

**BAXTER CAPITAL
MANAGEMENT**

March 8, 2010

Ms. Mary Rupp
Secretary of the Board
National Credit Union Administration
1775 Duke Street
Alexandria, VA 22314-3428

Dear Ms. Rupp:

We appreciate the opportunity to provide comment on the NCUA Proposed Rule 12 CFR Part 704. Baxter Capital Management is an investment and ALM advisor to credit unions in Indiana. We have a general suggestion about the structure of the CCU system and specific comments about NEV risk limits. With regard to the structure of the CCU system, we believe that a significant part of the excessive risk-taking at Corporate Credit Unions was related to unhealthy competition for members among CCU's. We think competition among central credit facilities has more disadvantages than advantages. Therefore, we recommend that the CCU system be structured like the Federal Reserve and Federal Home Loan Bank Systems and that the national field of membership be eliminated. Our comments about NEV risk limits are below.

704.8 NEV RISK LIMITS

Like NCUA, we too are advocates of the net economic value (NEV) approach to measuring and managing interest rate risk (IRR) as well as other types of risk. Unlike other methods such as the use of net interest income (NII) projections, the NEV approach is complete, far sighted, it uses a minimum of forecast assumptions, and it recognizes the time value of money. We think it is clearly the best method for measuring IRR devised so far. However, we disagree with the way that the NCUA has chosen to specify risk limits, and are dismayed at the proposal in the discussion

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of the regulation to use NII projections for IRR management. On page 93 under “Net interest income modeling” it is stated that “NII modeling will assist corporate management with its budgeting process and will provide an interest rate risk measurement tool if base case NEV declines sharply due to external market shocks.” NCUA is forced to consider using NII as an IRR tool because there are problems with the way that the NCUA has defined IRR limits as minimum allowable percent change in NEV and minimum allowable NEV to asset ratios. This has become apparent over recent quarters as the calculated NEVs of corporate credit unions (CCUs) have plummeted. IRR measures expressed as percent change of NEV (equity based measures) soared as the calculated NEVs approached zero then those same measures improved as calculated NEV levels sank below zero. At the same time estimated dollar losses due to rate change remained relatively stable. Something is clearly wrong, but it is not with the NEV approach, and NII simulations are not the remedy. The problem is with the current design of IRR limits and the expression of risk as % change in NEV. The solution is to correct the problem not to use the wrong tool. Below are several reasons why the way that IRR limits are currently expressed as equity (NEV) based should be changed.

First, the % change in NEV from a rate shock misrepresents the amount of risk being taken. The amount of risk an institution takes equals the dollar amount it would lose given a rate shock. This is independent of the level of NEV. It is incorrect to say that 2 institutions have the same level of IRR if they would both suffer the same percent loss in NEV from a given rate shock when one has twice the NEV of the other. The one with the greater NEV is clearly taking more risk because it would lose more value. Though it may have a greater capacity to cover loss it is clearly at risk of greater loss. There is a difference between taking risk and the capacity to take risk. Ability to cover loss does not negate risk. An institution with estimated NEV of \$0 that would lose only \$1 from a +300 basis point rate shock would show an infinite level of risk using the equity based % change in NEV measure. An institution with \$10 billion of NEV that would lose \$1 billion would only show a 10% decline in NEV. The second institution is clearly taking more risk, but its % sensitivity of NEV indicates otherwise. The setting of risk limits should be based on capacity to absorb loss as represented by the level of capital or NEV, but the risk measure that is being limited and thus managed should primarily reflect the amount of risk being taken.

Second, the objective of keeping the NEV to assets ratio above some minimum is beyond the control of IRR. It is admirable to strive to keep NEV from dipping below a certain minimum level, but this should be an overall objective of asset liability management (ALM) not the objective of the management of an individual risk type. Controlling a single type of risk cannot prevent NEV from dipping below a minimum level. That is, you cannot control the level of NEV by keeping IRR in check alone. NEV can plummet for other reasons such as from credit risk as we have recently witnessed. An IRR measure should be more a measure of IRR than a measure of NEV, and limits on IRR should be achievable by controlling IRR alone. That is, if an IRR limit is set it should be achievable by controlling IRR. Maintaining a minimum level of NEV is beyond the capabilities of IRR management, or the management of any individual type of risk. Managing the level of IRR can prevent interest rate changes

from significantly lowering NEV but that doesn't keep other occurrences from reducing NEV.

