

Weihao Choo (FIAA) / +65 97585996 / chooweihao@gmail.com

Current work experience

Senior Actuarial Executive at MSIG Holdings (Asia) – 2011 to present

- Reporting to regional actuary and working with two junior executives
 - Regular and ad-hoc projects for Hong Kong, Thailand, Singapore, Malaysia
 - Involved in various aspects of actuarial control cycle – see below
 - Technical work plus written and oral communication
 - SAS, Igloo, ReMetrica, Tableau, Emblem, Excel, VBA, Word
1. Stress testing and capital modelling
 - Local regulatory and Solvency II requirements
 - Discuss with business units to identify and quantify key solvency risks
 - Model parametrisation, result validation and analysis of VaR/TVaR
 2. Liability valuation
 - Short and long tail classes
 - IBNR projection, expense and risk margin review
 - Quarterly and year-end reporting
 3. Portfolio monitoring and pricing
 - Design of portfolio monitoring framework
 - Segmentation of workers' compensation and motor portfolios
 - Analysis of premium volume, rating strength and claims
 4. Investment modelling
 - Short and long term modelling for various asset classes
 - Optimal asset allocation and investment risk appetite statement
 - Assessment of new investment strategies
 5. Business planning
 - Projection of future financial loss ratios
 - Reflect loss ratio trends and underwriting strategies
 - Best estimate and stretch targets

Academic research

Part time PhD in Actuarial Studies at Macquarie University – 2011 to present

Main focus on capital modelling and allocation:

- Analyzing risk measures including VaR and TVaR
- Aggregation of random, dependent loss variables
- Understanding role of standalone loss behaviour

- Impact of dependence structure / copula
- Spillover effects of entities in distress

Other interest topics:

- Role of aversion behaviour in pricing and risk measurement
- Who is to blame when something bad happens due to a sequence of unfortunate events?

Research papers and conference presentations:

- The two-sided tradeoff insurance premium (2013), *IME Congress, Copenhagen*
- Determining and allocating diversification benefits for a portfolio of risks (2010), *ASTIN*
- Loss reserving using loss aversion functions (2009), *Insurance: Mathematics and Economics*

Qualifications

- 2012: FIAA
- 2008: BCom Actuarial Studies Honours (1st class), Macquarie University
- 2007: BCom Actuarial Studies and BSc Statistics (GPA 4/4), Macquarie University
- 2007: GradStat of Royal Statistical Society, UK

Other work experience

Actuaries Institute – 2013 and 2014

- GI MCQ writer
- GI MCQ scrutineer

Associate at Ernst and Young Singapore – 2011

- Life insurance audit
- Motor insurance in Asia
- Prophet model review

Intern at Watson Wyatt – 2008

- General insurance valuation
- Report writing

Tutor at Macquarie University – 2006 to 2008

- Tutorials at all levels of statistics and actuarial science
- Occasional lecturing
- Writing and marking exams / assignments

Other skills and hobbies

- English and Mandarin
- Sightseeing, jogging