

Recommendations of the Canada Pension Plan (CPP) Actuarial Review Panel

1. Data – Reliability

Opinion and Recommendation of the Independent Panel of Actuaries

In our opinion the Chief Actuary had access to the data he required. The Chief Actuary completed such tests and analyses on the data as might be expected. The data used are, with one exception, adequate and appropriate for the purpose of the review – the one exception is the lack of information on the long-term asset mix targets of the CPP Investment Board.

We recommend that the Chief Actuary closely monitor the methodology used by Statistics Canada in developing statistics on emigrants and returning emigrants.

Superintendent's Response:

As was done for the 18th Actuarial Report on the Canada Pension Plan (AR18), the Chief Actuary will continue the practice of consulting Statistics Canada when developing actuarial projections of demographic information. The Chief Actuary will work to ensure that the working relationship between the Office of the Chief Actuary (OCA) and Statistics Canada continues to develop. This will increase the common understanding between the two departments regarding the bases for each other's population projections and their uses, e.g., the methodology used by Statistics Canada in developing statistics on emigrants and returning emigrants.

2. Data – Sufficiency

Opinion and Recommendation of the Independent Panel of Actuaries

In our opinion the Chief Actuary had access to the data he required.

He has expanded the sources of information for the valuation and arranged improvements in specific data inputs. The OCA has increased its contacts with other Departments and Agencies such as Human Resources and Development Canada (HRDC), the Canada Customs and Revenue Agency (CCRA), Statistics Canada and Finance Canada and this has provided helpful results.

We recommend that the Chief Actuary continue his program of seminars with presentations from appropriate experts, and strive to broaden the range of presenters and to better focus their contributions on matters of most relevance to the preparation of actuarial reports on the CPP.

Superintendent's Response:

The Chief Actuary will continue to consult with experts – such as demographers and economists – before setting the assumptions to be used in the actuarial reports. For this purpose, as was done for the first time for AR18, the OCA will organize a series of seminars that will look at the impact of demographic and economic trends on the CPP. The presenters will be chosen with the objective of obtaining information of greatest relevance to the work of the Chief Actuary in preparing the actuarial report on the CPP. The success of these seminars in meeting this objective will be evaluated periodically, and other methods of obtaining advice will be considered, where appropriate.

3. Methodology Improvements

Opinion and Recommendation of the Independent Panel of Actuaries

In our opinion, the methodology elements employed in the actuarial report are appropriate and reasonable for the purposes of the Plan and have been properly applied.

We recommend that the Chief Actuary continue to keep up the tradition of continual improvements to the methodology by such actions as:

- Continuing research on both the technical and feasibility aspects of applying stochastic processes to the actuarial review of the CPP,
- Developing and articulating objective criteria for selection of the current, or “plausible”, sensitivity tests and for any future additional sensitivity tests, and
- Reviewing what length of experience data should be considered when developing projected distributions of parameters.

Superintendent’s Response:

It is certainly important that the methodology used by the OCA be continuously improved. As an example, AR18 introduced two major methodological changes, related to the projection of labour force participation rates and assets.

The OCA will continue to study the potential application of stochastic processes to the actuarial reviews of the CPP. In particular, the Chief Actuary will consider using stochastic processes to assist in developing more objective criteria for the selection of the sensitivity tests.

The Chief Actuary will continue to apply judgment regarding the length of the experience period used when developing projected distributions of parameters. This requires a careful analysis of the long-, medium- and short-term trends together with the projected outlook for such distributions.

4. Selection of Assumptions

Opinion of the Independent Panel of Actuaries

In our opinion, the assumptions used in completing AR18 in the aggregate are within the reasonable range, while a little on the conservative side of the best-estimate assumptions that we would have selected.

Superintendent's Response:

I am pleased that the Panel took note that the assumptions are within the reasonable range. The Chief Actuary will continue to broaden the sources of information available and to consult with experts through his program of seminars before setting the assumptions to be used in the actuarial reports.

5. Content of the Report

Recommendation of the Independent Panel of Actuaries

We recommend that the Chief Actuary include in future reports

- The normal actuarial cost under the accrued benefit actuarial cost method,
- Revised descriptions of the Actuarial Balance figures, and
- Additional sensitivity tests of the “two standard deviation” or “stress testing” variety (i.e., in addition to the current “plausible” individual and combined sensitivity tests).

Superintendent’s Response:

The normal actuarial cost under the accrued benefit actuarial cost method is commonly determined when assessing the financing of a funded, employer-sponsored, defined benefit pension plan. This measure of cost is not directly relevant to the CPP, considering both its benefit provisions and funding method. However, the Chief Actuary will consider including it, as supplementary information, in the next actuarial report.

The Chief Actuary introduced the concept of actuarial balance under the Canada Pension Plan for the first time in AR18. Actuarial balance, measured by the evolution of the projected growth rates of assets and liabilities, should provide a useful indicator of the future financial health of a plan funded along the lines of the CPP. Changes to the explanation of actuarial balance will be incorporated in the next report in order to make it clearer to the users of the report.

