NCUA
National Credit Union Administration

Range of Practice – Capital Planning and Analysis

December 2022

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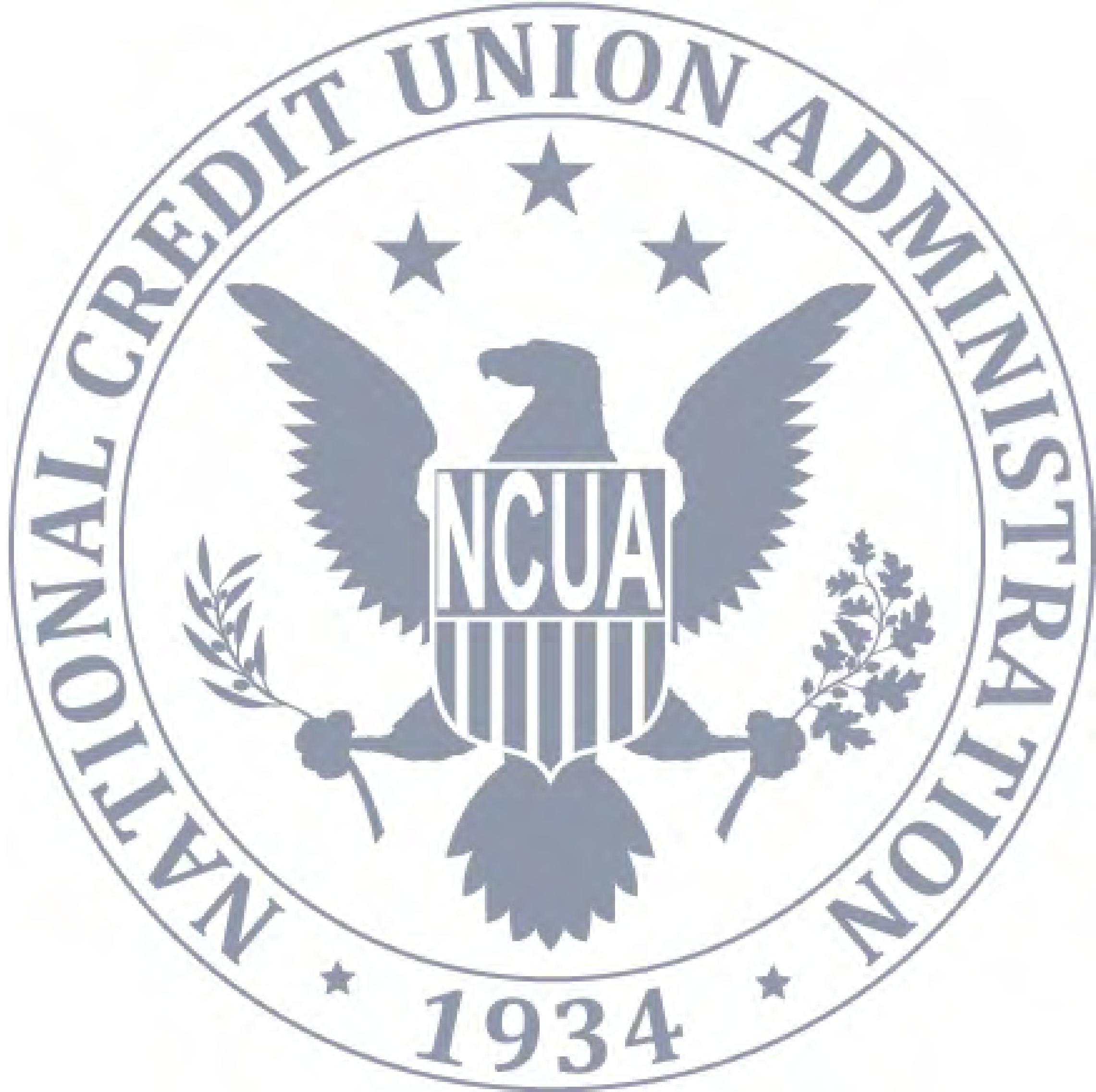

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Executive Summary and Emerging Topics

After each annual capital planning and stress testing cycle, the Office of National Examinations and Supervision (ONES) publishes a range of practice (ROP) paper identifying leading and lagging practices observed through its review of capital plans. The ROP document enhances transparency and supports the iterative improvement of credit union capital planning.