Third, NEV is too volatile to be used as a base for IRR measurement. In the market place we have recently witnessed that the economic value of financial institutions can change dramatically. For example, the stock market value of Citigroup fell over 98% between 12/27/06 and 3/5/09. Such a decline in economic value would raise NEV based risk measures by a factor of 50 indicating a rapid increase in risk even if the loss to NEV from a given rate shock remained constant. Similar examples can be made of other financial institutions such as Bank of America (down 94%), JP Morgan (down 70%), and Wells Fargo (down 80%). As of 1/8/10 these financial institutions have seen rebounds in their market values ranging from +280% to +543%. We have also witnessed such volatility in the estimated NEVs of corporate credit unions. Large changes in NEV will significantly change NEV based risk measures confusing the measurement and management of risk. As NEV approaches zero risk measures expressed as % changes in NEV become unstable rising to infinity regardless of the actual exposure to rising rates. This results in confusion about the level of IRR, how much it has changed, and what should be done about it. And as NEV goes below zero, risk appears to decline. The more negative NEV gets the less risk NEV based measures indicate. These problems have been illustrated recently as the NEVs of CCUs have plummeted. IRR measures expressed as percent sensitivities of NEV to rate changes soared as the calculated NEVs approached zero then those same measures improved as calculated NEV levels sank below zero. These changes in the current IRR policy measures were not because of changes in IRR. Something is clearly wrong, but it is not with the NEV approach, it is with the specification of risk as % change in NEV. Economic value is too volatile to be used as a base for IRR measurement. Equity based IRR measures often vary more because of changes in NEV than because of changes in risk exposure.

Fourth, expressing the level of IRR and setting limits in this manner puts too much reliance on both the accuracy of NEV measurement and the appropriateness of its definition. It is arrogant to believe that one can accurately determine the economic value of a financial institution by calculation. NEV calculations are liquidation values based on estimated market values of assets and liabilities. Many have argued that the economic value of an organization can be much greater than its liquidation value. In addition, there can be significant error in the estimation of NEV. This is largely because NEV is a residual value, small in relation to total assets and liabilities. As a result even small errors in the valuation of assets and liabilities can result in large errors in the estimate of NEV. For example, consider an institution with an actual NEV to assets ratio of 5%. An estimate of the value of its assets that is 98% of actual (only 2 points too low) with an estimate of the value of its liabilities that is 102% of actual (only 2 points too high) can result in a 78% error in NEV (NEV estimate of approximately 1.1% versus actual of 5%). This would increase an IRR measure specified as per cent change in NEV by over 4.5 times. An actual equity based IRR position of -10% would appear as -45%. Two points is not a large error on the value of a financial instrument. A difference of 50 basis points in the opinion of market yield on a simple 5 year note can generate a difference in present value of over 2 points. Such errors can also overstate NEV resulting in underestimation of risk.

Fortunately, it is not necessary to accurately measure the level of NEV in order to measure and manage risk effectively. Risk is the loss in NEV given an economic shock. Therefore, risk measurement only requires an accurate assessment of the sensitivity of

NEV to changes in economic environment. The sensitivity of NEV to interest rate changes is the amount that NEV changes with changes in market rates. To determine this, NEV in the flat rate environment is subtracted from NEV in the rate shock environment and so errors in the measurement of the level of NEV or the definition of NEV (liquidation value versus actual economic value) tend to net out. For example, the dollar loss on a Treasury note from a rate increase is nearly the same whether it is valued at 98 cents on the dollar to start or 102. By defining risk as the % change in NEV, establishing limits on that measure, and requiring a minimum NEV to assets ratio NCUA is unnecessarily relying on accurate measurement of and a correct definition of NEV. Risk can be measured and managed without relying so much on the accuracy of the measurement of NEV levels.

