

Risk model run-time enhancement (Life Insurance)

Client Situation

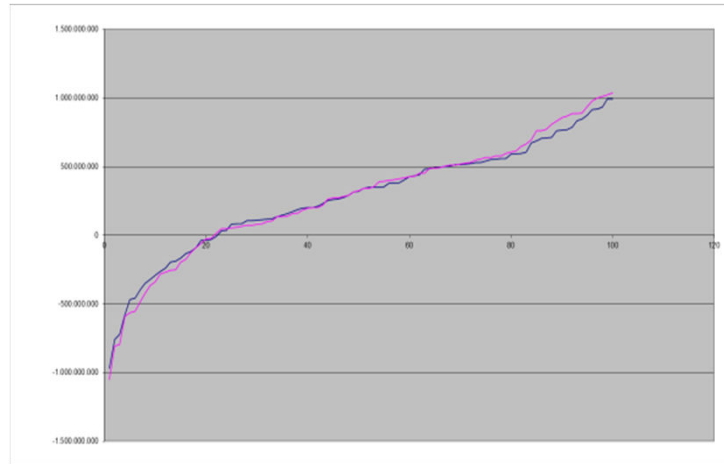
- International insurance group – Belgian subsidiary
- Exhaustive internal life risk model with numerous options modeled and many assets classes requiring stochastic simulations
- Group requirements to produce a large number of sensitivities on key indicators
- Pressure from group to produce results in shorter and shorter delay

Issues

- In the full model as existing when starting the project, required simulations would have last around one month
- Timing not compatible with Group deadlines requirements

PVFP comparison

Full and run-time enhanced model



Reacfin Contribution

- Define and propose alternatives in order to enhance the run time
- Choose the most relevant approach given the requirements
- Implement within the existing model, those alternative calculations
- Model testing, operationalization and documentation
- Continuation of developments in case of changes in the full model

Results & Benefits

- Run time saving of 50% in comparison with the full model
- On average and in CE, deviations <2%
- Multiple uses for risk management
- Fulfilled group requirements with high appreciation level
- Optimal ratio "Accuracy / run time"