In October 2021, the NCUA released *Updated Principles of Capital Planning* to complement the NCUA's original guidance *Principles of Capital Policy and Planning*. The enhanced guidance memorialized many of the capital planning practices observed before the COVID-19 pandemic. ROP documents issued from 2015 through 2019 contain examples of credit union practices which helped to inform the focus of the *Updated Principles of Capital Planning*.

The unprecedented economic stress and uncertainty arising from the COVID-19 pandemic provided credit unions and the NCUA a unique opportunity to invoke and evaluate the strength and usefulness of covered credit union capital planning and assessment practices. Accordingly, NCUA's 2020 and 2021 ROP documents focused primarily upon approaches taken by covered credit unions to invoke capital planning and assessment tools in response to the pandemic and related economic disruptions.

With the economic and financial challenges specific to the pandemic and associated responses subsiding, this year's ROP document will focus upon practices consistently identified as "lagging" in ONES review of covered credit union capital plans in recent years. Whereas observations of leading and lagging practices in this year's ROP are not all inclusive, we encourage credit unions to continue to refer to our 2019 version of the ROP White Paper for a broader discussion of leading, lagging and expected practices related to capital planning.

Like all past NCUA capital planning guidance and white papers, we arranged practice observations in this paper in alignment with the NCUA's core principles of capital planning:

- Effective capital policy and governance;
- Sound risk management fundamentals; and
- Comprehensive capital planning and analysis.

Emerging Topic: Current Expected Credit Loss (CECL) and Capital Planning

The CECL accounting standards required by the Financial Accounting Standards Board Accounting Standards Update No. 2016-13 becomes effective for credit unions for fiscal years beginning after December 15, 2022. In most cases, this will result in the institutional use of CECL accounting practices during the first quarter of 2023 with required regulatory reporting beginning with the March 31, 2023, Call Report. As discussed in more detail below, some credit unions did address incorporation of CECL requirements into forward-looking capital assessments in their 2022 capital plans, but others did not. Given the upcoming requirement to adopt the accounting standard, we are providing some initial guidance regarding incorporation of CECL into forward-looking capital planning, as well as supervisory stress testing activities, during 2023 and beyond.

The NCUA understands the complexities involved with transitioning to the CECL methodologies for loss reserving, not only for financial statement purposes, but also forward-looking forecasting utilized in the production of annual strategic and capital plans and supervisory stress tests. The NCUA has determined, like other prudential regulators, to not dictate a specific approach for forward-looking forecasting, and inclusion, of CECL-based loss estimates for capital planning and supervisory stress testing purposes. Instead, the NCUA is only requiring that covered credit unions account for the "day one adjustment" to their allowance for credit losses (ACL) and net worth in forward-looking capital plans and supervisory stress tests produced in the first quarter of the scenario forecast beginning with 2023 capital plans and supervisory stress tests.

For purposes of supervisory stress testing, covered credit unions should evaluate and incorporate the ACL/net worth impact of CECL adoption in their 2023 self-run stress testing activities beginning in the year of adoption, which would be Q1 2023. Additionally, in accordance with §702.703 of the NCUA's Regulations, credit unions should also evaluate and incorporate the "phase in" impact of the CECL "transition amount" over a 12-quarter "transitional period" as allowed under §702.703 of the Regulations. Once the "transition amount" impact of CECL is accounted for, covered credit unions should maintain the current framework for calculating ACL and provision expense they have applied in prior year self-run stress test engagements. Reporting of self-run stress test results to NCUA both inclusive and exclusive of the CECL "transition amount" should be conducted in accordance with Supplemental Data Requests Memoranda and Self-run Stress Testing Instructions provided to covered credit unions by NCUA.

