

Leak proof testing (Life Insurance)

Client Situation

- International insurance group
- Complex life model with numerous interactions between assets and liabilities
- Group very demanding with respect to the consistency between the different indicators and this also across the different valuation frameworks

Issues

- Reconciliation issues between items of the economic balance sheet
- Evolution of some indicators between two reporting periods partly unexplained

Leak proof testing

Results before and after changed

Segment	PVFP	BEL dir	BEL ind	Delta (%)	PVFP_corr	Delta_c orr (%)
all	227.732.095	3.755.290.951	3.754.952.008	0.01%	227.732.095	0.01%
allger	40					%
allpb	-1					%
pb	20					%
wpb	20					%
exlgrcompl						%
exlgrdec						%
exlgrret	-1					%
exlgrsdec						%
exlgrret						%
exlitr	1					%
exlits	1					%

Undisclosed

Reacfin Contribution

- Method definition and implementation and this, in line with undertaking requirements
- Implementation of the needed model changes in order to decrease the level of leaks in the model
- Interaction with Group for the issues regarding the economic scenario's generator
- Testing automation in the model with results at different level of granularity
- Team training session on the topic

Results & Benefits

- Better reconciliation of the results ; leaks under the 1% mainly explained by the finite numbers of simulations and thus by the scenario's generator
- Enable to understand the profitability transfers between products during the projection
- After these changes, undertaking could report for the first time to the group results meeting the required level of consistency