

UNDERTAKING SPECIFIC PARAMETERS – APPLICATION FILE

All dummy numbers & graphs for illustrative purposes only

Client Situation

- Belgian subsidiary of an international group
- Mono-liner and leader on its market
- Too small for entering the scope of the group's internal model but very penalized by the capital requirements of the standard formula
- Has decided to apply for the use of undertaking specific parameters for the calibration of non life premium and reserve risks

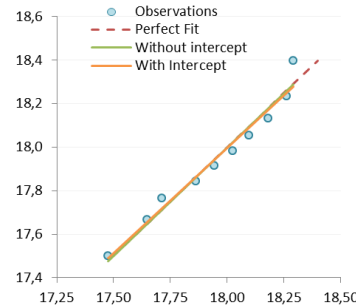
Issues

- Necessity to be compliant with evolving regulation (official definitive texts unknown at the beginning of the project)
- Limited resources with actuarial and solvency II knowledge in the company
- Need of an external support for the application file to be ready on time (development of some parts of the file and validation of others)

Premium Risk



$$\sum_{t=1}^T \pi_t(\hat{\delta}, \hat{\gamma}) \left(\ln\left(\frac{y_t}{x_t}\right) + \frac{1}{2 \cdot \pi_t(\hat{\delta}, \hat{\gamma})} + \hat{\gamma} - \ln(\hat{\sigma}(\hat{\delta}, \hat{\gamma})) \right)^2 - \sum_{t=1}^T \ln(\pi_t(\hat{\delta}, \hat{\gamma}))$$



Reactfin Contribution

- Development of a calculation file for the calibration of the latest methods allowed for the USP computation and comparison with the results under QIS5 calculations
- Development of a methodology and a tool to verify the assumptions underlying the calculations methods
- Review of the application file to be sent to the supervisor and guidance for improvement
- Technical support for meetings with supervisor

Results & Benefits

- Complete application file – in line with the latest requirements – ready to be sent to the supervisor on time
- Confidence in the methodologies implemented
- Increased knowledge and expertise in the technical computations and assumptions
- Potential very high gain on required capital if the file is approved
- Decrease of the capital requirements for the non life underwriting risk by +/- 35%