For purposes of internal capital planning, the NCUA expects covered credit unions to incorporate the day one impact of adopting CECL as of, or before, Q1 2023. The day

one impact aside, the NCUA is not dictating a specific approach to the way CECL is then incorporated into the forward-looking analysis over the remainder of a given scenario horizon. This expectation acknowledges the complexities of incorporating CECL approaches into forecasts which already include forward-looking estimates with respect to credit defaults and losses. Instead, the NCUA is encouraging covered credit unions to apply a "best efforts" approach in aligning the requirements of CECL with their own internal capital assessment and planning practices. Any decisions to adopt a specific approach should be well documented and supported within the capital plan and as part of the review and approval of the capital plan. The NCUA will assess the range of practices applied in 2023 capital plans and will incorporate a discussion of leading approaches observed in future range-of-practice white papers. Except in the most egregious of cases, we would not expect to take exception to approaches taken to incorporate CECL into forward-looking capital assessments and plans.

In actual practice, and even though scenario horizons for 2022 capital plans included the required CECL adoption dates encompassing financial reporting periods after December 15, 2022, no credit unions chose to include the impact of CECL in the scenario forecasts used in 2022 capital assessments and plans. Some credit unions were proactive in including a discussion about the expected impact of adopting CECL in 2023 as a separate section within their capital plan and capital adequacy assessment. These credit unions presented both the pre- and post CECL adoption impact on net worth and stress test net worth ratios. This allowed the credit unions to understand how the adoption of CECL may impact both internal policy and regulatory net worth standards after the CECL adoption date. This was considered a leading, but not required, approach for 2022 capital planning.

Effective Capital Policies and Governance

Credit unions with well-established governance structures and risk cultures generally utilize capital analysis frameworks to produce sound and conservative capital assessments. These credit unions tend to respond more quickly and effectively to changes in internal and external operating or business conditions. Relatedly, cultures stressing the importance of critical challenge and transparency demonstrated sound approaches to capital re-assessment. This provides for more timely and actionable capital management and alignment with ongoing strategic planning activities.

Governance: Obstacles to Independent Effective Challenge

Review of 2022 capital plans continue to demonstrate wide disparity regarding the strength of independent effective challenge applied to both the capital assessment process as well as outcomes of the capital analysis conducted.

Most credit unions have put in place governing frameworks over capital planning which provide suitable oversight and review structures. While these frameworks, in form, can support independent effective challenge of capital assessment processes and outcomes, in actual practice, our observations regarding overall strength with which effective challenge is conducted have varied.

Functionally, it is difficult to measure and determine the strength of a qualitative concept such as application of effective challenge. Normally, weaknesses in effective challenge are identified through observations of analysis approaches or results that are not realistic, conservative, sufficiently stressed, or adequately supported through documented evidence of that challenge being applied. Examples of this identified in recent years' submissions include:

- Insufficient conservatism applied in design of adverse and idiosyncratic scenarios. Most credit unions did include a rising rate or stagflation scenario in their 2022 capital plan. However, in a few cases the forecast increase or flattening of the yield curve was only incrementally different from yield curves used for accompanying baseline scenario analysis. This does little to reveal earnings and capital implications of an aggressive monetary tightening stance being signaled by the Federal Reserve. This leads to overly optimistic net worth ratio/capital forecasts.

- Use of deposit and asset growth rates that do not align with recent performance or are not effectively supported in the capital plan. In these cases, the use of lower growth rates than observed in recent performance led to potentially overly optimistic net worth ratio/capital forecasts.

- Use of new or refreshed loan loss models which provided loss forecasts in adverse scenarios only incrementally higher than observed in recent performance and baseline scenario forecasts.

