



Weekly Post: Fin Sim - Financial Simulation Interface

November 10, 2016

Video instructions are available at www.thcdecisions.com conference room lower part of the **Homepage**

Dear Clients-

Last week, I discussed the use of Risk Capacity to enhance your performance. I also wrote about the uniqueness of THC Risk Officer in integrating risk analysis and financial simulations into one coherent decision making ALM model.

THC *Financial Simulation* provides financial projections based on your specific growth plan, reports the impact of alternative rate scenarios on projected performance, generates executive summaries with your re-investment rates that are consistent with your loan rate plans and generates reports for multiple alternative strategy plans.

The importance of a coherent financial simulation (including budgeting, capital planning, and strategic planning) with accurate modeling of interest rates, liquidity and credit risks is self-evident. However, there are practical issues that I need to address, something that I will describe in this Post.

Challenges

- I typically do my budgeting using Excel. How can I integrate my budgeting model to the *Financial Simulation*?
- How can I incorporate my GL numbers to the THC *Financial Simulation* models, combining historical trend and future projections?
- I have developed my own Executive Summary reports. What is a simple way for me to use *Financial Simulation* numbers to populate my executive summary reports?

Solution

THC provides your quarterly reports that you download from the Homepage. Also included in your quarterly reports is your financial simulation, which you can also download in the *Financial Simulation* page, as depicted below.

Market Wisdom - Art Hilliard*

An Organized Approach to Loan sales

This week the discussion will focus on the sell side. TFO gives those looking to sell loans a way to show their loans to multiple bank and credit union buyers. Sellers can post virtually any type of loan:

- Residential, commercial, consumer
- Loans from the portfolio or from the origination pipeline
- Fixed/ARM

TFO gives institutions a way to meet their objectives:

- Improve asset quality
- Improve spread
- Reduce loan concentration

TFO gives institutions a way to sell their assets peer-to-peer.

- Loans are posted anonymously until until buyer and seller agree on a price and an LOI is issued
- Loans will not be “shopped” to/by brokers
- Banks and credit unions can get free access to TFO thereby widening market exposure

TFO is a vehicle that gives banks and credit unions a way to post loans for sale without having to go through traditional secondary market outlets. Using THC analytics, institutions can compare execution on selling loans through the secondary versus through TFO before they make the decision to sell.

Art Hilliard has been in the mortgage industry for 29 years. He has originated, managed secondary marketing, securitizations and settlements, provided mortgage financial advisory and performed multiple mortgage portfolio sales and acquisitions. He was past president of the Illinois Mortgage Bankers Association.

Quarterly Projection	Quarterly Summary		Du Pont Analysis		download financial projection				
	Jun-16	Sep-16	Dec-16	Mar-17	Jun-17	Sep-17	Dec-17	Mar-18	Jun-18
Balance Sheet(\$000)									
Total assets	231,846	231,919	231,938	231,912	231,835	231,734	231,619	231,507	231,396
Total liabilities	196,782	196,782	196,782	196,782	196,782	196,782	196,782	196,782	196,782
Capital	35,064	35,137	35,156	35,130	35,053	34,952	34,837	34,725	34,614
Chg in Capital		73	19	-26	-77	-101	-115	-112	-111
Tier 1 Capital	34,417	34,490	34,509	34,483	34,406	34,305	34,190	34,078	33,967
Total Assets for Leverage Capital Purposes	243,392	231,919	231,938	231,912	231,835	231,734	231,619	231,507	231,396
Tier 1 Leverage Ratio(%)	14.14	14.87	14.88	14.87	14.84	14.80	14.76	14.72	14.68
Risk Based Asset	164,546	164,619	164,638	164,612	164,535	164,434	164,319	164,207	164,096
Tier1 Capital Ratio(%)	20.92	20.95	20.96	20.95	20.91	20.86	20.81	20.75	20.70
Total risk-based capital	36,505	36,578	36,597	36,571	36,494	36,393	36,278	36,166	36,055
Total Risk-Based Capital Ratio(%)	22.19	22.22	22.23	22.22	22.18	22.13	22.08	22.02	21.97



On that page, you can also download the Fin Sim Excel Book, which is a financial simulation lite. Risk Officer has embedded the THC financial models and your quarterly data in this Fin Sim excel book. Therefore, you can make your assumptions on

- The growth plan,
- The reinvestment rates,
- Non-interest expenses and income.

You can copy and paste your budgeting item on the non-interest items excel tab exactly the way you do your budgeting. You can use your current loan rates for reinvestment rates, or default on THC model assumptions. There are multiple ways for you to specify your growth plan for up to five years, monthly or quarterly. Personally, I like to use the function “target to.” Target To allows me to use the Excel functions to project the balance sheet over the planning horizon. The model will originate loans, invest in assets, fund with borrowings or deposits to meet your projected target, taking your back tested prepayment rate, deposit withdrawal rate and offer rate betas into account.

By clicking on Apply, you can generate the simulations, as often as you want. Afterwards, you can upload Fin Sim to Risk Officer, and your final set of assumptions and results will be saved to the Risk Officer database assigned to you, after clicking on Simulation. You can then adjust your growth plan in more detail, as Financial Simulation offers more flexible features for specifying your projections.

