Net Economic Value Sensitivity

April 2022

McQueen Financial Advisors

McQueen's ALM reports use robust tools and include considerable analysis regarding interest rate risk. These tests measure risk to income and value over a wide range of yield curve scenarios. Starting in March 2022, many of our clients noticed a less favorable net economic value of equity risk profile. Before releasing ALM reports, we carefully review model inputs, assumptions, yield curve shifts and balance sheet changes. We'd like to take this opportunity to explain the trend, which is primarily related to rising interest rates. In addition, we explain why the NCUA's NEV Supervisory Test may indicate greater sensitivity to rising rates and a lower post-shock NEV Ratio compared to prior quarter.

Net Economic Value of Equity (NEVE)

NEVE is best thought of as the net present value of cash flows from the balance sheet. The sensitivity tests are an important tool for regulatory compliance and interest rate risk measurement. Output from the model in rising and falling rates is compared to policy limits and the trend is tracked over time. Less favorable NEVE sensitivity can be the result of fluctuating interest rates, prepay speed assumptions or changes in the balance sheet structure. Using industry-standard methods, value in the base case scenario is determined by pricing expected cash flow using prevailing market rates. Thereafter, rising and falling scenarios are calculated after changing the discount rate and prepay speed assumptions.

Asset Value Trends

"Inflation remained elevated"

Inflation remained elevated over the past 6 months and the possibility of ongoing inflation continues to be a risk for fixed income investors. In response, the Federal Reserve began increasing the Fed Funds target rate. Starting in last 2021, the U.S. Treasury curve flattened. Short term U.S. Treasury rates increased quickly from near zero to 2.50%, at a pace not seen for nearly 30 years. Within the ALM model, higher interest rates will result in lower loan and investment values. Longer-term holdings will generally decline in value more than short-term holdings when rates rise. Higher interest rates and the resulting lower asset values are the primary reason for less favorable NEVE sensitivity starting in March 2022 ALM reports.

ALM Model vs NCUA Method

In addition to McQueen's industry-standard sensitivity test, we include the NCUA's NEV Supervisory Test. Both tests measure value in the unchanged rate scenario and sensitivity to rising interest rates. However, the NCUA's supervisory test is a rudimentary model which does not assign significant value to non-maturity deposits. As such, the NCUA's test results are more volatile when rates change rapidly. The NCUA uses the term 'NEV' while most ALM models, including McQueen's use the term 'NEVE'. Both acronyms refer to net economic value of equity.

"Used to define the exam scope"

ALM Model Treatment of Non-Maturity Deposits

Core non-maturity deposits hold significant value because they are an inexpensive source of funding that is generally retained regardless of the rate paid to depositors. These accounts are maintained for reasons other than the interest rate and balances tend to grow over time. To fully understand the value of non-maturity deposits, it is sometimes helpful to think in extremes. Noninterest-bearing deposits are the best example. In the current rate environment, free deposits hold considerable value in the ALM model. In the absence of these funds, it would be necessary to seek alternative sources, which would be much more expensive, in the range of 2.00 to 2.50%. The value of noninterest-bearing deposits is calculated using the expected retention term and the savings achieved by holding them. Free deposits with an assumed term of 60 months and an alternative funding cost of 2.00% are assigned a premium of approximately 5%. In the rising rate scenarios, free deposits boost NEVE value even more, simply because they are still free while the alternative cost of funds is assumed higher. In the up 300 basis point scenario, noninterest-bearing deposits are assigned a premium in the range of 7%. These are standard methods used in most ALM models, but the NCUA's NEV Supervisory Test uses very different methods as described below.

NCUA NEV Supervisory Test Methods

The NCUA's NEV Supervisory Test is a balance sheet risk measure which calculates net economic value in the base case and up 300 basis point scenario. The test incorporates asset values and term liability values from McQueen's model. However, they ignore non-maturity deposit values calculated in the model. Instead, they apply standardized NCUA-defined premiums for non-maturity deposits. The NCUA's non-maturity deposit premium is only 1% in the base scenario and only 4% in the up 300 basis point scenario. This method does not capture the true value of non-maturity deposits and therefore will result in less favorable and more volatile results. The NCUA's NEV Supervisory Tests are part of the exam process, designed to assess the credit union's interest rate risk and define the exam scope. Examiners will consider two tests, the post-shock NEV ratio and the NEV value sensitivity. Results from each test are classified as low, moderate, high or extreme. The exam scope may be scaled up or down depending on the risk level identified. Test results can be found on the last page of the ALM summary and on page 9 of the full quarterly report.

"Talk to us about your specific results"

Action Items

In response to rapidly rising short-term rates, NEVE sensitivity test results may be less favorable and some of the quarter-over-quarter changes are meaningful. We encourage you to review your risk profile in relation to policy limits and the NCUA's NEV Supervisory Test results carefully.

We have the following recommendations:

- Talk to your McQueen advisor, who will interpret the results and may be able to discuss risk mitigation strategies.
- Review this document and NEVE sensitivity results carefully.
- Include a discussion of NEVE sensitivity and the trend in ALM meeting minutes.
- Understand that the NCUA's NEV Supervisory Test is a rudimentary model that assigns low value to non-maturity deposits.
- Consider that less favorable results on the NCUA's test may cause examiners to widen the focus of your next exam.
- More favorable NEVE sensitivity can be achieved by growing short-term or floating-rate assets or by growing longer-term liabilities. This is not a broad recommendation, because shorter term assets generally provide lower yields and longer-term liabilities may add to interest expense. Talk to us about your specific results.
- Understand that NEVE results are based on a simultaneous, across the board shock test. All interest rates are assumed to increase immediately. Interest rates do not typically move up quickly by 300 basis points or more.