

PREPAYMENT MODEL

All dummy numbers & graphs for illustrative purposes only

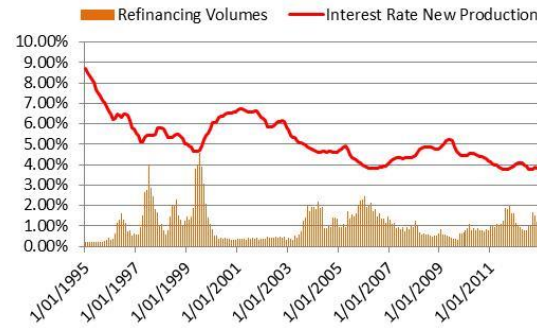
Client Situation

- Belgian retail bank
- Large mortgage loan portfolio with embedded prepayment options on its balance sheet;

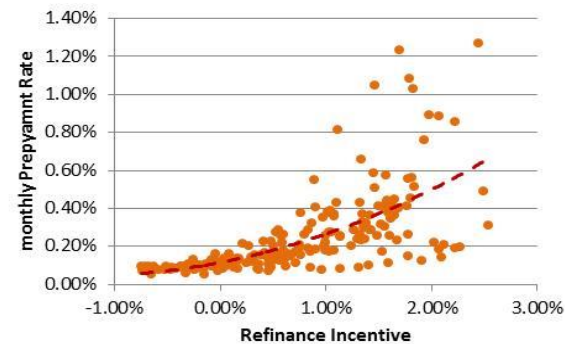
Issues

- The existing method to calculate the cost of the prepayment option included many short-cuts:
 - The method did not take into account all crucial parameters and information available (e.g. client profile);
 - The calculation was not performed on a granular level

Historical Prepayment Volumes



Explanatory Variables



Reacfin Contribution

- Development of a behavioral model that describes the prepayment behavior for a given client profile under different economic scenarios (see also ESG)
- Calibration of the model based on the historical prepayment data of the client
- Testing & validation of the model's predictive power
- Integration of the model in the existing pricing and risk systems of the client

Results & Benefits

- Quantification of prepayment option on the embedded value/profitability of the loan portfolio
- More accurate pricing of the prepayment cost in the new production
- More complete hedging arrangements