The Chief Actuary will also consider the possibility of adding supplementary sensitivity tests of a “stress test” nature to the next actuarial report. This will depend, in part, on the developments achieved in connection with Recommendation 3 on stochastic modeling.

6. Communication of Results

Opinion and Recommendation of the Independent Panel of Actuaries

In our opinion, the actuarial report fairly communicates the results of the work performed by the Chief Actuary and his staff.

We recommend that in future Actuarial Reports information on sensitivity testing be included in the Executive Summary.

Superintendent's Response:

The Chief Actuary will include a summary of the results of the combined sensitivity analysis in the Executive Summary of the next actuarial report.

7. Responses to Recommendations of Previous Review

Opinion and Recommendation of the Independent Panel of Actuaries

In our opinion, the Chief Actuary and his staff responded well to the thirteen recommendations listed in the report of our review of the previous report. The overall result is that good progress has been made on methodologies, assumption setting, documentation and report presentation in AR18, compared to the 17th Actuarial Report on the Canada Pension Plan (AR17).

We recommend that further consideration be given to two recommendations made by the previous panel: their Recommendation 1 (separate OCA from OSFI) and 3 (form an Advisory Panel).

Superintendent's Response:

The Chief Actuary has complete independence in the exercise of professional judgment in fulfilling his mandate to provide actuarial services with respect to the CPP, the Old Age Security Program, the Canada Student Loan Program and various public sector pension and benefits plans. The independent reviews of AR18 and AR17 have confirmed that this judgment has been exercised appropriately in respect of the CPP, and have raised no concerns that the independence of the Chief Actuary has been compromised. Furthermore, organisational changes, increased resources and management focus by the Chief Actuary have resulted in continued improvements in the quality and timeliness of service provided by the OCA to other government departments. The current structure works well in meeting the needs of both the client departments and plan members, while the association of the OCA with OSFI provides various operational benefits. Therefore, neither the Chief Actuary nor I see the need to separate the OCA from OSFI.

A formal advisory panel is one method for the Chief Actuary to obtain input from experts. However, the seminars organized by the OCA, together with the feedback from periodic independent reviews of the actuarial reports on the CPP, already provide considerable input to the Chief Actuary. Furthermore, the Chief Actuary and staff of the OCA continuously keep abreast of experts' views on demographic and economic issues through Statistics Canada, the Québec Pension Board, economic forecast analyses from the Policy and Economic Analysis Program of the University of Toronto, the Conference Board of Canada and attendance at various seminars on specialized topics. These activities are now part of the on-going process of how the Chief Actuary operates. Neither the Chief Actuary nor I see the need to form an advisory panel at this time.

8. Responses to Recommendations of Previous Review on Data and Methodology Improvements

Recommendation of the Independent Panel of Actuaries

We recommend that further work and additional resources be allocated to enhance the responses to two recommendations made by the previous panel: their Recommendation 6 (broaden data sources) and 7 (methodology improvements).

Superintendent's Response:

As the Panel noted in their report, the staff of the Social Insurance Programs Section of OSFI has more than doubled since the previous review. Moreover, the Panel stated that the staff increase has enabled the OCA to spend considerable time on CPP matters, improving methodologies, data sources, and inter-valuation studies, all of which help the quality of the work and of the report.

The OCA will continue to expand the sources of data used in developing the actuarial assumptions, in order to further improve the quality of its work. These sources could be expanded through the seminars and other consultations with outside experts, internal research and the purchase of information produced by third parties, where relevant and appropriate.

As discussed earlier in response to the recommendation on the methodology, the Chief Actuary will continue to improve the methodology used and will seek increased resources, if required and appropriate.

9. Professional Experience and Professional Standards of Practice

Opinion of the Independent Panel of Actuaries

In our opinion, the professional experience of the Chief Actuary and the staff who worked on the report was adequate for carrying the work required.

In our opinion, the work on the actuarial report was completed in compliance with the relevant professional standards. We are able to conclude that the Chief Actuary and his staff, in completing the work on the 18th actuarial report,

1. Have met the requirements of the applicable Rules of Professional Conduct of the Canadian Institute of Actuaries,
2. Have complied with the relevant portions of the proposed “Consolidated Standards of Practice, General Standards” of the Canadian Institute of Actuaries,
3. Have used appropriate methods as required by the existing Pension Standard and by the draft CSOP-Pension Standards of the Canadian Institute of Actuaries,
4. Have complied with all sections of the U.S. Standards of Practice No. 32, and
5. Have complied with all elements of the draft Guidelines of Practice for actuarial work provided with respect to Social Security Programs, released by the International Association of Actuaries.

Superintendent’s Response:

I am pleased that the Panel took note that the work of the OCA not only met Canadian actuarial standards, but also satisfied various existing and proposed international standards specifically related to social security programs.