The identification of counter intuitive, unreasonable, and insufficiently conservative capital analysis results can be symptomatic of a review and challenge process not functioning as intended. As already noted, most credit unions' governing frameworks over capital planning processes are sufficient in form to provide for appropriate challenge and review points. Unfortunately, we continually observe instances where review and challenge applied to capital analysis approaches and results are not functioning as intended. This is normally associated with credit union cultures that tend to "defend the brand" as opposed to place value on varying perspectives on risk when conducting capital analysis. Corporate cultures that discourage alternative perspectives on risk that may conflict with strategic business initiatives tend to demonstrate overly optimistic capital assessments in both expected and unfavorable scenario analysis. This limits the effectiveness of the exercise in managing capital relative to risk in an ongoing actionable manner.

Conversely, governance cultures, which foster independent critical challenge:

- Improve the reliability and conservatism of analysis results;
- Aid in an understanding of analytical limitations;
- Identify areas for improvement in the capital analysis framework; and
- Ensure the use of results is consistent with the framework's objectives.

To foster conservative and transparent capital analysis as well as accurate and timely reporting, the review and challenge process should be vetted as part of periodic validation and internal auditing engagements. Additionally, credit union boards should also ensure the review and challenge process is not being obstructed by cultural factors favoring analysis outcomes that support ongoing business strategies in lieu of gaining a more thorough understanding of potential capital at risk.

Capital Policy: Actionable vs. Reactive Approaches to Capital Analysis and Management

Leading credit unions establish capital policies with forward-looking and actionable triggers. This enables a rapid response to changing economic or business conditions using capital analysis and assessments as the primary tool for managing capital needs on a continuous basis.

For example, leading credit union policies require the board and management to invoke contingency actions based upon forward-looking capital analysis results produced by management. This proactive approach to the use of capital analysis more effectively

limits capital sensitivity to risk in a timely and forward-looking way. In other cases, active use of forward-looking capital analysis signals the board and management to establish additional capital buffers to account for economic and environmental stress such as that experienced during the pandemic or, more recently, aggressive monetary policy moves initiated by the Federal Reserve.

Conversely, credit union policies relying on actual performance and balance sheet positions to trigger capital actions required by policy consistently react more slowly to economic stress and changes in business conditions. This reactive policy approach left credit unions more vulnerable at the onset of the pandemic and to the recent increase and flattening of the yield curve. This diminishes the value and use of forward-looking analysis as part of ongoing strategic decision making.

As credit unions migrate from Tier I to Tier II and III status, the NCUA expects capital policies and management practices to mature and allow for more actionable approaches to managing capital and risk in a forward-looking manner. This can be accomplished by more proactively utilizing both the hypothetical scenario analysis serving as the foundation of the capital plan and performing ongoing monitoring of actual performance when evaluating capital adequacy against various policy limits and triggers.

Governance: Third-Party Relationships

Many covered credit unions have contracted third-party consultants and service providers to assist and support capital planning initiatives in a variety of ways, including, but not limited to:

- Evaluation of and assistance with establishing overall governance and process frameworks associated with the capital assessment and planning process;
- Assistance in identifying essential elements to be included within the annual capital plan and best practices for presentation within the plan;
- Use of third-party vendor modeling solutions for purposes of loan loss forecasting, asset valuation, and cash flow aggregation for use in the scenario forecasting process; and
- Development, deployment, and validation of internally sourced loan origination and credit loss forecasting models.

More recently we have seen credit unions relying on third-party vendor relationships for “end to end” production scenario-based forecasting and sensitivity analysis serving as the basis for the capital assessment and plan.

As with any other third-party relationship, it is expected that vendor relationships are clearly defined and subject to internal vendor management and oversight policies within each credit union. While the use of third parties in supporting the development of a capital planning framework and production of the capital analysis itself is not discouraged, covered credit unions must ensure potential limitations associated with outsourcing of capital analysis are understood and mitigated. Examples of some limitations that have been observed in capital plans reviewed in recent years include, but are not limited to, the following:

