Article of the month:

**Developing a Climate Risk Model Framework**

*Jared Forman & Julian Horky (DHG)*

Economists and scientists have studied climate risk for decades, however, climate science is relatively new to the private sector and regulators alike. Approximately five years ago, many of these stakeholders turned their focus to climate change and understanding its potential impact. Fast forward to present day; both groups are catching up at an unprecedented speed. This is a timely development as many see climate risk as a large driver of industry change which will allow innovators to reap profits while leaving laggards with losses and stranded assets. There are myriad impacts to the world as a result of the climate change issue and one thing is for sure; climate risk consideration and the management thereof will remain a hot topic for years to come. [Read more.](#)

**Actuarial Models**

*A spatial machine learning model for analysing customers’ lapse behaviour in life insurance*

*Sen Hu, Adrian O’Hagan, James Sweeny, Mohammadhossein Ghahramani (Cambridge.org)*

Spatial analysis ranges from simple univariate descriptive statistics to complex multivariate analyses and is typically used to investigate spatial patterns or to identify spatially linked consumer behaviours in insurance. This paper investigates if the incorporation of publicly available spatially linked demographic census data at population level is useful in modelling customers’ lapse behaviour (i.e. stopping payment of premiums) in life insurance policies, based on data provided by an insurance company in Ireland. From the insurance company’s perspective, identifying and assessing such lapsing risks in advance permit engagement to prevent such incidents, saving money by re-evaluating customer acquisition channels and improving capital reserve calculation and preparation. [Read more.](#)

**Actuarial Teams Built for Uncertain Times**

*Sady Zupancic & Karen Lopez (theactuarymagazine.org)*

The insurance talent landscape is experiencing a number of shifts. Ongoing modernization projects, technological advancements and a tumultuous economic climate all are impacting how insurers—and their actuarial departments—operate. Hybrid teams, which leverage a variety of employment types, are becoming the norm as organizations embrace new ways of working. [Read more.](#)

**ERM**

**ERM in the Spotlight**

*Lori Widmer (rmmagazine.com)*

In times of great upheaval for industries or financial markets, organizations often turn to the formal discipline of enterprise risk management. After the 9/11 terrorist attacks and the 2008 financial crisis, for example, ERM gained traction as many organizations realized the significant drawbacks of a traditional siloed risk management approach. But widespread ERM adoption remains stalled. It is not for lack of awareness of risk’s increasing complexity. According to the 2019 State of Risk Oversight report from North Carolina State University’s Poole College of Management, 59% of business executives believe the volume and complexity of risks are
increasing extensively over time. The report also found that 68% of organizations have recently experienced an operational surprise due to a risk they did not adequately anticipate. Read more.

Regulation
Banks fold climate, pandemic, and cyber risks into CCAR

*Steve Marlin (risk.net)*

Banks have long faced an uphill task to accurately gauge the financial risks posed by climate change, pandemics and cyber attacks, and to put a dollar value on them for the purpose of capital planning. But while such risks have previously been treated as tail events, the coronavirus has made clear they can significantly affect the losses firms have to project as part of regulatory-mandated stress-testing. Read more.

Regulators tell banks they can choose and replacement rate for Libor

*Hannah Lang (American Banker)*

Banking regulators on Friday said financial institutions can choose any reference rate to replace the London interbank offered rate, or Libor, which is set to sunset in 2021. The statement comes after multiple small and midsize banks earlier this year told the Federal Reserve, Federal Deposit Insurance Corp. and Office of the Comptroller of the Currency that the regulators’ preferred Libor replacement — the secured overnight financing rate— was ill-suited to them since they don't have many ties to the repo market. They argued SOFR was more appropriate for larger banks. Some banks have also expressed concern that SOFR could result in a “mismatch” between bank assets and liabilities in the event of economic stress. Read more.

Financial Risk
BoE warns banks: start preparing for a higher carbon price

*James Ryder, Sharon Thiruchelvam (Risk.net)*

Risk Live: stress tests should assume rising carbon price, regardless of government policy, says Breeden. The financial industry should plan for the arrival of a uniformly higher carbon price, irrespective of the speed of government action on the issue, a senior regulator at the Bank of England has said, adding that carbon pricing would play a significant role in the bank’s forthcoming climate stress-testing of large banks and insurers. “Just because there isn’t a [carbon] price that has been set by governments doesn’t mean that we, as financial professionals, should think that price is zero,” Read more.

Quants worry inflation risks could sink stocks

*Rob Mannix (Risk.net)*

Research from ex-BoE official Sushil Wadhwani shows stocks may struggle when inflation is high. A former central bank official turned buy-side quant is warning investors not to get carried away with the stock market boom. Sushil Wadhwani, who sat on the Bank of England Monetary Policy Committee from 1999 to 2002, said equities could take a hit if inflation ticks higher in the coming years. That depends on how central banks respond as Covid-battered economies begin to recover. If they act too slowly and prices run out of control, equities are likely to leave investors disappointed... Read more.
Resources (click upon image to access)

The Actuary Magazine:  
ASTIN Bulletin:  
Irish SoA Database:

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