IAA AAI AFIR-ERM Finance, Investment & ERM

REFERENCE LIST
November 2019

Article of the month:

12th Annual Survey of Emerging Risks

Victor Chen, Steve Hodges, Dave Ingram, Ronora Stryker, Jan Schuh (SOA)

The Casualty Actuarial Society, Canadian Institute of Actuaries, and the Society of Actuaries' Joint Risk Management Section is pleased to make available results from the 2018 Emerging Risks Survey, the twelfth in the series. Conducted by Max J. Rudolph of Rudolph Financial Consulting LLC, the survey incorporated a set of Emerging Risks defined by the World Economic Forum as the basis for several of the questions. The survey also included questions related to current risk management topics. Read More

Atuarial Models

Long-Duration Contracts Targeted Improvements Overview & Approach - Estimating the Liability for Future Policy Benefits

Louis Mannello, Prashant Panavalli, Schamel Johnson (DHG)

Accounting Standards Codification (ASC) 944, Financial Services — Insurance, is the source of authoritative Generally Accepted Accounting Principles (GAAP) to be applied to long-duration insurance contracts for which GAAP is applicable. In August 2018, the Financial Accounting Standards Board (FASB) issued Accounting Standards Update (ASU) 2018-12, Targeted Improvements to the Accounting for Long-Duration Contracts (the ASU or the Update), which will amend and update ASC 944. The objective of the Update is to improve, simplify and enhance the financial reporting of long-duration contracts providing financial statement users with more useful information about the amount, timing and uncertainty of cash flows related to those contracts. The Update affects all insurance and reinsurance companies that issue long-duration contracts, including life insurance, long term care, disability income and annuities. Read More

Ratemaking Reformed: The Future of Actuarial Indications in the Wake of Predictive Analytics

Gyasi Dapaa (SOA)

The journey of achieving the actuarial aspiration of equitable pricing through increased segmentation has not been without twists and turns. It started with one premium for all; moved to meager segmentation with univariate analysis and later with Bailey's minimum bias (BMB) procedure; and finally to generalized linear models (GLMs), which allow us to segment along limitless dimensions. However, despite the capacity of GLMs to determine both the base rate and the policy risk relativity, they are currently used to determine only the latter. This article argues for a necessary cultural change that will enable actuaries to advance pricing excellence and also capitalize on the exploding reserves of data available to them. Read More*

** This is the first article from the SOA's Risks Embedded in Predictive Models: Call for Essays*

Predictiveness vs. Interpretability

Kimberly Steiner, Boyang Meng (SOA)

A common criterion for the selection of predictive models is predictiveness: one model is considered better than another if it gives more accurate predictions of the outcomes of unknown events. Apart from making intuitive sense, this criterion is attractive because there are measures available (e.g., Gini coefficient, R^2) that allow us to easily rank models by predictiveness. This paper demonstrates that relying on predictiveness alone can result in choosing a model that exhibits behavior that may not be intuitive. It also demonstrates that this unintuitive behavior may not be immediately obvious. Read More*

** This is the second article from the SOA's Risks Embedded in Predictive Models: Call for Essays*

Actuarial Fairness in the Era of Machine Learning

Marjorie A. Rosenberg (SOA)

The purpose of this essay is to step back and ask ourselves the meaning of a fundamental tenet of actuarial practice, i.e., the notion of actuarial fairness. One can google the term and see thousands of links that all point to the concept of pricing risks related to the benefits. In fact, law has set precedence of establishing unfair or fair discrimination of premiums based on this concept. Read More*

** This is the third article from the SOA's Risks Embedded in Predictive Models: Call for Essays*

Financial Risk

Why is There a Secular Decline in Idiosyncratic Risk in the 2000s?