Numerical Example

I use a hypothetical bank to show the quarterly projected financial statements below. You can link these and the executive summary outputs to your own Executive Summary report that you have designed.

Pro-forma balance sheet items(\$000)	2016Q3	2016Q4	2017Q1	2017Q2	2017Q3	2017Q4	2018Q1	2018Q2
Total Assets	231,919	231,938	231,912	231,835	231,734	231,619	231,507	231,396
Cash & Short Term	21,748	21,767	21,741	21,664	21,563	21,448	21,336	21,225
Securities	56,856	56,856	56,856	56,856	56,856	56,856	56,856	56,856
Loans and lease financing receivables	148,585	148,585	148,585	148,585	148,585	148,585	148,585	148,585
Other assets	4,730	4,730	4,730	4,730	4,730	4,730	4,730	4,730
Deposits	178,418	178,418	178,418	178,418	178,418	178,418	178,418	178,418
Borrowings	14,000	14,000	14,000	14,000	14,000	14,000	14,000	14,000
Federal funds purchased and securities	2,504	2,504	2,504	2,504	2,504	2,504	2,504	2,504
Other liabilities	1,860	1,860	1,860	1,860	1,860	1,860	1,860	1,860
Equity	35,137	35,156	35,130	35,053	34,952	34,837	34,725	34,614
Tier 1 Capital	34,490	34,509	34,483	34,406	34,305	34,190	34,078	33,967
Tier 1 Leverage Ratio	14.87%	14.88%	14.87%	14.84%	14.80%	14.76%	14.72%	14.68%
Tier1 Capital Ratio	20.95%	20.96%	20.95%	20.91%	20.86%	20.81%	20.75%	20.70%
Total Risk-Based Capital Ratio	22.22%	22.23%	22.22%	22.18%	22.13%	22.08%	22.02%	21.97%

You can copy/paste your budgeting items to the non-interest income/expense. Your format will be saved in Risk Officer so that you can do your budgeting in Risk Officer going forward. Furthermore, you can set up a mapping of your GL ID numbers to the chart of account that you use for your risk reports. Then the Variance Analysis report can be automatically generated. These features are depicted below.

In Summary, Fin Sim is a powerful excel book that can provide multiple financial simulations and act as an interface to your other excel applications. After you upload Fin Sim to Risk Officer and click on Simulate, THC will save all your results, fine tune your strategic plans with more flexible Risk Officer modeling features, and generate your desired reports, including the Fin Sim.



Group	Jul-16	Aug-16
	97333.333	97333.333
Income from fiduciary activities	0	0
Service charges on deposit accounts	8000	8000
Trading revenue	0	0
Fees and commissions from securities brokerage	0	0
Investment banking, advisory, and underwriting fees and	0	0
Fees and commissions from annuity sales	0	0
Underwriting income from insurance and reinsurance ac	0	0
Income from other insurance activities	0	0
Venture capital revenue	0	0
Net servicing fees	0	0
Net securitization income	0	0
Net gains (losses) on sales of loans and leases	0	0
Net gains (losses) on sales of other real estate owned	0	0
Net gains (losses) on sales of other assets (excluding st	0	0
Realized gains (losses) on held-to-maturity securities	0	0
Realized gains (losses) on available-for-sale securities	0	0
Other noninterest income	131666.67	131666.67
Salaries and employee benefits	437777.78	437777.78
Expenses of premises and fixed assets (net of rental inc	42111.111	42111.111
Goodwill impairment losses	0	0
Amortization expense and impairment losses for other ir	0	0
Other noninterest expense	262666.67	262666.67
	29.4702	29.4702

Variance Analysis

BankC (New York City, New York)

	Jun-16	Jul-16	Actual Variance(%)	Aug-16
Interest Rate Base Case				
Balance Sheet(\$000)				
Total ASSETS	231,846	231,881		231,903
Total LIABILITIES	196,782	196,782		196,782
Capital	35,064	35,099		35,121
Chg in Capital		35		21
Tier 1 Capital	34,417	34,452		34,474
Total Assets for Leverage Capital Purp	243,392	231,881		231,903
Tier 1 Leverage Ratio	14.14%	14.86%		14.87%
Risk Based Asset	164,546	166,825		166,847
Tier1 Capital Ratio	20.92%	20.65%		20.66%
Total risk-based capital	36,505	36,540		36,562
Total Risk-Based Capital Ratio	22.19%	21.90%		21.91%

Conclusion:

Fin Sim, the THC Financial Simulation lite, is popular with our clients because of its provides you with ease of use, ability to interface with your other Excel applications, and compatible compatability with the Web-based comprehensive financial simulations functions in Risk Officer

If you have any questions regarding the Fin Sim, the THC financial simulation lite, please do not hesitate to contact THC.

Regards,
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THC is NOT a broker-dealer. THC only offers an analytical platform for clients to work together to meet your customers' needs or your balance sheet requirements. THC does not collect any commission.

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