- If not adequately customized or calibrated, vendor-supplied models may be limited in their design and ability to apply forecasting approaches appropriate for credit union’s unique asset/liability holdings and risks;
- Vendor relationships and solutions may not be flexible or cost effective enough to allow for timeliness and ability to refresh capital analysis when conditions rapidly change;
- Transparency of modeling approaches and access, and ability to conduct model review, performance, and validation activities can be somewhat more difficult for the credit union’s own internal review and challenge functions to work as intended;
- Overreliance on third-party vendors to collect and manage risk data used to inform model coefficients and calibration could result in lost opportunities regarding credit unions’ understanding and use of risk data in other risk and strategic management activities; and
- Lastly, the production and use of the capital analysis in strategic and risk decision making can become siloed within a specific division in the organization responsible for the relationship with the third party. This could limit diversity of input and challenge brought to the planning process, as well as to subsequent use of the capital assessment itself in managing capital needs in response to both existing and emerging risks across the organization.

Generally, outsourcing of capital analysis and planning activities, in whole or in part, is considered reasonable and appropriate for Tier I credit unions. As credit unions migrate to Tier II and Tier III status, expectations are that credit unions will become less reliant on third-party vendors for production of material aspects of capital analysis, which will enhance efficiency, transparency, and strength of the overall capital analysis and planning framework. Whenever a covered credit union utilizes third-party resources to support or produce material aspects of its ongoing capital assessment and plan, the previously mentioned limitations should be expressly considered, addressed, and monitored by senior management and the board responsible for oversight of the capital planning process.

Risk Management Fundamentals

As detailed in prior years' ROP communications, a foundational risk management framework and practices are fundamental to support sound capital planning and analysis. During 2020 and 2021, the external economic and operational stresses associated with the pandemic elevated the importance of model risk management (MRM) and timely risk identification and assessment as crucial risk management fundamentals supporting and informing capital analysis. During review of 2022 capital plans these key risk management functions continued to be emphasized. Observations about leading and lagging practices arising out of assessment and the way these functions informed and supported capital assessments are detailed below.

Model Risk Management

A strong, effective, and independent MRM function is a key risk management fundamental supporting and contributing to sound capital analysis. Although pandemic-related economic concerns began to subside during 2022, strength of MRM oversight and review, as applied to capital analysis-related modeling approaches, continued to be an area demonstrating lagging approaches as observed in review of 2022 capital plans.

Management of Model Risk Related to Pandemic-Period Data Anomalies

Despite immediate economic pressures associated with the pandemic subsiding, the impact of various governmental and institutional responses to the economic threats associated with the pandemic will impact modeling and forecasting approaches utilized in credit union capital assessments for years to come. Accordingly, an ongoing area of heightened expectations related to MRM activities supporting capital analysis is effectiveness of MRM functions' evaluation of the long-term impact pandemic-related member intervention actions could have on performance data sets used to develop and "tune" models going forward. While we noted generally reasonable approaches applied in dealing with data complications, in some cases additional validation and transparency related to decisions was deemed necessary.

In most cases, covered credit unions chose to omit pandemic-period performance data for purposes of ongoing model development, re-development, and refresh/tuning activities. Other credit unions determined, for purposes of consistent application of model maintenance policies, there was value in maintaining complete historical data sets used for model development and maintenance. These credit unions chose to continue to append pandemic-period performance observations to the data sets. In either case, the inclusion or exclusion will have implications regarding model development. In both cases model calibrations and outcomes should be subject to enhanced performance testing and validation as required by the credit union's MRM policies and procedures and be appropriately explained within the capital plan and supporting documentation.

Regardless of the decision to include or exclude pandemic period data, additional performance and back testing may be warranted. Leading institutions conducted additional back testing and performance testing by both including and excluding the data sets. They then compared results, documented those results, and shared the results of these activities with management and board committees responsible for approval of the forecasting approaches and estimates.

In some cases, credit unions invoked changes in model variable selection or adjusted model coefficients to compensate for outer bound sensitivity in model performance arising out of a decision to include or exclude data sets in question. While these were considered pro-active approaches to dealing with a potential model limitation, depending upon the significance of change in model design or approach, questions arose regarding the need to re-validate those models. Where changes are made to aspects of underlying model design or approach, credit unions should consider the materiality of the change in accordance with their MRM policy. Credit unions should also determine whether independent re-validation of those decisions and actions should be considered.

