



**Weekly Post: Use Risk Capacity to Make Decisions**

November 3, 2016

Dear Clients-

I often find the agendas of ALCO and Board meetings, for example, consist of (1) Review financial performance and risk exposures; (2) Proposals on increasing deposits; (3) Progress report on a new product introduction. The meetings then proceed with these items discussed independently. This is unfortunate. Measuring risk exposures is identifying your risk capacity, which in turn assists you in optimizing your ALM strategies

These are some simple examples:

- If your Liquidity Coverage Ratio is 3 and your aggregate monthly uses of funds is \$10mm, then you can deploy \$10mm cash;
- If your EVE ratio is 20%, then you can increase the balance sheet by 25%;
- If your duration is -3 year, then you can increase your asset duration (liability sensitivity) by 0.6 year to make the balance sheet insensitive to rate change, if your EVE ratio is 20%.

Your risk capacity affects your ALM strategies. However, you need to consider other practical issues. This Post will discuss how to relate your risk capacity to your ALM strategies.

**Challenges**

- Getting fundings from internet banking will affect my EVE ratio (capital risk), duration ( interest rate risk), liquidity coverage ratio (liquidity) all at the same time. How can I optimize this funding strategy?
- Currently the loan demands are in 10-1 ARMs with a good rate. But how much volume can we do in the coming year?
- Increasing risk would increase earnings, and therefore the risk capacity has to depend on the needs for earnings. But how are they related?

**Solution**

**Market Wisdom - Art Hilliard\***

**An Organized Approach to Loan Acquisitions**

TFO gives those looking to buy loans the opportunity to set inquiries for loans that match specific criteria:

- Residential, commercial, consumer
- Transaction size
- Loan type – Fixed/ARM
- Credit score range
- Geographic area

TFO gives institutions a way to meet their objectives:

- Grow loan assets
- Improve credit quality
- Improve spread
- Offset low loan demand
- Improve loan concentration
- Supplement origination capacity

TFO is a vehicle that allows banks and credit unions to issue loan inquiries, see loans that meet their criteria and perform valuations to determine the best bid. Using THC analytics, institutions can also see how the assets they are acquiring will fit their balance sheet before they make the decision to buy.

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.



**Bank Performance**

Performance	Current	Chg from Last Cycle	%Chg
EVE ratio(%)	20.12	2.34	13.14
Duration	8.19	-0.93	-10.17
% EVE Chg up 400	-27.01	1.90	-6.57
% NII Chg up 400	5.31	-4.34	-44.96
Short Term/Asset(%)	8.85	-1.58	-15.15
Margin(%)	3.31	0.17	5.53
NII(\$000)	8,387	-87	-1.03
Earnings(\$000)	-11	-61	-121.96
ROE(%)	-0.02	-0.13	-120.75

Risk Officer™ *Trade Simulation* function provides the solutions. *Trade Simulations* enables you simulate the balance sheet strategies comprehensively and quickly. You can evaluate an increase deposits and 10-1 ARMs volume on a comprehensive dashboard of the balance sheet performance. Consider the performance of a hypothetical bank below. This bank has the risk capacity, with EVE ratio 20%, to borrow. The duration of 8.19 may need to be lower in a rising rate cycle. This bank may need to increase earnings.

In *Trade Simulation*, I simulated a strategy of originating \$30mm 10-1 ARM 4%, 750 FICO and 75% LTV; \$10mm 1 year agency bonds, and \$20mm cash. I used the cash to reduce the ARM interest rate sensitivity. I funded the \$60mm investment with saving accounts. This simple simulation is to illustrate how the risk capacity gives a guidance in ways to seek earnings. *Trade Simulation* enables us to measure the combined effect of multiple strategies on the multi-facted risk profiles, on interest rate risk, capital risk, and liquidity risk.

**Numerical Example**

The table below presents the simulation results. The blue row and green rows present the September cycle numbers and the simulated results respectively. The results show that the EVE ratio falls to 16.16% from the high of 20.12%. The sensitivity (duration) lowers from 8.19 to 7.64. The Net Interest Income increases from \$8.387mm to \$10.446mm, an increase of \$2mm. *Trade Simulation* provides 80 dashboard metrics, including simulated risk measures, book value and fair values, not just the measures reported below.

Performance Dashboard						
Economic Values			capital			NII and Earni
assets	loans	deposits	EVE	EVE ratio(%)	duration	NII
244,805	162,611	175,694	49,267	20.12	8.19	8,387
304,805	192,611	235,694	49,267	16.16	7.64	10,446

I discuss some practical considerations below:

- *But we do not put on \$60mm funding all at once?* But given a strategy, you can use *Financial Simulations* in Risk Officer™ to formulate your planning or budgeting
- *Isn't Trade Simulations useful for strategic changes but not for most transactions which are relatively small?* Not so. *Trade Simulation* presents the combined effect on your risk capacity enable you to continually adjust your strategies. These simulations enable you to execute your strategy with each transaction.
- *Don't these simulations need marketable prices and rates to determine the projected earnings? Aren't these simulations just hypothetical without executable prices?* THC Risk Officer™ is a unique product that seamlessly links ALM simulations to market liquidity for transactions. Risk Officer™ enables you to incorporate quotes from your counterparties.

**Conclusion:**

Measuring risk exposure is not just for regulatory purpose. Risk Capacity enables you to implement strategies with precision and transparency. THC *Trade Simulation* in Risk Officer™ is a decision support tool for you to measure, monitor and manage your balance sheet.



*If you have any questions regarding the Trade Simulations reports, 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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