

Welcome to *Seeing Beyond Risk*, the new quarterly electronic publication from the Canadian Institute of Actuaries (CIA). Each issue will present the latest actuarial thinking from experts on some of the key issues facing Canada and Canadians, such as savings and pensions, risk management, insurance, and our healthcare system. Actuaries play an essential role in Canada's economy and its development, and these articles will offer invaluable actuarial insights into problems affecting millions of people. We are sure you will find them informative and thought-provoking, and we encourage you to distribute them among your friends and colleagues.

Jacques Lafrance, FCIA, President of the CIA

## FIXING CANADA'S RETIREMENT 'CRISIS'

**IN A POLL OF 200 PENSION PLAN SPONSORS** taken by a large Canadian consulting firm in June 2013, 71 percent agreed that the country is in the midst of a retirement crisis. No doubt the proportion of the general public who would concur with this assessment is even higher.

This view, however, is not supported by the facts and may be leading us down a dangerous path of unnecessarily excessive pension reform.

The poverty rate among Canadian seniors is only half that for the working-age population and less than a third of what one finds among seniors in countries such as the U.S., Japan, and Switzerland<sup>1</sup>. Moreover, most new seniors have been doing better than simply avoiding poverty. To appreciate how much better, we need to define "consumption replacement ratio": Consumption includes all spending except for "investments" such as paying the mortgage, buying property, saving for retirement, and child-raising costs. What most of us want in retirement is a consumption replacement ratio of 100 percent, meaning we can continue our discretionary spending unabated, thus maintaining our standard of living.

Statistics Canada tells us that at least 55 percent of recent retirees have consumption replacement ratios of 100 percent or higher<sup>2</sup>. If we also take into account what I call Pillar 4 assets—stocks and bonds held outside of tax-assisted vehicles, bank accounts, real estate, and business equity—that percentage is higher again since Canadians hold more assets in Pillar 4 than in the traditional three retirement pillars combined<sup>3</sup>.

Why, then, do we think we have a crisis?

One reason is that we tend to overestimate our retirement income target. For middle-income earners, achieving 100 percent consumption replacement requires retirement income of about 50 percent of gross final average earnings, which is a far cry from the widely accepted target of 70 percent. (This calculation assumes that cash outlays on the above "investments" have ended by retirement. If they haven't, then maybe one should not be retiring.)

Consider a couple with average earnings who plan to retire at age 62 when their mortgage is paid and their children are on their own. If the couple actually saved at the rate necessary to achieve a 70 percent income target, it would severely lower their pre-retirement standard of living and result in a consumption replacement ratio after retirement of 150 percent<sup>4</sup>.

While there is no present crisis, future retirees will not have it quite so easy:

- **We are living longer and yet still expect to retire early.** The average retirement period is about twice as long as it was 50 years ago.
- With the risk-free real return down to about 1 percent versus 4 percent or more in previous decades, **our investments will likely not grow as quickly in the future.**
- **The build-up of our housing wealth is not repeatable and may not even be sustainable** given that we have the most expensive housing market in the world by some measures<sup>5</sup>.

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1. OECD (2011) Pensions at a Glance: Retirement-Income Systems in OECD Countries.

2. C. D. Howe Institute Commentary, December 2010, "Canada's Looming Retirement Challenge", Moore and Robson.

3. Pillar 1 is Old Age Security and Guaranteed Income Supplement, Pillar 2 is the Canada/Québec Pension Plan, and Pillar 3 includes registered retirement savings plans and pension plans.

4. *The Real Retirement*, Vettese and Morneau, chapter 10.

5. *The Economist* interactive house-price index, August 2013, "Prices against rents".

- **Old Age Security (OAS) and Guaranteed Income Supplement (GIS) payments will start later;** moreover, they will continue to shrink relative to earnings since the maximum benefit rises only with price inflation, not wage inflation.

As outlined below, there are steps that governments, corporations, and individuals can take to mitigate these problems before they become a truly serious concern.

## RETIRE LATER

We cannot have it all: maintaining our pre-retirement standard of living, retiring early, and having 100 percent consumption replacement in retirement. Something has to give. The conventional solution is to save more but that reduces pre-retirement consumption, which reduces our standard of living, and that is not something that most middle-income Canadians are prepared to do voluntarily. The more natural response is to retire later.

The average retirement age today is just 62<sup>6</sup>. By working a few years longer, say until 65, the retirement income challenge shrinks considerably. For a given savings rate, a three-year deferral of retirement increases the consumption replacement rate by 10 percent or more. Not that the individual retiree has any reason to care, but later retirement will also improve the dwindling worker-to- retiree ratio, which otherwise is expected to drop by 2036 from the current 4.1 to about 2.3<sup>7</sup>. (Note: a CIA task force has examined this issue in detail—for more information, see the Further Reading panel.)

Retiring later does not have to be as onerous as it sounds. It will actually be welcomed by most workers whose jobs are not too physically demanding. Most 60-somethings I know would like to stay engaged in the workforce if only they can escape the grind of working long hours, week in and week out. And clearly, more of them have opted to continue working. As of 2012, the labour force participation rate among 65–69 year olds was 24.5 percent, which is more than double the comparable figure in 2000<sup>8</sup>. It is a fair bet that much of this involved part-time employment or phased retirement.