Model Risk Oversight – Failures to Detect Model Weaknesses

We also continue to note instances where limitations in capital planning related models continue to elude detection by credit union MRM staff and functions charged with applying challenge to forecast approaches and results. Over the past three planning cycles our reviews of capital assessments have identified examples of unreasonable or unintuitive forecasting approaches and outcomes in material aspects of the capital assessments produced. In most cases these observations led to forecast outcomes lacking a level of conservatism appropriate when conducting a capital adequacy assessment. Issues identified that led to unreasonable forecast outcomes included the following:

- Newly developed loss forecasting models that failed to allow for alignment of key independent variables between the risks being assessed and economic variables required for use in supervisory stress testing scenarios;

- Model refresh activities that utilized performance data tainted by pandemic-period borrower intervention strategies and government stimulus measures that had significant impact on the conservatism of model forecasts; and

- Overreliance on independent variables and model coefficients which resulted in model performance degradation dependent upon the scenario applied (i.e., consistency of model performance could not be demonstrated under all scenarios utilized for the capital analysis).

In all these cases, the underlying modeling limitations and weaknesses resulted in forecast outcomes which were intuitively unreasonable and overly optimistic when compared to recent performance or other benchmarks such as prior years' stress tests or challenge models. Significant deviation when comparing baseline or expected results and results under adverse scenario analysis were easily observable yet not explained or commented upon in the capital plan and supporting documentation presented to key decision makers within the organizations.

These weaknesses raise questions as to the strength of practice applied by both internal MRM functions as well as the overall capital planning review and challenge functions themselves. This prompts further concern regarding the overall strength of MRM frameworks oversight, independence of MRM oversight functions from business line management functions, as well as the strength of expertise of staff leading MRM functions.

As noted earlier, MRM is an essential risk mitigating and effective challenge function related to the production of reasonable and conservative capital analysis. As covered credit unions migrate from Tier I to Tier II and III status relative to capital planning and supervisory stress testing activities, leading expectations that would assist in mitigating some of the weaknesses noted during recent years' capital plan reviews would include the following:

1. As a credit union matures, oversight responsibilities for MRM activities should be more clearly defined and segregated from committees comprised of and led by front line modelers and transitioned to a centralized risk oversight function;

2. Responsibility for oversight of MRM functions should be led by individuals possessing the experience and qualifications necessary to understand principles and practices related to MRM;

3. Less reliance should be placed solely on front line modelers for production of model performance and risk analysis, in favor of the addition of qualified risk management staff capable of producing or, at a minimum, interpreting and challenging model performance and risk analysis performed by front line modeling and forecasting staff; and

4. Establishing consistency in reporting and communications by MRM staff to senior management and board committees with respect to model risk reviews, validation activities, and independent outcome analysis of forecasts used for purposes of capital assessment and planning.

Comprehensive Capital Analysis

Reasonable and conservative capital analysis is a crucial component of the capital planning process and is a critical element of risk management for credit unions. The capital analysis informs the board and senior management of the credit union's resilience through uncertain times. It also helps to establish enterprise risk appetites and associated risk limits. Capital analysis provides an opportunity to assess strategic planning and business decisions on a forward-looking basis.

The fundamentals of capital analysis are not new for credit unions. We expect credit unions will approach and apply the principles in different ways depending on the unique circumstances and business models of each credit union. We also expect capital analysis is conducted in a manner that is forward looking and aligned with both the institutions' ongoing risk and strategic management programs.

Specific fundamentals of sound capital analysis continuously observed as lagging with respect to achieving this alignment between capital analysis and larger enterprise-wide strategic and risk management programs are as follows:

1. Relevance and conservatism of scenario design and selection;
2. Conservatism of capital analysis approaches, assumptions, and estimates; and
3. Use of capital analysis results informing ongoing risk and strategic management objectives.

