



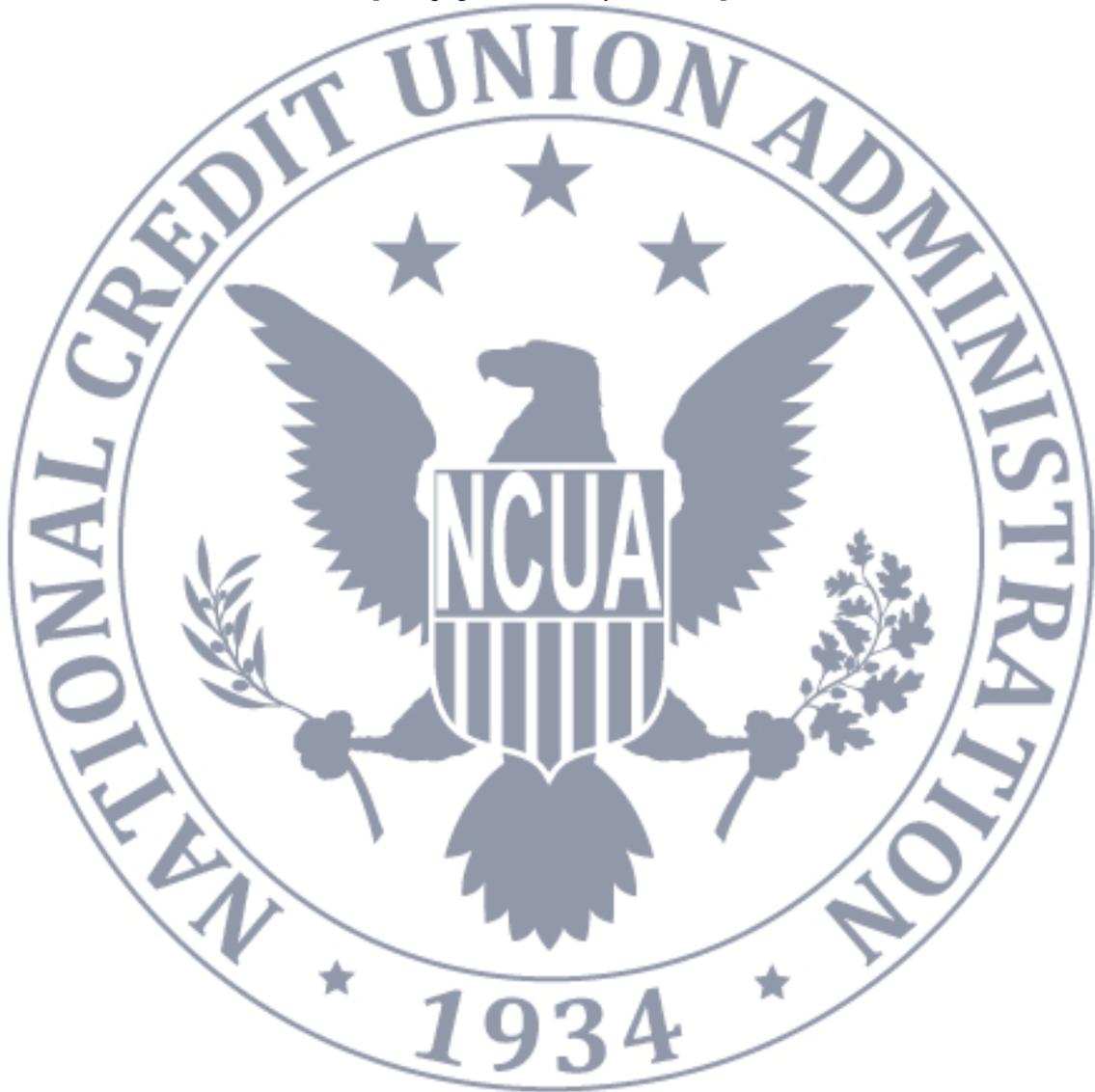
NCUA

National Credit Union Administration

Credit Union Self Run Supervisory Stress Testing

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Credit Union Self Run Supervisory Stress Testing • 2020

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1. Executive Summary

National Credit Union Administration

The National Credit Union Administration is the independent federal agency created by the U.S. Congress to regulate, charter and supervise federal credit unions. With the backing of the full faith and credit of the United States, NCUA administers the National Credit Union Share Insurance Fund, insuring the deposits of more than 99 million credit union account holders in all federal credit unions and the overwhelming majority of state-chartered credit unions.

The agency's mission is to facilitate the availability of credit union services to all eligible consumers, especially those of modest means, through a safe and sound credit union system. Because of this mission, credit union examiners account for the majority of NCUA's staff positions, representing 74 percent of the 1,235 employees onboard as of December 31, 2014.

Self-Run" Supervisory Stress Tests

This document provides information to credit unions for running "Self-Run" Supervisory Stress Tests. The underlying principle of the National Credit Union Administration's (NCUA) Supervisory Stress Test (SST) is the conservative application of risk measurement fundamentals to assess credit union balance sheet resiliency and credit union capital adequacy under stress scenarios. These instructions implement NCUA's guiding principles of independence, consistency, and flexibility into credit union-run supervisory stress testing.



