69%			
The Canada Wide Industrial Pension Plan	17,707	62.5%	97.4%
LARGEST PLAN WITH SOLVENCY RATIO B/W 70-80%			
Carpenters' Local 27 Pension Plan	9,929	73.2%	1.015%

**Note: Membership Information is based on most recently filed Annual Information Return with FSCO for the period ending December 31, 2015.*

Appendix F: Select SOMEPP Funding Status (cont'd)

- 52 SOMEPPs in Ontario. SOMEPPs are significantly less well funded than non-SOMEPP MEPPs.
 - In 2015, the median solvency ratio for SOMEPPs was 67.5%, compared to 94.2% for non-SOMEPPs.
- SOMEPPs are also significantly less well funded than public sector JSPPs which are also exempt from solvency funding requirements. According to valuations dated December 31, 2015/ January 1, 2016, the public sector JSPPs had the following solvency ratios:
 - OMERS: 78%
 - OPSEU: 95%
 - CAAT: 80%
 - TPP: 131%
 - HOOPP: 102%
- 87% of SOMEPPs are less than 80% funded on a solvency basis.
 - Seven plans with a solvency ratio of greater than 80% (10,591 beneficiaries);
 - 15 plans with a solvency ratio between 70% and 79% (68,149 beneficiaries);
 - 12 plans with a solvency ratio between 60% and 69% (68,974 beneficiaries);
 - 13 plans with a solvency ratio between 50% and 59% (261,447 beneficiaries); and
 - Five plans with a solvency ratio between of less than 50% (436,814 beneficiaries).

Appendix G: Details of Actuarial Analysis

- The actuarial analysis of possible TB MEPP funding framework options led to a focus on the following four options:
 1. **Make permanent the current SOMEPP rules (status quo):**
 - Permanent exemption from funding on a solvency basis.
 - Going concern funding with deficiencies amortized over 12 years.
 - Benefit reductions if contributions are less than required service costs plus special payments as contained in most recent filed valuation report.
 - Lump sum payments on termination of membership or wind up are calculated on a solvency basis.
 2. **Modified SOMEPP rules:**
 - Same as Option 1 except that lump sum payments on termination of membership or plan wind up are calculated on a going concern basis.
 - A further modification that could be added would be to require a plan's going concern funded level to exceed 100% before benefit improvements could be implemented i.e. place restrictions on benefit improvements.

Appendix G: Details of Actuarial Analysis (cont'd)

3. Alberta approach

- Permanent exemption from funding on a solvency basis.
- Going concern funding with deficiencies amortized over 15 years.
- Require funding of a cushion, also known as a provision for adverse deviation (PfAD) based on the plan's equity investment allocation and its going concern discount rate relative to a benchmark discount rate (BDR).
 - The BDR is determined with reference to the plan's equity investment allocation.
 - Lump sum payments on termination of membership or plan wind up are calculated on a going concern basis.

4. Modified Albert approach

- The same as Option 3, except that the amount of the PfAD would be based only on the plan's equity investment allocation and have no BDR.
- Unproclaimed PBA s.87(4)(b) could provide Superintendent with the authority to order a new valuation if the Superintendent is of the opinion that the assumptions or methods used in a valuation are inappropriate in the circumstances for the plan report.

Appendix G: Details of Actuarial Analysis (cont'd)

Option	Reduces Benefit Volatility	Maximizes Current Benefit Level	Transparency	Plan Sustainability
Option 1: Current SOMEPP rules 12 yr amortization Solvency basis for lump sum payments	✓✓ Benefit level volatility higher than options with a PfAD	✓✓✓ Similar to Option 2, but slightly lower benefits due to solvency basis used for calculating lump sum payments	✓✓ Risk of benefit reduction not as apparent to beneficiaries without a PfAD	✓ Lack of funding cushion creates lower funded plan status which can jeopardize future benefit payments
Option 2: Modified SOMEPP rules 12 yr amortization Going concern basis for lump sum payments	✓✓ Similar to Option 1	✓✓✓✓ Higher benefit levels since contributions do not fund a PfAD and lump sum payments are calculated on going concern basis	✓✓ Risk of benefit reduction not as apparent to beneficiaries without a PfAD	✓ Similar to Option 1
Option 3: Alberta approach 15 yr amortization PfAD based on the plan's equity investment allocation BDR Going concern basis for lump sum payments	✓✓✓✓ Similar to Option 4 but BDR slightly reduces volatility	✓ Lower current benefits since a portion of contributions are directed to fund a PfAD	✓✓✓ Similar to Option 4, members better understand risk of benefit reductions, but BDR has complexity	✓✓✓✓ Funding cushion improves long term funded plan status which improves likelihood of future benefit payments
Option 4: Modified Alberta approach PfAD, no BDR 15 yr amortization Going concern basis for lump sum payments	✓✓✓ PfAD reduces benefit level volatility	✓✓✓ Lower PfAD requirement combined with going concern basis for lump sums results in higher current benefits	✓✓✓✓ PfAD creates a cushion allowing members to better understand risk of benefit reductions	✓✓✓ Similar to Option 3, however more likelihood of reductions with lower PfAD

Appendix H: Proposed TB MEPP Framework – Provision for Adverse Deviation (PfAD)

- For this framework, it is proposed that any PfAD, or funding cushion, must be funded before the plan may take action that could weaken the plan's funded position (e.g., improve benefits).
- The July 2015 consultation paper on a TB MEPP framework proposed that PfADs would be funded partly from contributions and partly from experience gains (e.g., better than expected investment returns).
 - A TB MEPP paying reduced benefits could reverse reductions for future pension payments if the plan had assets in excess of its liabilities and PfAD.
- A PfAD is intended to assist plans in providing more consistent and stable pensions. Specifically, a PfAD:
 - Helps reduce the risk of plan failure and/or benefit reductions by providing a cushion against unanticipated investment losses or other changes that affect the funded status of the plan; and
 - Protects the target benefit by requiring a plan to be more than fully funded before allowing any action that could weaken its funded position (e.g., increase in benefits).