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## CERA OP-ED: MANAGING SYSTEMIC RISK IN RETIREMENT SYSTEMS

By Minaz H. Lalani

*Note: This article first appeared as part of a joint SOA/CAS/CIA essay collection titled "Risk Management Part Two—Systemic Risk, Financial Reform, and Moving Forward from the Financial Crisis." This collection is sponsored collaboratively by the SOA/CAS/CIA Joint Risk Management Section, the SOA Investment Section, the International Network of Actuaries in Risk Management (IN-ARM) and the Enterprise Risk Management Institute International (ERM-II). The full collection can be found at [SOA.org/library/essays/fin-crisis-essay-2011-toc.aspx](http://SOA.org/library/essays/fin-crisis-essay-2011-toc.aspx).*

Retirement systems are built on three foundational pillars:

- employer-sponsored pensions
- government pensions
- pensions provided by personal savings.

Historically, the total pension consists of the following distribution: 50 percent coming from employer-provided pensions; 25 percent from government benefits; and the remaining shortfall of 25 percent being provided from personal savings.<sup>1</sup>

Employer-sponsored pensions have gradually been shifting pension risk<sup>2</sup> to individuals by moving from defined-benefit plans to defined-contribution plans.<sup>3</sup> The effect is that the portion contributed by employer-sponsored pensions toward the retirement pillar is expected to be significantly reduced to around 30 percent (from 50 percent). In addition, government pensions are under review, and the long-term expectation is that government pensions will be reduced, or paid at a later retirement age, so as to reduce the cost of these government programs. The anticipated

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shortfall (in excess of 50 percent), due to the reduction in employer-sponsored and government pensions, is expected to be recovered from personal savings.

For the short to medium term, employers and the government will be transferring the provision of retirement to individuals who will be ill-equipped to have adequate savings for retirement.<sup>4</sup> The inadequacy of savings will be compounded by the fact that individuals will require more savings as a result of increased life expectancy, transfer of postretirement medical costs onto individuals, and the expectation of lower investment returns in the "new normal" world.<sup>5</sup> In combination, these trends will yield unintended consequences. In my view, without any explicit actions, these trends will result in social unrest (society may not accept these changes), sociological impact (e.g., society will have declining living standards), organizational workforce impact (employees will be unable to afford retirement, thus working longer and deferring their retirement age), institutional impact (financial companies will have to restructure their product offerings) and restructuring of the economy (financial regulators will have to deal with the decline of corporate defined-benefit pension plans as a major player in the financial market).

In this essay, potential actions are recommended for key stakeholders to manage the unintended consequences of a systemic risk "brewing" within the retirement system today.

#### Governments

In countries where a pay-as-you-go approach is used to deliver government pensions, it is imperative that such governments stay at arm's length and facilitate a process to fund future pension obligations through a separate trust apart from the general revenues of the government.

Countries may want to adopt Canada's approach, as it has in place an effective working model consisting of a separate trust and robust governance structure. In addition, all countries should remove uncertainty and have a long-term policy clearly articulated in legislation that states the level of government pension that individuals can expect to receive. This would allow individuals and their pension advisors to better focus on retirement planning for the future. Since the expectation is that individuals should be directly responsible for a significant portion of their retirement income, governments could also provide meaningful incentives (e.g., tax credits) to individuals who attain a threshold level of savings for adequate retirement as prescribed (after collaboration and agreement with pension experts), or to individuals who participate and complete a certain prescribed set of educational courses on retirement planning.

Governments could consider sponsorship of voluntary programs to facilitate provision of retirement for small- to medium-size companies that currently do not provide pensions to their employees.<sup>6</sup>

## Employers

In most countries, it is a fact that employers have been moving to defined-contribution plans. This is due to increasingly complex pension funding rules and unclear, ambiguous surplus ownership rules for defined-benefit plans. The result has been the underfunding of pension plans to minimize future actuarial surpluses. It may be too late to reverse the trend away from defined-benefit plans; however, simplicity and clarity of pension legislation could slow the trend. Most employers have introduced auto-enrollment, auto-deductions and other auto-features in defined-contribution plans to ensure that their employees adequately save for retirement. This is a great start; however, the underlying issue is that employer contributions to defined-contribution plans are significantly less than to defined-benefit plans. Employers should be voluntarily asked to revisit their defined-contribution plan designs and mirror the aggregate contributions paid into the defined-benefit plans. Failing that, minimum defined contributions should be legislated so that all employers contribute toward an employee's retirement account whether it is in a registered/qualified or nonregistered/nonqualified account. Of course, there will be push-back and resistance from employers, but governments need to consider the long-term social and societal impact of inadequate retirement income. Some forward-looking employers may welcome such an initiative, as it could allow such organizations to effectively manage their workforce. In other words, employers will be able to develop robust growth plans to manage attrition and retirement in a socially acceptable manner (employees would have adequate income to retire on).

