Silo Risk Management Needs to Stop

Aggregate Risk Management Needs to Start

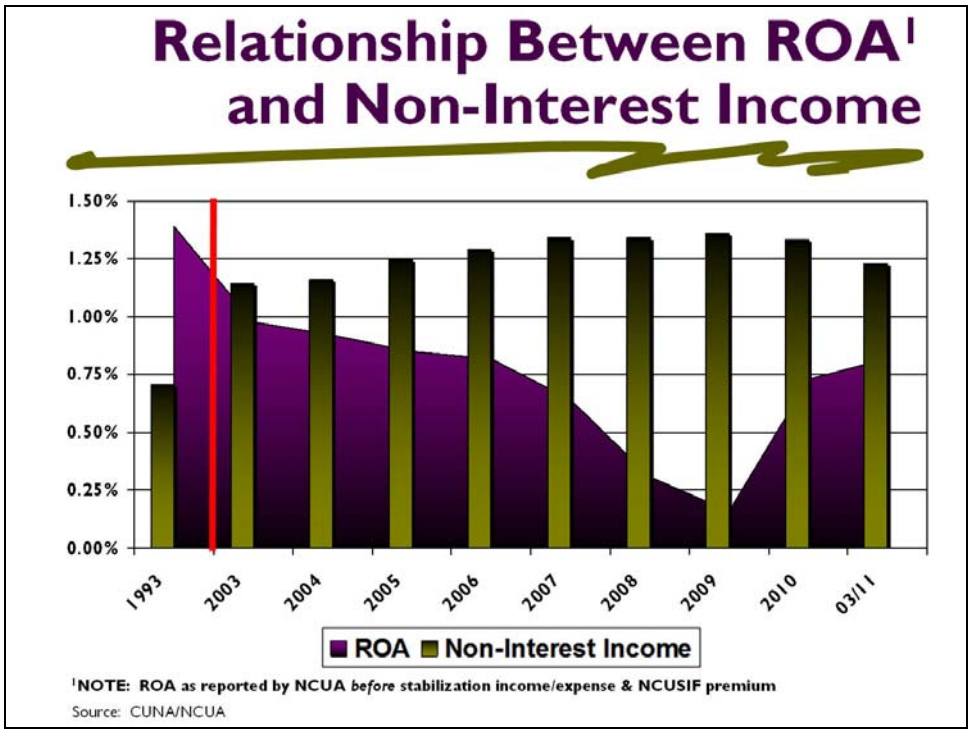
By c. myers corporation

Many credit unions are beefing up their risk management process. However, a critical component of the risk management process that is missing for many is evaluating and managing risk in aggregate.

Managing Aggregate Risks

According to conventional wisdom, risk is quantified and managed in silos—including interest rate risk (IRR), credit risk, concentration risk, etc. External forces no longer support this conventional wisdom as the world has changed. Our belief is that decision-makers and regulators need to have a more comprehensive view of risk by attempting to quantify and manage risks related to the *entire financial structure.*

For example, changes to various components of profitability have caused decision-makers to seek alternative sources of income beyond the margin. The industry's reliance on non-interest income is no secret (as illustrated in the following graph), yet few are quantifying the potential impact on aggregate risk from this source of revenue.



In quantifying and managing aggregate risks, we recommend continuously evaluating and answering the following question:

Under the conditions for which we have chosen to prepare, are there circumstances, in isolation or combination, that could cause our credit union to lose money and erode net worth to a level that threatens safety, soundness and ongoing viability?

To answer this question, decision-makers need to identify risks for all strategy levers and, as appropriate, quantify the potential impact of each risk—**particularly if unfavorable external forces come into play.**

Finally, this risk should be aggregated at the enterprise level to determine if net worth is adequate to absorb the aggregate risks.

Strategy Levers

	Yield on Assets
–	Cost of Funds
=	Net Interest Margin
–	Operating Expense
–	Provision for Loan Loss
+	Fee/Other Income
=	**Return on Assets (ROA)**

Keep in mind, if risks are exclusively quantified at the individual level and risk limits are exclusively established and monitored at the individual level, then decision-makers will never understand if the credit union's net worth is adequate to absorb risks that could materialize simultaneously.

History teaches us that rarely do risks materialize in isolation.

We also acknowledge that it is necessary to understand the individual components of risk. Following is an example of how decision-makers can understand their aggregate risk while also understanding, at an executive level, the key contributors to risk.

