Capital Models – Extracting the Value

Jason Doughty - Head of Economic Capital - Hiscox

Sebastien Colombo – Lloyd’s & London Market Lead - SAS

7th October 2014
Capital Models – Extracting the Value

Jason Doughty
Head of Economic Capital

7th October 2014
Current Model Focus

- Solvency II Compliance
- SCR Calculation
- Risk Management Framework
Model Wish List

- What Impact do certain actions have on the risk profile?
- How will the risk profile move in the future?
- How quickly will those changes need to be funded?

"As I see it, the main motto in our business is: Know your risks!"

Nikolaus Von Bomhard, CEO, Munich Re Group
Model Inhibitors

- Runtime
- Difficulty in modifying assumptions
- Need for Specialised Skills
- Flexibility in Use
- Results not readily accessible throughout the business
Database Solution

- Generated data is retained. Allowing recasting without rerunning the model.
- Database skill set more readily available in the marketplace.
- Analytics technology available to make results more accessible to the end user

“Anything that is measured and watched improves”

Bob Parsons, Founder GoDaddy.com
Analysis without a Model Re-run

Exposure change

Rate Change
How using SAS assisted

- Processing of large datasets (at times over 100gb)
- Programming language relatively easy to learn
- Robust and Repeatable
- Skill set readily available
- Low Infrastructure Investment, Good Documentation and Large Organisation
An example of good working relationship – Capital modelling reporting

10 Weeks

- 20th May – New requirement discussed face to face
- 3rd June – VA Agreement completed
- 2nd July – VA up & running
- 29th July – Case proven
- August – more data & tests!
Questions
1. Anti-Fraud – CNA
- 15 new network cases in 3 month preventing up to $20m in fraudulent claims
- $2m savings within 12 month of implanting SAS Fraud Framework for Insurance
- Run weekly predictive models on both structured and unstructured claims data
- Claims analysed within Commercial Property / Auto, General Liability and Worker Comp.

2. Customer Engagement - Chubb
- Loss ratio improved by 2 to 4 points
- Initial project netted 10 times ROI – Home inspection
- Increased model accuracy and confidence
- Internal users adopt models built in SAS 100% of time

3. Underwriting - AIG
- $14 million in new, low-risk business, representing 100% segment growth
- Avoided a potential loss of $75 million from certain executive liability accounts
- $10 million deferred tax credit
- Real-time view of risk exposure