We discuss these as well as other observations made with respect to the strength and completeness of capital analysis practices observed in 2022 capital plan submissions in more detail in the following section.

Relevance and Conservatism of Scenario Design and Selection

Previous years' range of practice papers noted weaknesses observed in relevance and conservatism of scenarios and economic variable paths used to produce forward-looking assessments of capital resilience in relation to ongoing economic stress and uncertainty related to the COVID-19 pandemic. The review of 2022 capital plans identified instances where scenario selection either did not account for or were not sufficiently conservative in response to ongoing signals that significant inflationary and interest rate stresses were imminent. These observations were indicative of weaknesses in not only the production of the capital analysis and assessment, but also the review, challenge, and oversight facets of the governing framework over capital planning.

In some cases, 2022 capital plans essentially ignored long-term consensus economic forecasts signaling increased inflation and market interest rates over the scenario

horizon beginning January 2022. In these cases, significant emphasis remained on use of the NCUA-mandated supervisory stress test scenario paths. In others, inflationary pressures were built into the scenario, but they were not severe enough to reflect the sensitivity of earnings, capital, and liquidity under varying levels and shapes of increases in market yield curves.

Insufficient conservatism applied to scenario design was specifically relevant in cases where rising interest rate or inflationary scenario analysis was being applied. Lagging observations include the application of inflationary scenarios where anticipated changes in magnitude and shape of upward shifts in the yield curve were well below consensus estimates or rate movements. These scenarios had already occurred at the time the capital plan was provided to the board of directors for review and approval. Capital plans should be providing the board with the most conservative view and understanding of resiliency of earnings, capital, and liquidity under a chosen economic or event risk. However, the capital plans provided a more optimistic view of financial strength than actual financial performance being realized at the same time.

To best understand sensitivity of earnings, capital, and liquidity, leading credit unions relied less on trying to "predict" what the path of the interest rate increase would be and instead utilized historical observations of "worst case" interest rate environments to better understand conditions in which policy limits related to earnings, capital, and liquidity could be threatened. These credit unions observed and applied worst-case historical interest rate environments. They incrementally applied those rate curves over the scenario horizon to identify points where tolerance levels related to interest income, expense, and margins were threatened. Further, those credit unions utilized the forward-looking analysis to identify products and business lines most impacted under a significant change in market interest rates. This helps to inform potential mitigation plans prior to the extent of the rate moves materializing in actual practice. This approach provides more useful information to understand inner and outer bounds of interest rate risk to earnings, capital, and liquidity in relation to board-approved risk tolerances.

The lagging practices seemed to indicate a disconnect in credit unions' ongoing risk assessment activities and the selection and development of scenarios used for capital assessment and planning. Lagging observations also are indicative of areas where review and challenge of capital analysis approaches could benefit from additional strength and maturity. Our review of most credit union Asset/Liability Committee and board meeting packets indicated senior management teams were actively discussing the potential for increased inflationary pressures and upward shift in market yield curves. However, those same management teams did not incorporate these potential circumstances within the capital analysis and planning itself.

In contrast, leading credit unions utilized ongoing risk and market assessment activities to inform scenarios related to both the type and severity of scenario paths utilized within

the capital analysis. Similarly, leading credit unions accounted for ongoing or anticipated changes in core business strategies when designing and deploying scenario analysis for purposes of capital planning. This included credit unions anticipating a shift of business strategies from traditional lend and hold strategies to more transaction and non-interest income-based business models. In those cases, credit unions designed specific scenarios and identified relevant economic variable paths to understand sensitivity of earnings, capital, and liquidity under varying degrees of economic stress.

Conservatism of Capital Analysis Approaches

Prior year range-of-practice papers have highlighted the importance of applying conservatism in producing capital analysis as essential to understanding a broad array of potential outcomes, not only those considered most probable and favorable in relation to strategic plan objectives. This does not mean however; the credit union must take a "the sky is falling" approach. Instead, conservatism requires thorough and transparent vetting of data biases and limitations, current and future reporting and consumer compliance policies, and the potential impact, availability, and unintended consequences of proposed mitigating actions. To ensure assessment approaches and outcomes are sufficiently conservative for purposes of assessing resiliency of earnings, capital, and liquidity, applying independent effective challenge of approaches and outcomes of analysis is also essential.

