

**Presentation to the 12th Pension Experts Meeting: Pension Reforms in Canada:
Pension Measures against Low Fertility and Population Aging**

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Good morning. It is my pleasure to be here to speak about pension reforms in Canada.

Office of the Chief Actuary (*Slide 2*)

Let me introduce myself. I am Assia Billig, Senior Actuary of the Office of the Chief Actuary (OCA) which is a part of the Office of the Superintendent of Financial Institutions. The mandate of our office is to conduct statutory actuarial valuations of social insurance programs such as the Canada Pension Plan (CPP), the Old Age Security (OAS) program, Employment Insurance (EI) program, and the Canada Student Loans Program (CSLP), as well as of the federal public sector employee pension and benefits plans. All statutory actuarial reports that we prepare are tabled before Parliament by appropriate ministers.

As you can see, we are responsible for plans and programs that have impacts on almost every single Canadian.

Canadian Retirement Income System is based on a diversified approach to savings (*Slide 3*)

Let me start by giving you a brief overview of the Canadian retirement income system. At retirement, most Canadians will receive an income from one or more of the three tiers of our system: Old Age Security program, Canada/Quebec pension plans and voluntary retirement savings.

The focus of my presentation today are the first two pillars which replace about 40% of pre-retirement earnings for full-career individuals with earnings at the average level. The diversification of the Canadian system through its mix of public and private pensions and different financing approaches mitigates the multitude of risks to which the system and individuals' retirement incomes are exposed. As stated in the editorial of the Organization of Economic Cooperation and Development's Pension at a Glance 2011 publication: "Taking the long view, a diversified pension system – mixing public and private provision, and pay-as-you-go and pre-funding as sources of finances – is not only the most realistic prospect but the best policy".

Old Age Security Program's goal is poverty reduction among seniors (Slide 4)

The Old Age Security Program is the first pillar of the Canadian retirement income system financed on a pay-as-you-go basis from general tax revenues. It provides a universal basic benefit. An income-tested family-based benefit (GIS) is also payable to about one third of basic OAS beneficiaries who have little or no other income.

The main goal of the OAS is reduction of poverty rate among seniors. This program gives all Canadians the right to a dignified old age.

Changes to the OAS usually target vulnerable groups (Slide 5)

Over the years, the federal government had made several changes to the OAS Program. As a rule, these changes are targeted, and are aimed at helping the most vulnerable groups. For example, today, in Canada, the majority of low-income seniors are single and live alone; a significant portion of this group are women. Last year, the income-tested supplement was increased for low-income single seniors benefiting about one million of vulnerable individuals. The Department of Finance estimates that this enhancement is helping to lift 13,000 seniors - including 12,000 senior women - out of poverty.

The chart on the slide illustrates that the resulting structure of the GIS is quite complex.

Canada Pension Plan is jointly governed by federal, provincial and territorial ministers of finance (Slide 6)

The Canada and Québec Pension Plans were established in 1966 primarily to assist with income replacement upon retirement. The CPP covers virtually all Canadian workers outside the province of Québec, and is jointly administered by federal, provincial and territorial ministers of finance. Any change to the Canada Pension Plan requires the agreement of two thirds of the provinces covering at least two thirds of the Canadian population.

The CPP benefits are financed by employer and employee contributions, as well as investment earnings. Employers and employees share the cost equally at 4.95% of contributory earnings.

The maximum retirement pension is equal to 25% of Canada's average earnings. However, the majority of beneficiaries do not receive the maximum amount due to uneven earnings and interrupted careers. In 2016, the average payable retirement CPP pension at age 65 was about 60% of the maximum.

The introduction of the Canada Pension Plan in 1966 was a result of extensive political and societal discussions (Slide 7)

In 1960s, a large number of Canadian workers were facing a sharp reduction in living standards upon retirement. Therefore, the design of the plan needed to address two goals: a relatively quick reduction of poverty among seniors and providing younger generations with an efficient way to save for their retirement. To make CPP benefits meaningful for older workers, the transition period for eligibility for the full retirement pension was set to be quite short at 10 years.

The CPP and QPP in combination with the OAS were very successful in reducing poverty amongst seniors. The low-income rate among seniors fell from 37% in 1971 to 22% by 1981. Currently, Canada enjoys one of the lowest old-age low-income rates compared to other OECD countries (6.7% in 2012).

