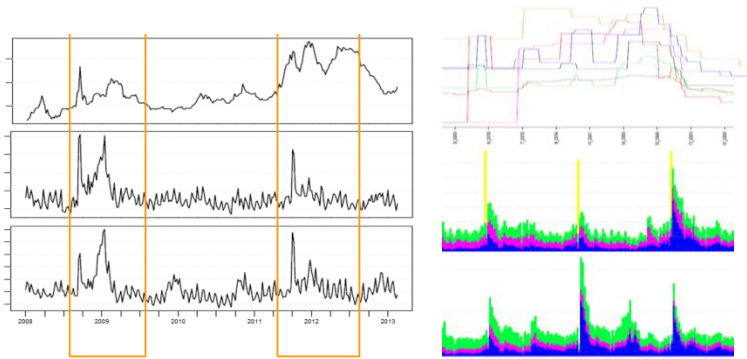


Deposit modeling for retail banks

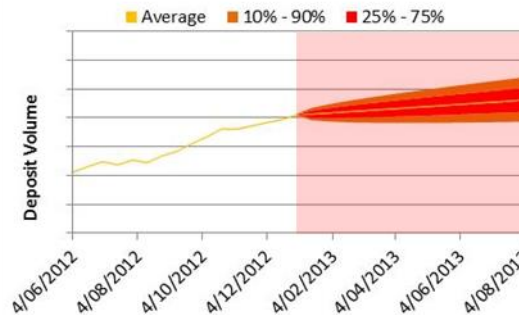
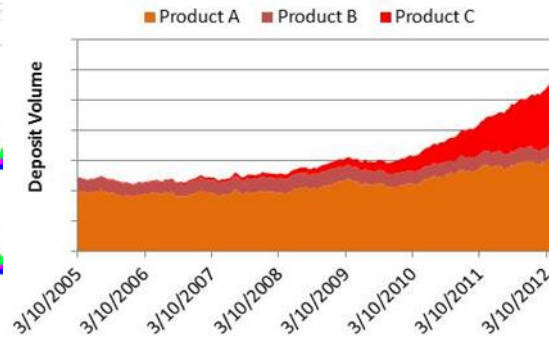


Client Situation

- Belgian retail bank
- Internal needs to assess the stability of the deposit balance (regulated products)
- Internal needs to assess the elasticity of the deposit balance (regulated products)
- Internal needs to evaluate the impact of deposit pricing on the bank P&L

Issue

- The quality of the model and tool delivered depends on the quality of the data offered by the client (availability and granularity of the data)



$$D_i(t) = P_{[i+t, i+k]} \left(\mathbf{1}_{\{r_{\max}=r_i\}} \sum_{j \neq i} d_{i,j} V_j(t) (\Delta(r_i - r_j))_+ + V_i(t) \sum_{j \neq i} \mathbf{1}_{\{r_{\max}=r_j\}} d_{j,i} (\Delta(r_j - r_i))_- \right)$$



Reacfin Contribution

- Implementation of a model completely created for this purpose
- Quantification of the sensitivity of the deposit volumes towards a range of explanatory variables
- Development of an end-user projection tool that simulates the effect of what-if scenarios
- Visualization of the data and the identified behavioral patterns
- Interactive workshops with the stakeholders during the model development cycle to validate all assumptions and to ensure a buy-in of the model

Results & Benefits

- Evaluation of the impact of past strategic and marketing actions and support tool in the development of marketing strategies
- Improved understanding of what drives the volumes on the deposit accounts
- Identification of the main competitors
- Assessment of the stability of the deposit portfolio