In addition to the preceding discussion regarding scenario design and severity, other examples of areas where conservatism of approaches, assumptions, analysis techniques, and outcomes were deemed lagging in 2022 capital plans reviewed are:

- Loan Loss Forecasts;
- Balance Sheet Growth Estimates; and
- Repricing Assumptions.

Loan Loss Forecasting

Conservatism of approach related to loan loss forecasting applied to capital analysis remained an area where instances of lagging approaches to both modeling and review and challenge of outcomes were apparent.

As discussed in the MRM section, some of the issues identified that contributed to less than conservative loss forecasts being applied for purposes of capital analysis included the following:

- Loss forecasting models failed to allow for alignment of key independent variables between the risks being assessed and key economic variables material to the economic scenarios analysis applied;

- Model refresh and calibration approaches utilized performance data tainted by pandemic-period borrower intervention strategies; and
- Overreliance on independent variables and model coefficients which demonstrated inconsistent model performance between expected and adverse scenarios utilized for the capital analysis.

In these cases, model risk and outcome analysis conducted by internal review functions failed to identify and challenge loan loss forecasts. Various portfolios demonstrated overly optimistic outcomes as compared to recent performance and prior period forecasts using different models and approaches. Leading credit unions instituting new modeling or calibration approaches utilized more robust model performance and challenge testing. The leading credit unions were also transparent in explaining and recommending remediation plans to oversight committees where significant year-over-year differences in loss forecasts were clearly apparent.

Data limitations associated with new and growing business objectives such as externally sourced loans, participation loans, and commercial lending activities also impact effectiveness of loss forecast results. In these instances, credit unions chose to apply realized loss rates at the portfolio level for purposes of forecasting in both expected and adverse scenario analyses. This was considered a lagging approach since the loss rates applied were primarily indicative of performance during an expanding economy. Leading practices included the acquisition and use of asset class specific modeling solutions or the use of more robust external data sources covering performance of the individual asset classes over several economic cycles.

Growth and Product Origination Assumptions

A key output of the capital analysis and planning process is understanding the degree to which unplanned growth or decline in balance sheet assets and product line origination activities can impact the ability to maintain earnings, capital, and liquidity within desired tolerances.

Leading credit unions explored the effect of varying levels of balance sheet growth and product origination levels under both scenario and sensitivity analysis produced as part of their capital analysis and planning. Conversely, lagging credit unions relied more heavily on single path assumptions derived using various quantitative or qualitative estimation techniques. Lagging credit unions applied those growth and product origination assumptions within the capital analysis. In some cases, these single path estimates did not align with recent performance nor with strategic planning objectives. They then led to overly optimistic forecast results with respect to net worth ratios, net interest margin, and liquidity forecasts included within the capital plan and assessment.

When assessing the strength with which credit unions derive and apply balance sheet

growth and product origination assumptions as part of the capital analysis, the NCUA will ensure there is not an overreliance on management actions applied to growth assumptions used in the capital analysis. Similarly, our review will also look to see that growth assumptions applied in the capital analysis align with recent performance. Any deviations from recent performance used within the forecasting should be adequately explained and quantified as part of the scenario analysis itself or as part of additional sensitivity testing.

Conclusions

As post-pandemic inflationary and potentially recessionary pressures continue to raise uncertainties regarding the macroeconomic environment in which credit unions may be operating for the foreseeable future, the NCUA expects credit unions to continue utilizing and adapting their capital analysis and assessment practices. Credit unions should leverage core enterprise functions and oversight to ensure useful, conservative, and transparent capital stress testing and financial forecasting to inform ongoing strategic and risk management action plans. The principles and practices detailed in this white paper will assist credit unions in deploying progressively more useful capital assessment and planning activities moving forward.