If this trend is to continue, though, we need to confront the elephant in the room. Dollar for dollar, older workers are not regarded by their employers as being as productive as their younger counterparts and this perception may not be entirely wrong. If chess ratings are anything to go by<sup>9</sup>, the decline in mental productivity that occurs with age trumps the positive effects of experience. Employers will need to be persuaded that older workers are worth the money. Certainly there is a level of compensation at which older workers remain valuable to their employers—but that level might be lower than what those workers have grown to expect.

## FURTHER READING

[Issues Related to Increasing the “Retirement Age”](#), a report from the CIA Task Force on Retirement Age, offers expert analysis on the factors influencing the age at which Canadians stop work.

The CIA’s [Pension Vision](#) sets out its views regarding workplace pension plans. Further public positions look at [defined contribution](#) and [defined benefit](#) plans respectively.

[This communique](#) highlights the importance of retirement savings and why finance ministers should discuss them.

## INDEX OAS AND GIS TO WAGE INCREASES

The maximum OAS and GIS payable to new retirees should rise by wage inflation. Otherwise, they will constitute a shrinking percentage of average pay over time<sup>10</sup>. Given the important role that OAS and GIS have played in reducing poverty, there is no justification for allowing Pillar 1 to wither away. It makes sense that once OAS and GIS payments start for a given retiree, they should then be indexed to price inflation rather than wage inflation. This is consistent with workplace pension plans and the Canada Pension Plan (CPP), where the benefit is indexed to wage inflation during the accumulation phase but to price inflation during the payout period.

## EXPAND THE CPP BUT RAISE THE “NORMAL” RETIREMENT AGE

In the same survey cited earlier, 65 percent of plan sponsors agreed that government pension plans (Pillars 1 and 2) should provide middle-income workers a “reasonably comfortable” retirement but that registered retirement savings plans and pension plans would still be needed to arrive at a 100 percent consumption replacement rate. Another 26 percent felt that the goal should be even less ambitious; i.e., to simply ensure that middle-income Canadians avoid poverty in retirement. Only 9 percent felt that government programs should be enough by themselves to allow the middle class to maintain their standard of living after retirement.

The broad consensus therefore suggests that government pensions alone should replace about 75 percent to 90 percent of pre-retirement consumption in the case of middle-income households. (Lower-income Canadians already have 100 percent consumption replacement.)

Expressing our goal in this fashion immediately reveals a problem with expanding the CPP. Consider two couples, both

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6. Historical data on retirement ages are based on self-reporting of retirement status. For future recommendations and forecasts, we will assume “retirement” means the substantive cessation of employment, meaning that no more than 25 percent of total income comes from employment earnings.  
 7. These numbers are based on the projected populations of the 18–64 versus the 65 and higher age groups as published by Statistics Canada, 91-520-X, and not strictly working to retiree populations.  
 8. Statistics Canada Table 282-0002.  
 9. “Does Mental Productivity Decline with Age? Evidence from Chess Players”, Bertoni, Brunello, and Rocco, University of Padova, March 2013.  
 10. “Canada’s Looming Retirement Challenge”, Moore and Robson.

with household incomes that put them between the 40th and 60th percentile of the population. Couple A are homeowners with two children while couple B are renters and have no children. My calculations show that a combination of CPP, OAS, and GIS already delivers 85 percent consumption replacement for couple A. If we improve the CPP benefit rate enough to get couple B to 85 percent, the consumption replacement rate for couple A climbs to 125 percent before reflecting Pillar 3 or 4 savings. This is something that 91 percent of plan sponsors deemed excessive. Note that the profile of couple A is much more common than that of couple B.

This suggests that the only change needed to the CPP is to increase the earnings ceiling, possibly to \$75,000 or \$100,000, and to leave the benefit rate intact at 25 percent. Given that expectations have been raised, perhaps the better response is to increase the CPP benefit rate slightly, say to 30 percent, and to increase the normal retirement age to 67 at the same time. This would align the CPP with OAS and GIS, nudge Canadians toward later retirement, and still provide a little more pension at 65 (even after early retirement reduction) than participants receive now.

Whatever the changes, we should strongly resist the urge to phase in changes quickly. An accelerated phase-in of changes

could not be fully funded because the contribution rate required to achieve full funding would be exorbitant. As a result, our children and grandchildren would be paying the bill. Again. It seems very few Canadians are aware that they are currently paying 9.9 percent (including the employer portion) for a CPP benefit that is worth closer to 6 percent, a legacy of the original phase-in of CPP between 1966 to 1976, which left a huge deficit.

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## CLOSING THOUGHTS

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As we decide on changes to the retirement income system, we would do well to remember the maxim *primum non nocere*: “first, do no harm.” For the most part, Canadians are being well served by our existing system. One of its most appealing yet least talked-about features is that it gives the average Canadian some choice—consume more when one is still young and have at least an adequate level of income in retirement, or save now and defer consumption until one’s retirement years. Some of the proposals for improving benefits would take that choice away.

Any changes we do make to the system need to be well considered and openly debated since they will inevitably be with us for a long time.

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