Evolving conditions over time including lower birth rates, increased life expectancies and lower growth in real wage led to increasing Plan costs. By the mid-1980s, the net cash flows had turned negative and part of the Plan's investment earnings were required to meet the shortfall. The contribution rate was gradually increased from 3.6% to 5.6% by 1996. In 1993, it was projected that the pay-as-you-go rate would increase to 14.2% by 2030, and the reserve fund would be exhausted by 2015. Younger workers were required to pay increasing contributions while not believing that they will eventually benefit from the CPP.

1997 changes were aimed at stabilizing the contribution rate (Slide 8)

As a result, following extensive consultations, the significant changes were brought to the CPP in 1997. These changes were based on the principles of increasing the level of funding in order to stabilize the contribution rate, improve intergenerational equity, and secure the financial state of the Plan over the long term. The contribution rate was increased to 9.9% and, while the benefits were not cut, their future growth was moderated.

The rapid increase in contribution rate ensured an excess of contributions over expenditures for the next two decades. It was decided to invest this excess on the market and, thus, to move the CPP from pay-as-you-go to partially funded financing called steady-state funding. The CPP contribution rate remains at 9.9% for the past 13 years.

The 1997 amendments also strengthened the CPP governance framework in order to avoid future problems similar to the ones that arose during the 1990s. The frequency of statutory periodic reviews of the CPP by the federal and provincial finance ministers was increased to every three years. During such reviews, ministers examine the financial status of the Plan and make recommendations as to whether benefits or

contribution rates, or both, should be changed. In making their decision ministers rely heavily on actuarial reports on the CPP prepared by our office. These reports are tabled in Parliament and are reviewed by an independent panel of Canadian actuaries chosen by the UK Government Actuary's Department.

27th CPP Actuarial Report: the Plan is expected to be able to meet its obligations over long term (Slide 9)

Today, the Canada Pension Plan is in a good financial health. The 27th CPP Actuarial Report as at 31 December 2015 found that the minimum contribution rate needed to sustain the Plan is 9.79% of contributory earnings for the year 2019 and thereafter. This rate is below the legislated contribution rate of 9.9%.

The report also found that under the 9.9% contribution rate, the annual contributions are projected to cover annual expenditures up to 2020. Further, the assets are projected to grow to almost half of trillion by the end of 2025. However, even with the projected growth in assets, contributions are and will remain the main source of revenues for the CPP. In 2050, it is projected that the contributions and investment income will represent 67% and 33% of total revenues, respectively.

Triggers of 2016 changes to the CPP (Slide 10)

Today we are witnessing another set of important changes being brought to the CPP – the expansion. While the Canadian retirement income system is performing generally quite well, concerns regarding potential insufficient retirement saving were raised. These concerns were triggered by several factors. The decline in the employer-sponsored pension plans coverage, especially in the private sector, resulted in 62% of Canadian labour force not being covered by employer-sponsored pension plans. Further, financial market volatility and low interest rates environment following the 2008-2009 financial crisis complicate individual saving strategies. The Department of Finance, Canada, found that, today, one in four families approaching retirement—1.1 million families—are at risk of not saving enough.

It was felt that the expansion of the Canada Pension Plan is the best way to address the issue of undersaving. Before beginning the work on the expansion design, the stewards of the CPP have agreed on principles. Modest – to leave enough space for private savings, gradual – to minimize impacts on businesses and individuals, and fully funded - to minimize intergenerational transfers.

Federal and provincial Minister of Finance reached in June 2016 a historic agreement on the CPP expansion (*Slide 11*)

Under this agreement, the amount of retirement pension is increased to provide a replacement rate of 33% compared to the current replacement rate of 25%, and the range of covered earnings is increased to 114% of the Year's Maximum Pensionable Earnings (YMPE). The additional benefits are financed by additional contributions equal to 2% of earnings up to the YMPE, and 8% of earnings between the YMPE and 114% of the YMPE. Further, the expansion is phased-in over the period of seven years.

Finally, to help offset the impact of the CPP contributions on the current consumption of eligible low-income workers, income tax provisions were modified.

Gradual Accrual of Additional Benefits (*Slide 12*)

This slide presents illustrative examples of additional CPP benefits for individuals with varying incomes and years of contributions to the Additional CPP. Each year of contributing to the enhanced CPP will allow workers to accrue partial additional benefits and full Additional CPP benefits will be available after 40 years of making contributions.

Additional CPP strengthens link between contributions and benefits (*Slide 13*)

The financing objective of the Additional CPP is consistent with the gradual accrual of additional benefits, and the fact that no past service liability is created at the time the Additional Plan is introduced. It is formulated as follows: to have constant contribution rates that result in projected contributions and investment income that are sufficient to fully pay the projected expenditures of the Additional CPP over the long term.