Söhnke M. Bartram, Gregory W. Brown, René M. Stulz (SSRN)

Except for relatively short but intense episodes of high market risk, average idiosyncratic risk (IR) falls steadily after 2000 until almost the end of our sample period in 2017. The decrease has been such that from 2012 to 2017 average IR was lower than any time since 1965. The secular decline can be explained by the fact that U.S. publicly listed firms have become larger, older, and their stock more liquid. The same changes that bring about historically low IR lead to increasingly high market-model R-squareds. Read More

Time for Transformation. Four key market forces are driving changes in the insurance industry

Bill Bade (The Actuary Magazine)

Time is the most important gift in life. It creates excitement in youthful anticipation of an overdue vacation or disappointment as the clock expires on a favorite sports team. Technology and new market opportunities long discussed as the future of the insurance world are already in practice at carriers—a few such examples include John Hancock, Lemonade and Oscar—and an influx of new market forces is creating opportunities for others. Many of these other carriers have invested, or will begin investing, in such opportunities. The remaining carriers that refuse to follow suit will eventually run out of time. Read More

Investments

Buy side builds bots to cut trade costs

(Risk.net)

It's not easy being Larry Fink. The head of BlackRock, who has seen the asset manager grow into a $7 trillion investment giant during his 30 years at the helm, is having to lay off staff. Around 3% of the firm's global employees. Fink is not alone. Greg Johnson, the boss at Franklin Templeton, is shedding as much as 5% of headcount as the firm adjusts to losing a fifth of its assets under management during the past five years. The retrenchment at these two companies is a familiar theme across. Read More

Banking

Leverage and Risk-Weighted Capital in Banking Regulation

Rainer Masera (SSRN)

This paper offers a critical survey of the swings in banking regulation, notably with reference to leverage and risk weighted ratios. At the outset the distinction is made between economic and regulatory capital and between private vs social costs/benefits of equity finance for banking firms. The inherent limitations of the transformation process of assets into a combined size-risk metric are brought to the fore, as well as the relative ease of circumventing the rules. The complexity of regulatory risk weighting creates significant (fixed) compliance costs. Unless appropriate tiering is adopted, a competitive distortion is created in favour of large banking institutions. These shortcomings were especially evident in the Basel II standard. With reference to the Basel III/IV framework it is argued that the two regulatory ratios (leverage and risk weighted capital) can be complementary, but require close and constant supervision, rather than the quest of an optimal (steady state) ex-ante calibration, which may prove time inconsistent. Emphasis should be placed on corporate governance and on the effective interaction between supervisory activity and internal controls. This is usefully complemented by stress-testing techniques which are less model dependent. Finally, potential drawbacks inherent in the latest regulatory change in the U.S. (community banks have now the option of abandoning tiered risk weighted requirements and adopting exclusively a leverage constraint, higher than 9%) are indicated. Read More

Trending topics

Coming of Age. How life insurers can cater to millennials as they become the largest living adult generation.

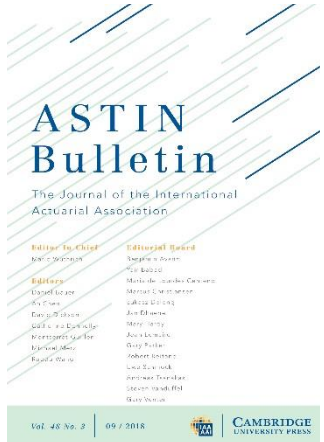
Ronald Poon-Affat (The Actuary Magazine)

Millennials have the distinction of being the most intimately observed and analyzed generation in human history. Simultaneously perceived as lazy/hard chargers, self-absorbed/altruistic and technology-addicted, this cohort can be both baffling and fascinating. Let's begin with some basic facts: The millennial population is, first of all, sizable. According to the U.S. Census Bureau, U.S. millennials will overtake baby boomers as the largest living adult generation in 2019, swelling to 73 million. Meanwhile, boomers, nearly half of whom are at retirement age or older, will shrink to 72 million in 2019, and Generation X, born between 1964 and 1979 (or 1981, depending on the source), will not overtake baby boomers in size until 2028. Read More

Resources (click upon image to access)

The Actuary Magazine:

ASTIN Bulletin:



Irish SoA Database: