

# The Impact of The Equity Risk Premium and Population Aging on The Canadian Retirement Savings System

Doug Andrews, MBA, FCIA, FSA, CFA  
Aon Consulting, Toronto, Ontario

## **Abstract**

Increasing longevity will impact retirement savings adversely. For defined benefit social insurance and private pension plans, its primary impact will be to increase costs. For accumulation-type savings arrangements, either group or individual, increasing longevity will lead to less adequate benefits than anticipated.

A critical component with respect to funded or partially funded retirement savings programs will be the rate of investment earnings achieved. Most private retirement plans and certain partially funded social insurance plans, such as the Canada Pension Plan, invest in equities. Accordingly, the return achieved on equity markets will be an important determinate of the level of benefits delivered and the costs associated with the retirement savings system. With increasing longevity of the population, the resultant savings gain or loss to the retirement system of the equity risk premium being greater or less than its forecast level will be magnified.

This paper reviews current research with respect to the equity risk premium. It uses an estimate of the equity risk premium derived from such research, combined with data regarding projected increases in mortality, and applies this information to the Canadian retirement income system. Based on the estimates of the equity risk premium and the current actuarial assumptions used to model the Canada Pension Plan, it shows the projected impact on that plan. It presents a similar analysis for other Canadian retirement savings. The paper concludes that if the lower estimates of the equity risk premium materialize, when combined with the increasing longevity of the Canadian population, the retirement savings system faces significant challenges.

