



## Stochastic Modeling

**Stochastic Modeling** is an approach for estimating the range, and likelihood thereof, of various financial results for a business line or lines. It incorporates much of what has variously been called DCAT (Dynamic Capital Adequacy Testing) and DFA (Dynamic Financial Analysis). But it goes beyond that.

At Dion Durrell, we use our proprietary modeling tools to model businesses on a “total balance sheet” basis (i.e. both assets and liabilities on an integrated basis). In the insurance world, our ability to model both Life and Non-life business lines, represents state of the art capital modeling technology. In addition, our tool's capabilities extend to other applications such as Enterprise Risk Management, Reinsurance Strategy Optimization, Asset Liability Management, Business planning / forecasting on a total balance sheet basis, Reserving, and Rating Agency Analysis, to name a few.

Our proprietary tool, named **DIVA**, has been developed as an integral part of our consulting operations for the last decade. It has been built from the ground up expressly for stochastic modeling, in a computationally efficient and user-friendly way. **DIVA** meets the robust risk management requirements contemplated under emerging principles based capital regulatory requirements such as Solvency II. **DIVA** is ready now for the regulatory model framework that will ultimately be adopted by most insurance regulatory regimes. **DIVA** is a powerful, easy to use risk modeling software that enables users to better understand the risk dynamics of their organizations. And all of it measured in the financial terms that are relevant to senior management.

While developed for Dion Durrell internal use, **DIVA** is now available for clients to license for their own use. **DIVA** has been architected so that it can readily and easily be embedded within a company's operations at all levels (e.g. the business operating unit, group corporate level) and integrated in its decision making process. Moreover, **DIVA** has been designed to integrate in a seamless manner with other corporate systems.

Dion Durrell have consulted to a variety of organizations utilizing **DIVA**, including insurers, captives, reinsurers, rating agencies and insurance regulators.