



Weekly Post: Sensitivity Analysis of Budget Plans ( OCC Questionnaire)

Dear Clients:

**Challenge:**

Yesterday, the OCC sent an extensive questionnaire to all ALM Vendors along with a letter stating “The purpose of this questionnaire is to update and expand the FFIEC member agencies (the agencies) information base on ALM models used to measure depository institutions’ interest rate risk (IRR).” The notice then continues:

“The questionnaire’s purpose is three-fold:

- gaining an understanding of the model’s features and capabilities for measuring short- and long-term IRR;
- understanding how depository institution management may use the model’s capacities to assess their institution’s IRR, **plus any sensitivity analyses of their budget, business plan, and or future strategies;**
- gaining information on other features the model offers, such as assessing dynamic balance sheet changes and or interest rate changes over time.”

The purpose of this Weekly Post is to elaborate on the highlighted portion of #2, underscoring the importance of conducting risk analysis of your planning for internal management and for regulatory purposes.

- *How to perform sensitivity analysis of our plans?*

**Solution:**

I have noted in previous Posts that THC Financial Simulation can provide for you the risk reports enabling you to evaluate the sensitivity of budget, business or strategic plans to the projection assumptions thus having all your interest rate, credit, liquidity risk and budgeting in one integrated application. In this Fin Sim module, you can

- use your own chart of account;
- add new balance sheet items in your future strategies;
- detail projected operating expenses;
- model the loan portfolio growth by gross or net volume; and
- model acquisition or sale of branches or banks in your plan.

Sensitivity analysis can also be conducted for each strategy for market risks, including parallel shocks of the yield curve, ramping rate rising, static rate projects and more. You can also conduct sensitivity to credit risk along with beta and decay for your deposits accounts.

The questionnaire also asks if the ALM models are “option-adjusted” as opposed to using “look up tables” and whether the model has Key Rate Duration to measure interest rate risk. These



functionalities are used and available in Risk Officer. I pioneered both concepts in 1986 and 1992 respectively, and you can be assured that they are robustly implemented in Risk Officer.

### Numerical Example

The budget, business or strategic plan can be inputted to Risk Officer using the PATH file or Fin Sim. The volume growth can be represented by \$ or by rates. The projection can include products not currently used on the balance sheet, as illustrated below by a portion of a hypothetical growth plan

	Balance	Volume Change	Month 1	Month 2
Real Estate Loan FRM 15	0	increase (\$)	80,000	80,000
Real Estate Loan FRM 30	0	increase (\$)	100,000	100,000
Real Estate Loan Land Loan	300,382	increase (\$)	20,000	20,000

You can implement your budget plan in Financial Simulations of Risk Officer. Or you may first use the proforma financial statements of Risk Officer to benchmark your own budgeting for the base case and then use Risk Officer to conduct sensitivity analysis.

### Conclusions

Conducting sensitivity analysis of your budget, business and/or strategic planning is important for risk management, profitability and for regulatory purposes.

*Please do not hesitate to contact me or my colleagues if you have any questions on your planning.*

Regards,

Tom Ho

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