1. Scenario Variables

- 1.1. *Prescribed Scenario Variables:* Covered credit unions must utilize the NCUA prescribed stress scenario variables as published by the NCUA on or before February 28 of the year in which the SST and capital plan results are due.
- 1.2. *Stress Testing Horizon:* The SST horizon will cover 9 quarters for pre-provision net revenue and expense items, and 13 quarters for purposes of forecasting loan loss reserves and associated provisioning expense.
- 1.3. *Scenario Macroeconomic Variables:* Covered credit unions will utilize the national macroeconomic variables in the scenario analysis as prescribed by the NCUA. Scenario variables will be published by the NCUA on or before February 28 of each year.
- 1.4. *Additional Macroeconomics Variables:* A covered credit union may choose to project additional economic and financial variables beyond the ones that are provided by NCUA to estimate losses or revenues for some or all of its products and portfolios; however, these additional variables must not take the place of, or be used in lieu of, the national variables as published by the NCUA.

Where the use of additional economic variables enhances the strength and soundness of the analysis, the NCUA expects a covered credit union to ensure that the paths of any additional variables (including their timing) are consistent with the general economic environment assumed in the NCUA scenarios.

If additional variables are used, the covered credit union must document and provide the source and/or methodology used in its capital plan submission and list the variable as prescribed in the Additional Scenario Variables tab of the Stress Testing Results Template workbook.

- 1.5. *Interest Rates:* Covered credit unions will utilize the quarterly interest rates provided by NCUA to interpolate between quarters. For other rate types deemed necessary, but not provided by NCUA, the covered credit union must document the rates utilized in the “Additional Scenario Variables” tab of the Stress Testing Results Template Workbook and describe the methodology used to develop them in the credit union’s capital plan submission.



2. Scenario Assumptions

- 2.1. *Net Zero Growth*: For purposes of the supervisory stress test, covered credit unions will utilize a static balance sheet approach. Liability balances will remain constant, implicitly assuming that members do not join, exit, or change their current level of deposits, savings, IRA, etc. with their credit union. Available principal cash flows and net income will be reinvested into newly originated loans and securities each period. As such, assets are allowed to grow or shrink as determined by Net Income projections.

 - 2.2. *Asset/Liability Mix*: The relative composition of assets and liabilities will remain materially consistent throughout the stress test horizon for all scenarios.

 - 2.3. *Reinvestment*: “As of date” lending standards and practices are held constant where new originations should use similar credit characteristics to the origination in the past 6 months before the inception of the stress scenario forecast. Interest rates on new loans are scenario-specific and depend on reinvestment date. Performance on these new loans should reflect the scenario starting from the reinvestment date and onward.
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3. Data

- 3.1. *Internal vs. External Data:* Credit unions may use either internal or external data to estimate losses and PPNR in SST. Data used to source and calibrate models should reflect current contractual and quality characteristics of assets and liabilities, and contain observations of behavior of similar assets and liabilities behavior under various economic cycles.

 - 3.2. *Data Completeness:* For material portfolios and business lines, a covered credit union should generally include all available data in its analysis. Data should not be selectively excluded for material portfolios and business lines based on the changing nature of the ongoing business or activity without strong empirical support.

 - 3.3. *Data Granularity:* Data should provide sufficient granularity and accurately depict contractual elements and risk characteristics for modeling purposes to reflect all main risk factors and performance drivers of the portfolio.
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4. Modeling and Computation Methodologies

- 4.1. The covered credit union should ensure that its material projection approaches, including any specific processes or methodologies employed, are well supported, transparent, and repeatable over time. All modeling methods, assumptions, and observed weaknesses should be documented within the credit union's capital plan submission.
 - 4.2. *Quantitative Approach:* Covered credit union quantitative approaches for supervisory stress testing must provide a conservative assessment of stress test capital under NCUA scenarios. The approaches must be appropriate for the type and materiality of the business line or portfolio. Quantification methods used to project revenues and losses for material business lines or portfolios must capture performance differences due to transaction level attributes and contractual characteristics of assets and liabilities. Projections must be conducted in an internally consistent manner and follow accounting rules and policies where appropriate.
 - 4.3. *Model overlays, qualitative augmentation, and management adjustments* may be necessary for certain exposures that are small in size or when data are not sufficient for appropriate means of quantification. Such outside of the model adjustments may also be used to add layers of conservatism to estimates for approaches that need enhancement for stress scenarios. For all of these adjustments, the processes must be conducted in a transparent and repeatable way, and documentation must include the reason, process used to arrive at the overlay or augmentation amount, and the attributable impact.
 - 4.4. *Sensitivity Analysis:* A covered credit union should understand the sensitivity of its stress testing results to main inputs and key assumptions. Sensitivity analysis should be used to test the robustness of material quantitative approaches and models, and provide insight into the inherent uncertainty and imprecision around stress testing estimate through generating a range of potential outcomes. The covered credit union's approach to sensitivity testing and sensitivity testing results must be summarized within the credit unions capital plan.
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5. Results Generation and Reporting

- 5.1. A covered credit union should have a consistent, transparent and repeatable process for aggregating enterprise-wide stress test results.

 - 5.2. As noted in the various sections above, covered credit unions must document and submit as part of their capital plan all information required in the Stress Testing Results Template Workbook.
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