Both the financing of the Additional Plan and its benefits design strengthen the link between contributions and benefits.

Insufficient rates provision of the current CPP serves as a safety net (*Slide 14*)

One of the most important elements of the Base CPP governance is the insufficient rate provision. This provision prescribes how the contributions and benefits are modified in the case the contribution rate needed to sustain the Base Plan is higher than the legislated rate. However, this provision is activated only in the case the CPP stewards (federal and provincial Ministers of Finance) do not agree on what needs to be done. That is, the primary responsibility with respect to the CPP financial health remains with the Ministers.

The analogous provisions are introduced for the Additional CPP. As for the Base CPP, every time actions are required, the first priority is given to the recommendations of Ministers. However, there is an important difference with the Base CPP: the provisions will be activated if additional contribution rates fall outside specified ranges, that is, the additional contribution rates may be lower than the legislated rates to trigger adjustments. Once again, such structure is consistent with the financing objective of the Additional CPP, as well as with the wish to maintain the intergenerational equity.

Prescribed actions with respect to the benefits and contributions will be defined in future regulations.

For the Additional CPP, investment income is the major source of revenues
(Slide 15)

Our office has prepared the 28th CPP Actuarial Report that projects future cash flows for the Additional Plan. The gradual accrual of the additional benefits will result in about 40 years of positive cash flows to the Additional CPP, and in the accumulation of sizable assets. As shown on the slide, by mid 2050s the Additional CPP assets are projected to exceed the Base CPP assets and will continue to grow. It is projected that the additional assets will reach \$1.3 trillion by 2050.

The financing approach of the Base CPP implies that the contributions are and will remain the major source of the base Plan revenues. However, the adopted financing approach for the Additional Plan results in the investment income being the major source of revenues. This will make the Additional Plan more sensitive to investment environments as illustrated on the next slide.

Additional CPP will be sensitive to investment environments *(Slide 16)*

The higher reliance of the additional Plan on investment income results in higher sensitivity of the minimum additional rates to changes in the investment environment. For example, a decrease in the best-estimate rate of return of 1% results in about a 30% increase in the minimum additional contribution rates compared to about an 8% increase in the minimum contribution rate for the Base CPP.

To recognise that, the 28th CPP Report assumes that the Additional CPP assets mix would have lower volatility and, as a result a lower expected real of return on the additional assets (a difference of 40 basis points between the Base and Additional CPP assumptions).

Do persistent low-income workers benefit from CPP enhancement? (Slide 17)

The main goal of the Additional CPP is to improve the retirement preparedness of Canadians. At the same time, concerns were raised that the CPP enhancement is not necessary for low-income workers due to their entitlement to the GIS benefits.

So let's look at whether persistent low-income workers benefit from the enhancement. We define persistent low-income workers as those who have at least 10 years of earnings between 10% and 50% of the YMPE. Out of the CPP contributors' cohort aged 65-69 in 2014, 50% or 0.7 million could be qualified as persistent low-income workers (green and blue shares of the pie).

The necessary condition to benefit from the CPP enhancement is the participation in the labour force. Thus, we should look only at persistent low-income individuals with sufficient labour force attachment, that is those who have less than 20 years absence from the labour force (blue share of the pie). It may surprise you, but out of this group more than 75% were not receiving GIS in 2014 and thus would fully benefit from the CPP expansion. Due to the family nature of the GIS benefit, this percentage is even higher for women.

Increasing lower earnings threshold would reduce replacement rates (Slide 18)

Excluding earnings up to a certain threshold (for example 50% of the YMPE) from the expansion would reduce the ability of the Additional Plan to close retirement savings gap. As shown on this slide, an individual earning 50% of the YMPE throughout his/her career would not benefit from the expansion at all if only the earnings over the 50% of the YMPE are covered by the expansion. Further, for an individual earning 100% of the YMPE, the total replacement rate would reduce from 32% to 28%.

Conclusions (Slide 19)

To conclude, the viability of the Canadian retirement income system is a joint responsibility of both federal and provincial governments. This process results in a need for a political dialogue and a will to reach political consensus.

Such political dialogue in combination with strong governance and sound actuarial analysis are three pillars needed to maintain financial sustainability of the Canadian system and to ensure the adequacy of benefits it provides.

Thank you and I will be happy to answer your questions.