

# Capital Model Reviews

Capital models have evolved from only satisfying regulatory requirements to an integral part of business decision making. In the current environment where there is higher uncertainty, (e.g. inflation and the geopolitical landscape) understanding the impact of key judgements and changes to data inputs and parameters is even more important as these can have a more material impact than in steady state. Capital models will require good governance and controls to ensure the business is not caught out by unexpected results and can withstand scrutiny from regulators.

Dynamo partners with capital teams to ensure their models are robust, transparent, and fit for purpose. We focus on providing direct first line support to capital teams by working collaboratively to challenge and improve their models and processes, including model governance and change. Our experts have extensive experience in all areas of capital models and governance directly through capital modelling, validation work, and model implementation experience through our Psicle engagements.

## KEY SERVICES



**Deep dive** reviews of selected areas of internal models to support future development or in response to previous validation or regulatory findings.



**IMAP and model change application** reviews to help capital teams anticipate challenge from second line and regulators with the objective of helping capital teams increase the possibility of change approvals.



**Model operation** reviews to ensure capital modelling teams are running efficient processes.



**Model best practice** advice based on our extensive knowledge of capital and other actuarial models.



**Model governance** reviews ensuring an appropriate level of governance is applied with sufficient evidencing and sharing of information with stakeholders.



**Design and implementation with automation** either using our Psicle product to automate the calculation of regulatory and economic capital and supporting processes (e.g. reserving, technical provisions and business planning), or using non-Psicle solutions based on our expertise and experience in designing and implemented automated models.



“ Robust challenge of capital models and associated processes. ”

## Key Technical Capabilities

### ✓ Underwriting risk modelling

We are experienced in exposure management, catastrophe modelling, and pricing and can provide insights in modelling underwriting risk.

We have built and reviewed models for a variety of clients with a focus on meeting model use objectives.

### ✓ Reserve risk modelling

We are thought leaders in traditional and emerging stochastic reserving.

We have reviewed and built various models for reserve uncertainty capital models, IFRS17 risk adjustment, and stress and scenario testing purposes.

### ✓ Financial risks (market risk and credit risk) modelling

In addition to models for (re) insurers, we have expertise and a Psicle offering on credit risk in the banking sector, which allows us to draw on best practices.

### ✓ Model dependencies

We are experienced in statistical and market leading methods for modelling dependencies and can advise clients on where and how dependencies could be considered in their models.

### ✓ Model governance and documentation

Our experts have direct experience of reporting through the governance hierarchy and can advise capital teams in order to withstand robust challenge from internal and external stakeholders.

We have reviewed a range of internal model governance processes and developed detailed documentation frameworks and templates for clients.

### ✓ Reporting

We can use our Psicle software to automate reporting from capital processes. This ranges from partial to full automation of internal and external reporting such as analysis of change, and regulatory reporting requirements. This allows teams to focus on interpreting results and communicating with stakeholders, rather than on operating the process.

## Our Experts



**Gurmeet Ghuman**  
Associate Director, Actuarial

Gurmeet has expertise in Solvency II capital modelling, model validation, and business planning and has a keen interest in tech applications. Previous roles include Head of Validation at Lloyd's of London and various actuarial roles at Beazley.



**Adrian Ericsson**  
Group Managing Director and Founder

Adrian has diverse practical experience covering capital management, reserving, risk management and pricing. Previous roles include Chief Actuary for Argo International, UK Head of Capital for Swiss Re P&C and Capital Modelling and Solvency II expert at Deloitte.

## About Dynamo

Experience, expertise, and service. All part of our DNA.

We are actuaries, problem solvers, and strategic thinkers. As a highly innovative team, we are passionate about understanding how the world of business-critical modelling is evolving, and how organisations need to adapt. We apply our mathematical skills, professional expertise, and intelligent automation platform to help our clients navigate their transformational journey with confidence.

For further information on Dynamo and Psicle, including case studies, visit [www.dyna-mo.com](http://www.dyna-mo.com) or email us at [psicle@dyna-mo.com](mailto:psicle@dyna-mo.com)