## Financial Institutions

Investment managers/counselors, life insurance companies and trust companies are key stakeholders in the retirement industry. Traditionally, each of them has fulfilled an important role of managing assets and/or administering defined-benefit pension plans. Also, in the emerging defined-contribution market, these stakeholders have continued to be major players fulfilling similar roles. However, these institutions need to switch their focus on delivering innovative retirement and investment products, and implementing creative retirement educational programs. For example, an innovative retirement retail product would allow employees to manage their longevity risk and crystallize their retirement income by an annual/periodic purchase of deferred annuities over the employee's working lifetime. Creative retirement education programs could incorporate dynamic modeling of employees' retirement income, taking into account employees' income from all sources, and incorporating expenses from personal data and comparative mainstream data. Currently, pension funds are very active in the financial markets from an investment and governance standpoint. With the decline of defined-benefit plans, and subsequently the maturity (pension outflows will exceed contribution,

expenses and investment) of these plans, there will be a material impact on the role of pension funds in the financial marketplace. It would be prudent for market regulators to anticipate the consequences and develop strategies for a revised financial infrastructure.

#### Individuals

Retirement risk has the most impact on individuals who have to make provision for their retirement either as pension plan members or non-pension members, and as citizens who have to fund government pensions directly (via pension contributions) or indirectly (via tax payments).

Unfortunately, individuals do not have the ability to take actions to minimize systemic risk. However, individuals can take steps to understand their personal affairs and make adequate provision to save for retirement. An individual can be helped with retirement with proper education from the government, employer and financial institutions (as stated earlier).

Collectively, individuals who care about retirement risks can vote out nonperforming governments, or choose their employer; however, this is a "tall order," and it is easier said than done.

At present, we do not "appear" to be in an immediate crisis mode on retirement; therefore, none of the above approaches may seem relevant. Unfortunately, retirement risk is an emerging and "silent" systemic risk; such a risk, if left unaddressed, will creep into our society with damaging consequences. Prudence dictates that all stakeholders should take immediate action to evaluate the systemic risk posed by a retirement crisis.

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<sup>1</sup> For simplicity, the rounded percentages are determined on a generalized framework of pensions in Canada for a career individual earning \$55,000 with 35 years of service. Of course, such percentages will differ by salary bands, service periods, and eligibility to government pensions and by country. Despite this, the commentary in this essay is still applicable for most circumstances and for other countries with a mature retirement system.

<sup>2</sup> Pension Risk: a complex and multifaceted concept. It incorporates the following key risks: investment, interest rate, inflation, salary, longevity, demographic, retirement adequacy, governance and regulatory.

<sup>3</sup> Defined-Benefit Plan: a plan which provides a pension based on a defined-accrual formula based on years of service and salary history; usually, an employer will take most of the pension risk (e.g., volatility of ongoing contributions, or payment of any solvency deficiency) related to such a plan.

<sup>4</sup> Defined-Contribution Plan: a plan based on a defined-contribution formula, which grows with investment return over the individual's working period to provide an accumulated fund for provision of pension; usually the individual is responsible for most of the pension risk (e.g., investment risk) related to such a plan. Canadian Institute of Actuaries (2007), Planning for Retirement: Are Canadians Saving Enough? CIA and University of Waterloo.

<sup>5</sup> "New Normal" is the phrase coined by PIMCO to describe an economic environment of de-leveraging, re-regulation and de-globalization resulting in slower, long-term economic growth.

<sup>6</sup> Ambachtscheer, Keith (2008), The Canada Supplementary Pension Plan, Towards an Adequate, Affordable Pension for All Canadians," C.D. Howe Institute Commentary No. 265.

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