Presentation to Panama Officials: Viability of Canadian Retirement Income System: Political Consensus and Sound Actuarial Advice Jean-Claude Ménard, Chief Actuary, and Assia Billig, Actuary Office of the Chief Actuary, OSFI Panama City, Panama, 16 November 2016

Good afternoon. It is our pleasure to be here to speak about the Canadian retirement income system.

Office of the Chief Actuary (*Slide 2*)

Let us introduce ourselves. I am the Chief Actuary of the Office of the Chief Actuary (OCA) of the Office of the Superintendent Financial Institutions, and I am accompanied by an actuary from our office – Ms. Assia Billig. 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*)

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 first two pillars 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 low-income rate 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 benefit is also payable to approximately one third of basic OAS beneficiaries who have little or no other income. All OAS Program benefits are indexed to inflation and are currently payable from age 65.

The main goal of the OAS is reduction of poverty rate among seniors. The program is perceived by the society as a fair program since it gives all Canadians the right to a dignified old age.

OAS expenditures are related to Canada's economic growth by expressing them as % of the Canadian Gross Domestic Product (*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. Today, in Canada, the majority of low-income seniors are single and live alone; a significant portion of this group are also women. This year, the income-tested supplement was increased for low-income single seniors benefiting about 900 thousands vulnerable individuals.

As you can see on this slide, the cost of the OAS Program is quite modest and stays in the range of 2% to 3% of the Canadian GDP. The increase in cost until 2030 is driven largely by retirement of the baby boomers generation and increasing life expectancies. The later reduction is attributable partially to higher projected incomes of new retirees, resulting in lower GIS benefits.

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. The CPP was initially designed as a pay-as-you-go plan with a small reserve and a low combined employer-employee contribution rate of 3.6%. It was recognized at its inception that this rate will increase in the future. In addition, 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).

Changing economic and demographic conditions jeopardized future of the CPP (*Slide 8*)

Evolving conditions over time including lower birth rates, increased life expectancies and lower productivity 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.

In 1996, the governments held cross-Canada consultation on the future of the CPP (*Slide 9*)

This situation led to the cross-country consultations on the future of the CPP held in 1996. As a result of these consultations it became clear that the majority of Canadians wished to preserve the CPP and that quick actions were required in order to solve the problems facing the Plan. Before launching into the discussion on particulars, eleven governments (ten provincial and federal) made a very important step: they have agreed on nine principles to guide their decisions (these principles may be found in the Appendix to the presentation). It took another 18 months for details to be worked out and agreement to be reached.

1997 changes were aimed at stabilizing the contribution rate (Slide 10)

The 1997 changes were based on the principles of increasing the level of funding in order to stabilize the contribution rate, improving intergenerational equity, and securing 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 steady-state contribution rate is a rate that stabilizes the asset to expenditures ratio over time. It was also decided that new benefits should be fully funded.

The CPP contribution rate remains at 9.9% for the past 13 years.

1997 amendments strengthened CPP governance framework (Slide 11)

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. If a triennial review reveals that major Plan changes are required, Canadians must be informed prior to any such changes being made.

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.

Self-adjustment provisions serve as a safety net in case of political impasse *(Slide 12)*

The insufficient rates provisions were put in place to provide the Plan with a safety net without diminishing politicians' responsibility for the Plan's future. They are activated only if the financial sustainability of the Plan is jeopardized and the federal and provincial Ministers of Finance can't reach a decision on how to rectify the problem.

These provisions share the increased cost between contributors and beneficiaries: they cause an automatic increase in the legislated contribution rate and freeze benefits in pay until the next review.

CPP27: the Plan is expected to be able to meet its obligations over long term *(Slide 13)*

Today, the Canada Pension Plan is in a good financial health. The 27th CPP Actuarial Report as at 31 December 2015, tabled in Parliament on 27 September 2016, 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 is projected to grow to almost half a 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.

Triggers of 2016 changes to the CPP (Slide 14)

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 retirement undersaving 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 empoyer-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. Once again, 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.

Historical agreement on the CPP expansion was reached by federal and provincial Ministers of finance in June 2016 (*Slide 15*)

After extensive discussions, the federal and provincial Ministers of Finance have reached in June 2016 a historical agreement on the CPP expansion. The legislation formalizing this agreement was introduced in Parliament early October 2016, and is currently being debated.

Under this legislation, 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 a period of seven years.

Additional CPP strengthens link between contributions and benefits (Slide 16)

The benefits are expected to fully accrue over 40 years, but workers close to retirement will be able to accrue partial benefits. Thus, unlike in 1966, when the full benefits were available after 10 years, the introduction of the additional Plan doesn't create

past service liability. It is also ensured that today's young worker will benefit the most from the expansion.

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.

The 28th CPP Report was tabled in Parliament on 28 October 2016 (Slide 17)

As required by the CPP legislation, the OCA has prepared the 28th CPP Actuarial Report which provides cost estimates with respect to the additional Plan. This report was tabled in Parliament on 28 October 2016.

The report found that the minimum constant first and second additional contribution rates needed to fulfil the additional Plan financing objective are 1.93% and 7.72%, respectively. These rates are lower than the legislated rates of 2% and 8%. Under these rates, future projected contributions and investment income are sufficient to cover the future expenditures, as shown by the open group balance sheet. The slide also shows that the ratio of additional assets to the following year's expenditures stabilises at the level of 25 over the long term, thus ensuring the stability of the contribution rates.

For the additional CPP, investment income is the major source of revenues *(Slide 18)*

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 19)

The 28th CPP Report assumes that the additional CPP assets mix is equivalent to a portfolio invested 50% in equities and 50% in fixed income securities. This portfolio volatility is 9.2% which is lower than the volatility of 11.4% of the assumed base CPP portfolio. The reduced volatility translates to a lower expected real of return on the

additional assets (a difference of 40 basis points between the base and additional CPP assumptions).

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 30% increase in the minimum additional contribution rates compared to about 8% increase in the minimum contribution rate for the base CPP.

Conclusions (Slide 20)

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 we will be happy to answer your questions.