

## Insurance Insight Series

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## Insight, IFRS 17, and Innovative Technologies – Drivers of Change in the Insurance Industry

Performance optimization through business insight, dealing with IFRS 17 in a post-Solvency II world, and the challenges associated with stress testing for insurance firms in the US. These were the focus areas for Moody's Analytics at this year's Moody's Insurance Summits in London and New York.

Insurance executives gathered in both cities to talk trends, challenges and opportunities in the global insurance sector, hearing viewpoints from Moody's Analytics, Moody's Investors Service, and insurance industry practitioners.

This year's Summit offered thought-provoking discussions, insights, and presentations on some of the key themes that are affecting insurers globally. Here is a round-up of the key topics discussed during the sessions delivered by Moody's Analytics at this year's Summit:

### Strength in Insight

As low interest rates continue to drive boardroom conversations within insurance companies, there is an increasing appetite from insurers to better understand the dynamics of value creation in their business. This need to find equilibrium between risk management and yield is nudging forward-looking business insight to the top of senior management's agenda.

"We are seeing a shift toward forward-looking insight and analysis, and the need from insurers to understand the impact of macro-type events on the business – from political uncertainty to understanding the impact of a recession," said panelist Brian Robinson, Senior Director of Product Development at Moody's Analytics. "Assessing the impact of each scenario allows management to develop and test forward-looking action plans that can be implemented in response to particular events."

### Moving Risk Beyond Simply Compliance

With the dust barely settled on Solvency II, Moody's Analytics panelists took on the topic of how insurers can best use their Solvency II infrastructure for business projection and optimization.

"We have been working with insurers through the Solvency II process and they are now moving beyond that pure regulatory compliance and capital calculation, and are looking

at how they can use those models and apparatus on a forward-looking basis,” said panel moderator Colin Holmes, Managing Director of Insurance Solutions at Moody’s Analytics. “It is about looking at how insurers can maximize the investments that they made to deal with Solvency II for financial decision-making apparatus to run business more effectively.”

## IFRS 17 in a post-Solvency II World

Talk of how the insurance industry can overcome Solvency II fatigue and press ahead with International Financial Reporting Standard (IFRS) 17 – the new standard governing insurance contracts – was ratcheted up a gear, with panelists exploring the challenges and opportunities in implementing the new reporting standard in the wake of Solvency II.

“As accounting standards and solvency regulations continue to evolve, the most significant change for many insurers is the introduction of the new IFRS 17 accounting standard, which impacts how profits are reported,” added Brian Robinson. “As a result firms must invest time, sooner rather than later, to understand the implications of IFRS 17 on their profitability profile.”

## Dealing with Discount Rates Under IFRS 17

It has been well documented that IFRS 17 has created significant challenges for insurers, including constructing discount rates for insurance contracts under the new standard.

IFRS 17, which allows for two different approaches to yield curve construction and discounting (“top-down” and “bottom-up”), introduces a requirement for insurers to use fair value and market-consistent approaches to liability valuations as the basis for reporting their accounts. Moody’s Analytics sees a significant challenge for insurers in clearly differentiating between the separate components of their balance sheet without introducing artificial noise or volatility into their reporting.

“There is likely to be significant scope for accounting mismatches arising from the varied treatment of different aspects of their business,” said Nick Jessop, Senior Director of Research at Moody’s Analytics. “These accounting mismatches, in theory, are minimal when assets are measured using fair value options [as opposed to amortized costs]. However, careful consideration has to be made of the approach to constructing the discount rates for the insurance contracts to ensure that the

net finance results clearly [and exclusively] reflect changes in economic conditions.”

## Yield Curve Construction – Where Next?

Following a recent assessment of the different components and options of the yield curve methods, Nick Jessop recommended that insurers think carefully about the following points: construction of yield curves for associated (or reference) asset portfolios; estimate of credit risks and especially the associated credit risk premia; and estimate of illiquidity, both the degree of liability illiquidity and market price of illiquidity.

“Given the requirements for granular modeling of different portfolios of contracts, practical considerations such as proliferation of yield curves, reusability of analytics produced in each step of the calculation, data availability, suitability, and ease of automation [particularly where a correction has to be made specific to a particular line and cohort of business] are also important,” concluded Nick Jessop.

[Click here](#) for more information about constructing discount rates under IFRS 17.

## Stresses with Stress Testing: A US Perspective

*Challenges and Solutions with Firm-Wide Stress Testing and Integration of Financial Projection*, a breakout session at the New York Summit zeroed in on the stress testing landscape in the US, exploring the associated challenges of stress tests, such as data management and modeling infrastructure. Other areas recognized as challenges for firm-wide stress testing and integration of financial projection include lack of integration between models, datasets, and functions, and the need for a holistic, integrated view of the balance sheet.

“Historically, stress testing in the US has been fairly fragmented in terms of modeling and process, which can present a set of challenges for insurers, such as lack of transparency, and difficulty explaining the stress test results from a business perspective,” explained panel moderator Youyou Tao, Associate Director at Moody’s Analytics. “To get value out of your stress testing model, insurers must understand the assumptions, limitations, suitability of the model, and the controls and governance that are required around data and processes.”

## Power of Proxies

Timeliness of results was also identified as key challenge for US insurers when conducting stress tests. Panelists discussed the over-reliance on heavy models, which can be slow to run and time-consuming to set up, and the need for a timely, top-down model that a chief risk officer can easily understand.

“Insurers are being smart in thinking about how they can use proxy techniques to more quickly understand their stress test results, and the impact on business,” said Colin Holmes during the New York Summit. “Firms, particularly in relation to Solvency II, have developed proxy modeling techniques, which are commonly used in the insurance industry to replace valuations that would otherwise require Monte Carlo simulation, to aid calculation efficiency. This type of modeling is important in terms of helping firms go beyond, ‘we have got a heavy model but it is too slow to operate’, to actually speeding up their stress tests and embedding results into their decision-making process.”

For more insight on proxy modeling techniques and principles, read [Fitting Proxy Functions for Conditional Tail Expectation: Comparison of Methods](#), and [Proxy Model Validation](#).

## Future Insight

» **Creating A Single View:** To achieve business insight, insurers must create a holistic view across key business metrics, which will encourage them to take a closer look at their reporting dashboard and its capabilities. A flexible dashboard that

provides the c-suite with the information they require to perform drill-down and comparison analyses across different business forecasts will be a key requirement for many insurers who are investing in their business insight agenda.

- » **Breaking Down Silos:** The key to embracing an insight-driven organizational mind-set is to first break down the silos within your organization, and bring together risk, actuarial and finance. Integrating systems, processes and data for both reporting and planning activities will drive operational efficiencies and ensure consistency across the business
- » **Emphasis on Data:** From collecting data as part of a quarterly stress test to managing the level of granularity required under IFRS 17, the importance of data management remains a priority area for insurers globally. Technology will play an important role in helping insurance firms gather, consolidate, and quality-check the large disparate sets of data from various systems required for calculations and reporting.
- » **Need for Speed:** To help senior management make decisions faster and more effectively, new concepts and techniques, such as cash flow flexing and mathematical proxies, will gain momentum among insurers.

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