Scenario Analysis & Stress Testing for Community Banks
Introduction

Scenario analysis is the process of analyzing possible future events by considering alternative possible outcomes. Instead of trying to show one exact picture of the future, scenario analysis presents several alternative future developments.

Stress testing, one component of your organization’s ERM competencies, is an exercise whereby you seek to estimate the likely impact of those scenarios on capital, liquidity, and earnings. Your organization should regularly conduct these exercises using standard criteria to consistently measure changing risks.

Stress testing has been practiced by banks for some time in their analysis of interest rate risk; however, events leading up to the 2008 crisis illustrated that banks should expand analysis to holistically consider all risks and all areas of the bank concurrently. Further, stress testing gained notoriety with the implementation of the Supervisory Capital Assessment Program (SCAP) in spring of 2009\(^2\) and the Comprehensive Capital Analysis and Review (CCAR) in fall of 2011\(^3\).

Not only is stress testing a fundamentally sound process, it is required under the Dodd-Frank Act.\(^4\) If your bank has assets greater than $10 billion, it is required to conduct annual stress tests\(^5\).

Bankers need to conduct their own stress tests... they force bankers to think through the implications of scenarios that may seem relatively unlikely but could pose serious risks if those scenarios materialized. Stress tests must be an integral part of firms’ processes for ensuring their capital is adequate.

– Federal Reserve

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5 Ibid, section §165(i)(2).

In June 2011, Federal regulators issued proposed guidance on stress testing that applies to all organizations with more than $10 billion in assets; this “highlights
the importance of stress testing as an ongoing risk management practice that supports a banking organization’s forward-looking assessment of its risks.\(^6\)

While community banks are not yet required to conduct a level of stress testing equivalent to larger banks, several instances occur where community banks must conduct stress testing.

Community banks with high concentrations in commercial real estate must stress test their portfolios according to the guidance provided in SR 07-1.\(^7\) Further, banks wishing to pay a dividend must stress test future income as prescribed under the guidance in SR 09-4.\(^8\) Regardless, all banks are strongly encouraged to implement stress testing as part of their risk management practice. You should be prepared for increased expectations as regulators become accustomed to seeing stress tests as part of the overall risk management framework. You may find it difficult to demonstrate effective risk management processes, capital planning and adequacy, and the ability to pay dividends or repurchase stock without a comprehensive stress testing program.

The goal of stress testing is to identify your bank’s potential exposure from possible events that affect capital, earnings, or liquidity, and to assist you in developing contingency plans or other loss mitigation strategies to deal with these events prior to and (or when) they occur.

Well functioning stress testing programs provide great benefits. Stress testing shapes the risk profile of your bank by allowing for the analysis of every day “what if” events, as well as extreme events. It enables a look into the future that allows you to better prepare for events.


The stress testing program is the intersection within your bank that provides for the integration of business strategy, risk management, and capital planning. This permits you to better see high-risk concentrations and better prepare for contingencies.
One of the most important benefits of stress testing is the conversations about risk that will occur internally. These conversations should take place from top to bottom within your organization as you, management, and analysts work to develop the scenarios that should be approved by the board—with the board reviewing the final outcomes and direction your bank takes in mitigating the risks at hand. When these conversations are well documented, it also provides increased transparency to regulators that your bank is managing its risk.

Finally, where there is risk there is also opportunity. Stress testing can and should help the bank identify additional business opportunities and provides a platform to better understand the risks associated with new products.

**Benefits**

1. Shapes the risk profile of your bank through better understanding of risk by providing a forward looking view of the organization and focusing management on the future strategy of the bank.
   — Allows for the analysis of extreme events.

2. Identifies risk concentrations across various business lines and allows management to form contingency plans.
   — When done well provides for the integration of business strategy, risk management, and capital planning.

3. Promotes discussion about risk that leads to enhanced internal and external risk communication.

4. When there is risk there is opportunity!
   — Stress testing can and should assist in identifying strategic opportunities.

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**Helpful Hint**

Unless the bank has a very complex portfolio of sophisticated risks, start with a simple spreadsheet model.

When the process starts to take a significant amount of time or the input assumptions becomes too complex to handle, then consider procuring an outside vendor model. The experience gained will prove valuable when questioning vendors and understanding the features or the limitations of their products.
For community banks in particular, stress testing is a good risk management practice for several reasons. First, many community banks have the added risk of concentrated loan portfolios. While this concentration is natural for community banks, you need to find effective strategies for managing capital, earnings, and funding. Second, you need to ensure the bank is not only well capitalized today, but remains well capitalized in the future—especially in a difficult economic environment. Capital is precious at the best of times and extremely difficult to raise under adverse conditions. This is particularly true of privately held community banks which have an even more difficult time raising capital and must do so through retained earnings. For these banks, understanding the balance between returns to shareholders and retained capital is critical. Stress testing enhances your bank’s understanding of this relationship.

9. This is especially true for banks with S-corp. structures that are pass-through entities to ensure their investors have sufficient cash to pay for taxes, while at the same time maintaining a sufficient level of capital and reserves.
Stress Testing: What It Is and What It Is Not

What It Is Not:

• A static, one-time exercise.
• An isolated exercise by the risk group. To be effective, stress testing will involve many areas and levels of responsibility within your organization.
• Tests carried out by separate units focusing on particular business lines or risk types (the silo problem).
• A check-the-box exercise with limited usefulness completed to satisfy regulatory concerns.
• A thoughtless exercise using arbitrary shocks or scenarios.

What It Is:

• A regularly scheduled review of the impact of possible adverse events on earnings, capital, and liquidity allowing your organization to develop effective risk management strategies. Stress testing should become a part of the strategic planning process and become a tool to incorporate risk into future plans.
• To be an effective tool for management, stress testing should foster internal debate and challenge prior assumptions such as the quality of earnings, secondary sources of liquidity, and the cost and speed with which new capital can be raised. It should also be used to determine if your bank is operating within its risk appetite.
• Your institution should have a comprehensive coordinated stress test in order to identify risks across the institution. The view should cut across credit, market, and liquidity risks. While individual units will stress their individual businesses, effective stress testing will pull these together to provide a comprehensive understanding for your organization and will use scenario assumptions and methods consistent across your organization.
• Stress testing should be actionable with the results affecting the decision making of an organization.
• Creation of practical and pragmatic scenarios that is believable and vetted internally prior to their implementation. The results will aid decision-makers in taking decisive action to mitigate risk.

Stress testing should become a consistent practice within your bank. It is inextricably linked to the establishment of risk appetite and is critical to the ongoing monitoring of risk appetite. Stress testing is also a great way to incorporate risk into the planning process by providing the “what if” scenarios for the strategic and capital planning process. Finally, stress testing should lead to the bank taking action. Actions may take the form of developing contingency plans, reducing concentrations, determining the appropriate dividend, or raising capital.
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Founded in 1914, RMA was originally called the Robert Morris Associates, named after American patriot Robert Morris, a signer of the Declaration of Independence. Morris, the principal financier of the Revolutionary War, helped establish our country’s banking system.

Today, RMA has approximately 2,500 institutional members. These include banks of all sizes as well as nonbank financial institutions. RMA is proud of the leadership role its member institutions take in the financial services industry. Relationship managers, credit officers, risk managers, and other financial services professionals in these organizations with responsibilities related to the risk management function represent these institutions within RMA. Known as RMA Associates, these 16,000 individuals are located throughout North America and financial centers in Europe, Australia, and Asia.

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For in-depth information about implementing scenario analysis and stress testing at your organization, please learn more about RMA’s Scenario Analysis & Stress Testing Workbook