Actuarial Kickoff Lecture

"Effects of Gainsharing Provisions on the Selection of a Discount Rate for a Defined Benefit Pension Plan"

Lecturer: Robert J. Rietz, FCA, MAAA

Friday, September 8th 2017 3 - 4:30 p.m., Wells Hall B117

Event open to the Public

In this talk we’ll examine the effect of gainsharing provisions on the selection of a discount rate for a defined benefit pension plan. This approach uses a traditional actuarial approach of discounting liabilities using the expected return of the associated pension fund. A stochastic Excel model was developed to simulate the effect of varying investment returns on a pension fund with four asset classes. Lognormal distributions were fitted to historical returns of two of the asset classes; large company stocks and long-term government bonds. A third lognormal distribution was designed to represent the investment returns of alternative investments, such as real estate and private equity. The fourth asset class represented short term cash investments and that return was held constant. The following variables were analyzed to determine their relative impact of gainsharing on the selection of a discount rate: hurdle rate, percentage of gainsharing, actuarial asset method smoothing period, and variations in asset allocation. A 50% gainsharing feature can reduce the discount rate for a defined benefit pension plan from 0.5% to more than 2.5%, depending on the gainsharing design and asset allocation.

About Robert J. Rietz: Robert has been active in insurance since the 1970's. In 1967 he earned the National Merit Scholar at the State of Illinois. He worked at Lincoln National Life Insurance from 1970 to 1975, in Fort Wayne Indiana. Also in 1970 he graduated with a BSc in Mathematics with high honors from MSU’s Honors College. After his time at Lincoln National Life he joined The Wyatt Company (now Willis Towers Watson) in Detroit, from 1975-1999. From 1995 to 2001 he was appointed and reappointed in 1998 by Governor John Engler as the Public Representative on the Board of the Michigan Public School Employees Retirement System (MPSERS). MPSERS has about 450,000 participants and over $40B in assets. Also starting in 1995 Robert was a Member of Board of Conference of Consulting Actuaries, till 2003. He was the president of the Conference of Consulting Actuaries from 2000 to 2001. In 1998 he was awarded the John Hanson Prize for the Best Paper on Employees Benefits, “Early Retirement Subsidies; A Plan Design Whose Time Has Passed?”. Robert joined Blue Cross Blue Shield of Michigan (BCBSM) as the General Director of Rewards in Detroit, from 1999-2001. From 2000 to 2004 Robert was a member of the Board of the American Academy of Actuaries. After BCBSM, in 2001 he joined Deloitte Consulting LLP as the Director and retired in 2010. During his time at Deloitte he was as the Chief Pension Actuary from 2005 to 2008. Robert was the Vice President of Professionalism of the American Academy of Actuaries from 2002 to 2004. Starting in 2009 to 2014 Robert was a Member of the Actuarial Board for Counseling and Discipline; last two years as the Chair. In 2010 he was part of the magazine of the actuarial profession, as the editor/columnist of Contingencies. Robert received the Lifetime Achievement Award of the Conference of Consulting Actuaries in 2011. Starting in 2014 Robert was appointed by Governor Rick Snyder as a Member of the Investment Committee of the Detroit General Employees Retirement System, this is ongoing.

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