Net Worth To Support Risk + Minimum

Assets ($000s)	NW $s	Minimum NW%	Rationale for Minimum
100,000	10,000	6.00%	Don't ever want to be Undercapitalized

Risk	NW Ratio at Risk	Rationale for Risk Components
Risks to Earnings including IRR	1.50%	Protect against +500bp change in rates
Additional Credit Risk	2.06%	Proxy for "bad" credit risk conditions
Regulatory Risk	0.20%	Assessments/costs beyond expectations
Strategic Operational Risk 'A'	0.30%	Est. cost if changes to interchange income materialize
Strategic Operational Risk 'B'	0.00%	Additional threats based on the credit union's unique situation
Strategic Operational Risk 'C'	0.00%	
Strategic Operational Risk 'D'	0.00%	
Total NW To Support Risk	4.06%	
Total NW Required	**10.06%**	**NW ratio to support risk + established minimum**

Risks to earnings incorporate base net operating expense and interest rate risk.

Based on analyses, this credit union has 4.06% ***net worth ratio at risk***. Adding the net worth ratio at risk to the established minimum of 6%, this credit union needs roughly 10.06% net worth to absorb potential losses and not fall below 6%. The net worth ratio at risk should be quantified and evaluated at least quarterly and discussed in light of policy risk limits. Additionally, major decisions should be tested prior to implementing.

The "Risk to Earnings including IRR" Component Of Aggregate Risk

The following is intended to touch on *just a few* things to consider in determining the "risk to earnings including IRR" component of aggregate risk, usually intended to be addressed by asset/liability management policies. Asset/liability policy limits are often established for net interest income (NII) and/or net economic value (NEV) and do not establish limits for ROA and net worth.

Why Focusing On Net Interest Income Is Insufficient

A primary focus on NII exclusive of ROA can be dangerous, especially in light of threats credit unions face beyond the margin. The net interest margin (NIM) for the industry has worked its way back to 2006 levels primarily due to the lowering of the cost of funds. As this option diminishes because many are reaching the bottom on deposit pricing, a primary focus on the NIM today can unintentionally invite interest rate risk or credit risk.

Further, consider that management would never submit a budget without net operating expenses and the board would never approve a budget that stops at the margin. Why? Because operating expenses, fee/other income and provision for loan losses are so critical in understanding potential earnings, net worth and safety and soundness that no prudent board or management would tolerate its absence in a budget. ***Why, then, is it acceptable to establish and manage to risk limits—intended to ensure safety and soundness—that don't incorporate ROA and, more importantly, net worth?***

NEV

Some might be thinking, *"NEV is a comprehensive measure of our threats to net worth."* It is not. NEV focuses on assets and liabilities and therefore ignores threats beyond the margin. A decline of 30 basis points in non-interest income due to interchange income would not change the results of an NEV analysis. Further, NEV and net worth are not synonymous. An easy way to remember that they are not synonymous is that net worth encompasses *all* of the strategy levers and NEV does not.

Net Income

When policy limits do go beyond the margin and establish limits on net income or ROA, often the risk analysis performed assumes a static balance sheet. This is inadequate for several reasons. One key reason is that, by definition, a static balance sheet assumes the financial structure does not change regardless of what is happening to rates. This is a simplifying assumption that can mislead decision-makers. (For more information, see our article, *Things To Consider When Evaluating Static Simulations*.)

The End Objective

Decision-makers should strive to answer: *Do we have enough net worth to support the aggregate risks in our financial structure?* To answer this, ***every*** strategy lever needs to be incorporated into the analysis. To manage these risks, decision-makers need to use ***every*** strategy lever and not be limited to taking action only with assets and/or liabilities.

If you only remember 3 things from this article, remember…

1. Recent experience demonstrates that rarely do "bad things" happen in isolation.
2. The risk management process needs to evolve to incorporate quantifying, evaluating and managing **aggregate** risks.
3. Decision-makers should strive to answer: *Do we have enough net worth to support the aggregate risks in our financial structure?*

About c. myers

C. myers' philosophy is based on helping our clients ask the right questions in order to create a solid foundation that links strategy and financial performance. Since 1991, in addition to strategic planning, c. myers has partnered exclusively with credit unions for their ALM needs, such as performing interest rate risk analysis and "what-ifs" (including NEV analysis and its tradeoffs), model validation, liquidity analysis, merger analysis, ALM assumption review, ALM policy and, more recently, concentration risk policy development just to name a few. Reach c. myers at 800.238.7475 or www.cmyers.com/contact/.