



Weekly Post: Applications of Earnings-at-Risk (EaR) Report

December 15, 2016

Dear Clients-

EaR report presents the projected Net Interest Income and Earnings over 24 months under multiple interest rate scenarios based on the flat growth assumption. Perhaps the Earnings-at-Risk report is the most important interest rate risk report for regulatory purpose.

Despite the importance of the EVE report and EaR regulatory report as articulated in *Interest rate risk regulatory report; 2010 Interagency Guidelines*, the concepts and the applications of EaR report often remain unappreciated.

EaR report is important for regulatory reasons: required for ALCO review by regulation, described in the Interest Rate Risk Management Policy, and monitored relative to your policy limits quarterly. EaR report is also important for managing the balance sheet. The purpose of this Post is to describe some of the applications of the EaR report.

Challenges

- How to ensure the Net Interest Income NII and earnings are projected correctly?
- Why is rate rising often adversely affecting the EVE risk but positively affecting the earnings?
- How should I use the EaR report for deposit account offer rate strategies?

Solution

Regulatory guideline requires that the balance sheet maintains "flat growth." That is the balance sheet remains constant over time. Any paydown of loans and other balance sheet items have to be replenished by the same amount of the same balance sheet items. The EaR report then provides the projected earnings and NII (under different interest rate shocks) over 12 and 24 months as described below.

Market Wisdom - Art Hilliard*

Due Diligence – Just Stick With It

Due Diligence is an integral part of the loan sale process and can make or break a transaction.

- The portfolio buyer performs due diligence either internally or they may outsource it
- Loan data in the loan file are compared to data provided in the tape to ensure accuracy
- A property valuation is typically obtained, usually a Broker's Price Opinion (BPO)
- Loan documents are reviewed for accuracy, marketable title and conformity to underwriting guidelines

Adverse due diligence findings can result in loans being "kicked" from the pool or price adjustments to reflect true loan risk characteristics. Sellers can minimize due diligence issues by:

- Ensuring data in the loan file matches the data in the tape
- Ensuring the loan file is in good order and there are no missing documents
- Some sellers might go to a due diligence firm and have them clean up their files before they market the pool

Designate a person to manage due diligence findings and make sure issues get addressed. Persistence is the key to working through many of the issues that come up. Remember the buyer wants the deal to close as much as the seller. Often they just need to understand what is going on in the file.

Art Hilliard has been in the mortgage industry for 30 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.



DATE	Sep-16	Oct-16	Nov-16	Dec-16	Jan-17	Feb-17	Mar-17
Scenario:Base Case							
ASSETS INTEREST INCOME		799	786	792	785	787	788
LIABILITIES INTEREST COST		86	95	97	99	100	109
NET INTEREST INCOME		713	691	695	686	688	679
<i>Non Interest Expense(income)</i>		603	603	603	603	603	603
<i>Provision of losses</i>		97	97	97	97	97	97
<i>Profit before taxes</i>		13	-9	-5	-14	-13	-22
<i>Tax</i>		4	-3	-2	-4	-4	-6
<i>Net Income</i>		9	-6	-4	-10	-9	-15
<i>Dividend Payment</i>		0	0	0	0	0	0
<i>Retained Earning chg</i>		9	-6	-4	-10	-9	-15
<i>Unrealized G/L</i>	0	0	0	0	0	0	0
Equity	35,034	35,043	35,037	35,033	35,023	35,014	34,999

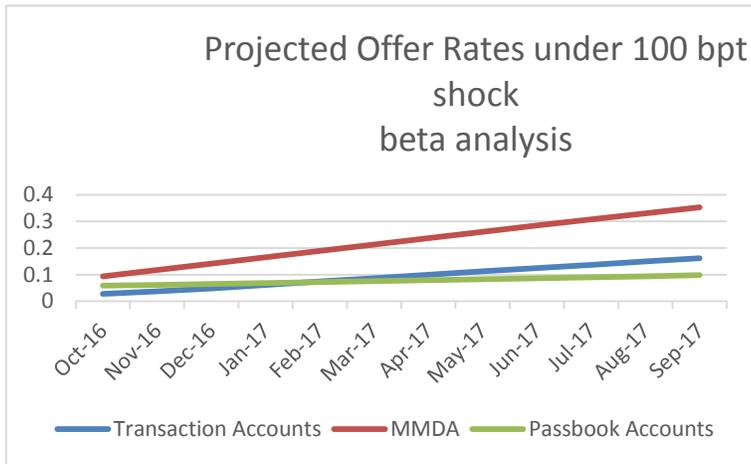
By regulation, the robustness of the EaR model is ensured by the recursive back-testing every quarter comparing the EaR projections with the realized selected financial reported items for all THC clients. Each client receives their institution’s recursive back-testing testing every quarter in the Directors’ Dashboard report.

Numerical Example

Repricing sensitivity

EaR report is effective in identifying repricing risk. Suppose an institution is using excessive short term funding such as overnight FHLB advances. Even if the short term to total asset ratio is adequate, the 400 basis points shocked up can significantly affect the projected NII. Since the deposit account offer rates do not adjust immediately, the funding portfolio in general may have long duration. In this case, the 400 basis point shock may not affect the EVE % change. Therefore EaR and EVE are measuring different aspects of interest rate risk exposure of the balance sheet.

Deposit account; Customers’ behavior



Customers’ behavior in the core deposit account is also an important consideration in managing interest rate risk. The institution may need to raise the deposit account offer rate quickly if the deposits are “hot.” The speed of adjusting the funding costs has significant impact on the interest rate risk, and ALCO should be aware of the model assumption on the projected offer rates and the related withdrawal rate (or retention rate) of the customers.

THC EaR report presents the projected implied offer rate and the offer rate of new accounts under all the interest rate scenarios. Furthermore, the report also presents the withdrawal amounts, the dollar amount that customer closes every month, given the offer rate and the market conditions. The transparency enables ALCO to formulate the rate setting strategies and marketing strategies. The figure shows that the offer rates adjust upward after a 100 bpt shock with MMDA rises more quickly. Offer rates tend to rise more slowly in a rising rate regime than dropping in a falling rate regime.



Conclusion:

Use your EaR report to identify the projected interest sensitive income and costs. You can use the report to formulate the deposit account strategies, levels of short term funding based on your cash account liquidity needs.



If you have any questions regarding the EaR report, please do not hesitate to contact THC. THC can also send you a more detail explanation of the Report. Use the Conference Room, Homepage Risk Officer, to send us your comments and questions. All your posts are anonymous.

Regards,
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