A better way to express IRR is to relate the interest rate sensitivity of NEV to total assets (asset based measure). This way, we will still have a measure that is reasonably comparable across institutions and time, but the risk measure will be much less affected by errors in the measurement of or definition of NEV, and it will tend to change only when the level of risk changes, not because the level of NEV changes. It is also a type of capital ratio measure to which many can relate. Limits can be set based on the institution's capital ratio relative to a minimum required ratio. For example, if an institution's capital ratio is 6% and the required minimum is 4% the amount of NEV loss due to a rate shock might be limited to 2% of assets (6% minus 4%). Consider the example of estimation error cited above. The estimated NEV based measure (current NCUA specification) would be -45% versus an actual of -10%, a large error. The equivalent asset based measure would be -.51% versus the actual of -.50%, a minimal error. Using an asset based measure will vastly reduce the effects of measurement error, eliminate the instability inherent in the NEV based measure, will better represent the amount of IRR that is being carried, and will eliminate any need to resort to inferior approaches of risk measurement such as NII projections.

704.8 NII MODELING

We are concerned about the NCUA's apparent intention of using net interest income (NII) projections in the management of risk (see page 93). IRR measures based on NII simulations are short sighted, incomplete analyses of risk that ignore the time value of money and rely more on assumptions than do NEV measures. We are not surprised at the popularity of NII projections. This is probably due to the widespread familiarity of NII calculations as NII and other accounting based analyses have been used to manage financial institutions for a long time. But despite the long term use of NII projections in the management of financial institutions, financial crises have continued. Institutions have failed with acceptable short term NII results. And the experience of many savings and loans during the 1980s and 1990s and credit unions in the mid 1990s showed that market-based measures of risk deteriorated long before the book value of capital signaled the need for intervention by management and regulators, and in some cases intervention was needed just months after positive earnings were reported. A strong case can be made that too much focus on short sighted objectives such as managing near term earnings has led the financial industry into many crises, and that it will continue to do so. Focusing on short-term objectives such as NII projections can lead financial managers to take on more IRR and credit risk threatening the long-term viability of the institution. A NII simulation over a 2-year forecast horizon cannot distinguish the difference between a 2-year asset and a 30-year asset. Pressure to focus on NII levels will tempt managers to finance long term assets with liabilities that mature just beyond

the simulation period, and to employ rosy scenario assumptions to hide risk. And incomplete risk measures such as NII analyses are an invitation to Wall Street to stealthily pass on risk via debt instruments structured to take advantage of the failings of the measure.

It is often argued that NEV measures show the long-term effects of interest rate changes and NII measures show the short-term effects and that we need both a short-term view and a long-term view of risk to manage it effectively. This is a false argument. There is nothing long-term about the impact of an instantaneous change in interest rates on a financial institution. The impact is immediate; it just takes a long time for it to be reflected in accounting measures such as NII calculations. The notion that quarterly earnings numbers accurately reflect the timing of the effects of economic impacts is by accounting convention, not economic reality. The distinction between the two approaches isn't long-term versus short-term, it's complete versus incomplete. The NEV approach shows the complete impact of an interest rate shock, the NII approach does not. The NEV approach is a complete measure of return and risk and the NII approach is an incomplete measure. Nothing good can come from guiding a financial institution using incomplete measures of risk. Accounting conventions can have serious shortcomings when it comes to properly reflecting economic events. Looking at the world through the filter of NII glasses makes us too nearsighted to avoid disaster.

In addition, with regard to IRR there is a negative relationship between the value of equity and return on equity. That is, the objective of stabilizing NII is contrary to the objective of stabilizing NEV. More specifically, for NEV to remain constant, return on equity must rise and fall in proportion to changes in market interest rates. This fact is well documented (e.g. see Comptroller of the Currency's Handbook on Interest Rate Risk). For a financial institution to remain economically viable NII needs to adjust to changes in the economic environment. This can be illustrated by comparing a long term fixed rate security with a variable rate security that is equal in all other respects. The value of the variable rate security remains stable when rates rise because its return adapts to the higher rate environment. The value of the fixed rate security falls when rates rise because its return doesn't adapt. A financial institution's earnings must adapt to changes in its environment if it is to survive.

In the regulation discussion (page 93) it was stated that NII modeling "will provide an interest rate risk measurement tool if base case NEV declines sharply due to external market shocks." The adoption of NII modeling for this purpose is unnecessary. By adopting the asset-based specification of IRR presented above in place of the NEV based specification currently in use there would be no need to incorporate a clearly inferior and misleading IRR measurement tool. NII projections may be useful in budgeting, but budgeting is not risk management.

Sincerely,

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