Sessional Research Event: Model Risk – Daring to open the Black Box

London, 23\textsuperscript{rd} March 2015

Introduction

On Monday 23 March the Model Risk Working Party presented their research paper to members of the Institute and Faculty of Actuaries (IFoA).

With the increasing use of complex quantitative models in applications throughout the financial world, model risk has become a major concern. Such risk is generated by the potential inaccuracy and inappropriate use of models in business applications which can lead to substantial financial losses and reputational damage.

With this in mind the IFoA commissioned a Working Party to look into this area further. The objectives of the Working Party were to:

1. Raise industry awareness and understanding of model risk
2. Develop a framework for management and measurement of model risk
3. Foster good practice around the governance and control of models

For SL Investment Management, models are an essential tool to help investors understand the complexities of the range of investment products we manage. The team at SL have market leading modelling expertise and appreciate the potential interactions and sensitivity to assumptions built into models.

However communicating the nature of inherent uncertainty within models to a wide range of types of investors is one of the key challenges for the SL team. With this in mind, at the end of 2013 SL’s Senior Actuary Louise Witts volunteered her time to research this area further and joined the Working Party.

Summary of findings

The Working Party’s work to date has culminated in the Sessional Paper “Model Risk: Daring to open up the black box” which was presented to the IFoA on Monday 23 March. For more details please refer to the IFoA’s website:

http://www.actuaries.org.uk/events/one-day/sessional-research-event-model-risk-%E2%80%93-daring-open-black-box
Nirav Morjaria, the chairman of the working party, presented a brief summary of the paper. Andrew Hiscox, Chair of the Risk Management Board then proceeded to open the floor to questions. The majority of the Working Party, including Louise, were present to hear the lively debate and support Nirav in answering a multitude of questions from the floor.

One of the key areas of debate of relevance to SL was around the Working Party’s proposals in connection with the culture of model risk users. This considers the fact that different people have differing levels of trust in models, and varying levels of belief in the uncertainty inherent in models. Hence communications in connection with models needs to allow for this.

The actuaries present for the debate discussed these ideas in some detail, in some cases considering the makeup of their decision making forums (Boards, Committees etc) and the way this worked, or needed to work in the future.

For Louise and SL, the Working Party’s research reaffirmed the robustness of many aspects of SL’s approach to managing model risk. Louise commented,

“At SL Investment, we already take a risk averse approach to modelling, with much of our complex financial analysis performed within the industry standard Towers Watson ‘MoSes’ modelling environment. However, as always, some useful ideas have come out of the Working Party’s research which we plan to incorporate into our modelling processes going forward.”

For more details on SL’s range of services please contact Louise Witts, Senior Actuary, or Patrick McAdams, Investment Director.