TITLE: IFRS Convergence: The Role of Stochastic Mortality Models in the Disclosure of Longevity Risk for Defined Benefit Plans

SPEAKER: Yosuke Fujisawa, University of Waterloo,
CO-AUTHOR(S): Johnny Siu-Hang Li, University of Waterloo

ABSTRACT: In recent years, the International Accounting Standards Board (IASB) and its International Financial Reporting Standards (IFRSs) have made great strides toward achieving global accounting convergence. Various countries, including Japan and Canada, are either adopting or converging their national standards with IFRSs. The IASB is now undertaking a comprehensive review of the accounting standards on post-employment benefits, an important part of which is about the quantitative disclosures of longevity risk. In this paper we examine how stochastic mortality models may assist with such disclosures. Specifically, we present three concepts, (1) longevity value-at-risk, (2) probability of longevity deficit, and (3) probabilistic corridor rule, that can help defined benefit plans identify the materiality of their longevity risk exposure. We illustrate these concepts with two case studies, one of which is based on a multinational company with longevity risk exposure across multiple populations.