INTEREST RATE RISK CASE STUDIES
2012 NEW ENGLAND DIRECTORS COLLEGE

CASE STUDY 1 – LOAN ASSUMPTIONS

During a Board meeting, the head of retail lending mentioned that the bank, for a number of reasons, is experiencing very little prepayment on mortgage loans. However, upon review of the interest rate risk measurement system, you had noticed that management based loan prepayments on national averages, which were prepaying at very high rates. How do you think this discovery could impact the results of the interest rate risk model if the loan prepayment assumptions were reduced to better reflect actual behavior? (PLEASE CHECK ALL THAT APPLY)

[ ] More Asset Sensitive
[ ] Less Asset Sensitive
[ ] More Liability Sensitive
[ ] Less Liability Sensitive

CASE STUDY 2 – DEPOSIT ASSUMPTIONS

Upon review of the deposit assumptions used in the interest rate risk model, you notice that the fractional sensitivity (or beta) for money market accounts is set at 10%. Currently, the interest rate on money market accounts is 0.20%. If market interest rates were to increase 300 basis points (or 3.00%), what does the interest rate risk model assume the rate will be on money market accounts?

[ ] 0.30% [ ] 0.40% [ ] 0.50% [ ] 0.60%

Over the past several years, your bank has experienced an inflow of money market accounts. During this time frame, the beta assumption of 10% has not changed. Please provide examples of how to test this assumption for reasonableness. (PLEASE CHECK ALL THAT APPLY)

[ ] Historical Analysis [ ] Sensitivity Testing [ ] Independent Review [ ] Back-testing

CASE STUDY 3 – INTEREST RATE RISK LIMITS

The annual review of the Interest Rate Risk Policy is slated to be on the agenda during the next Board meeting. The policy establishes a net interest income limit of -15% under all interest rate scenarios. The bank has been experiencing earnings erosion over the past several years with a net interest margin (NIM) of 3.00% and an ROA of 0.40%. Using the Basic Limit Test discussed earlier, estimate the permissible erosion in the NIM using the net interest income limit of -15%.

[ ] -0.30% [ ] -0.45% [ ] -0.55% [ ] -0.60%

Does the net interest income limit of -15% appear reasonable in relation to the ROA of 0.40%?

[ ] Yes
[ ] No