

# DYNAMIC FINANCIAL ANALYSIS

*Balancing Risk and Return.*

DFA brings together the various components of the insurance process to forecast future results and the associated level of risk. Simulation techniques make it possible to estimate a range of outcomes and discover areas of strength and weakness. Regulators and rating agencies are increasingly looking for companies to incorporate DFA into their decisions.

The foundation of a DFA model is set by fitting severity and frequency curves to the detailed claim experience from a database. Catastrophes are typically handled separately due to their random and large impact. A thorough understanding of the reinsurance program is also necessary to net down the direct losses. Other key assumptions regarding growth, investments, inflation and expenses add extra depth to the analysis.

Since each assumption is defined statistically with a midpoint and range, the simulated loss ratios and profits are also expressed with ranges of confidence. This is where the true benefit of DFA is found: by giving depth and shape to a company's business model, rather than just a point estimate, management is better able to make informed decisions.

The simulation process helps shed light on the model's most sensitive assumptions. For example, a company might learn that the annual number of catastrophes is the most meaningful item to the bottom line. It can then structure its reinsurance to protect it from a heavy cat year. On the other hand, a company might find that it is too conservative and decides to shift some assets to stocks in the hopes of increasing its expected returns.

Contact Steve Streff at [steve@streffinsurance.com](mailto:steve@streffinsurance.com) or 651-385-7500 to learn more about DFA modeling and its unique ability to help you better manage risk.

