Impact of the Corporate Stabilization Actions on the NCUSIF

Introduction

The corporate credit union system is facing unprecedented strains on its liquidity and capital due to credit market disruptions and the current economic climate. Nearly 80 percent of the securities held in the corporate credit union system remain highly rated, but a portion of the securities has been downgraded below investment grade due to the underlying collateral performance. As of November 30, 2008, corporate credit unions reported approximately $18 billion in unrealized losses on securities. The credit exposure is difficult to define as it is predicated on estimates about the economy and performance of underlying collateral. Should a corporate sell its securities at this time, such transactions will likely occur only at "fire sale prices" resulting in losses that may far exceed the current unrealized losses and the $8.7 billion in corporate total capital.

The NCUA Board took action on January 28, 2009 to stabilize the corporate credit union system by placing an infusion of capital into U.S. Central Corporate Federal Credit Union and implementing a temporary guarantee on excess shares on deposit at corporate credit unions. This guarantee requires the establishment of a liability that will impact the NCUSIF. Based on current corporate credit union balance sheets and modeling various market scenarios, the amount of the liability will initially be $3.7 billion with the participation of all corporate credit unions. The following discusses the calculation of the loss reserve and explores options that may affect the calculation.

Why do we have to recognize a liability for the guarantee?

FASB Interpretation No. 45, *Guarantor's Accounting and Disclosure Requirements for Guarantees, Including Indirect Guarantees of Indebtedness of Others*, is the applicable accounting standard which requires that financial guarantees are initially recognized and measured at fair value. Simply stated, the "fair value" should represent what we would have to pay a third party in an arms-length transaction to take over responsibility for the guarantee. For most transactions like this, the fair value at inception is usually equal to the premium received. However, since the type of guarantee provided by NCUA does not contain a market-based premium, we rely upon valuation modeling (a probability related approach) to determine the fair value.

While the accounting standard does not prescribe 'how' to determine the fair value, the methodology and model we utilized to determine the fair value applied specific variables to the

expected liability based on loss events, a range of probabilities of default, and the related cost of capital.

How did NCUA determine the loss reserve estimate?

During the last NCUSIF audit, NCUA staff worked with valuation experts from our external accounting firm to develop a model for determining the fair value of NCUSIF Loan Guarantees. We used the basic design of that model to develop an appropriate model to determine the fair value of the guarantees contained in the corporate stabilization actions. Specific and stable information for the key variables we use in the model are not available. Therefore, a forecasting and risk analysis program, or Monte Carlo simulation, was utilized to provide analysis of all of the probable model results. A simplified equation for the model is identified below and the key variables are discussed in detail in the next section:

Fair value of the Share Guarantee	**=**	**Probability of Default**	**x**	**Loss given Default**	**+**	**Cost of Capital**

- Probability of Default: a range of the probability that NCUA would have to fulfill the guarantee.
- Loss given Default: a range of potential future payments that could be required of the NCUSIF as guarantor.
- Cost of Capital: a range of possible pricing for the cost of capital.

What are the variables used in the fair value calculation model?

Probability of Default: The probability of default is the likelihood that the NCUSIF would have to fulfill the terms of the guarantee. We utilized a range of scenarios for the probability of failures. Our range was developed by reviewing the history of credit ratings and default rates for financial institutions and bonds.

Loss given default: The loss given default is the amount the NCUSIF would have to pay in order to satisfy the claims resulting from the corporate stabilization actions. The NCUSIF's total exposure is the difference between the amount of shares subject to the temporary share guarantee and amount of shares insured up to the current $250,000 limit, and the value of each participating corporate credit unions assets at the time of execution of the guarantee after the payment of secured creditors and general creditors.

Shares up to $250,000 + Shares subject to the Temporary Guarantee	**-**	**Asset value at time of the guarantee – payment of secured and general creditors**	**=**	**Amount of NCUSIF loss**

Using the December 31, 2008 financial data submitted by the corporate credit unions, we estimated this exposure to be approximately $15 billion. Approximately 90 percent of the corporate system assets are investments, making the asset value upon execution of the guarantee predominantly dependent upon the market value of those investments. Since establishing a true market value of the investments is difficult under the current illiquid conditions, we utilized a distribution of possible losses given default.

Cost of Capital: The cost of capital is the return that a third party would expect if they take on the guarantee and maintain adequate capital or reserves to ensure they were able to fulfill the execution of the guarantee. The amount of capital needed is based upon the estimated exposure to loss. The term of the guarantee and the assumed cost rate of capital impact the cost of capital. We utilized a range of probable rates for the required return on capital based on the cost of corporate debt and normal returns in the financial services industry.

What are the results of the fair value calculation model?

The risk modeling software allowed us to run 10,000 trials of any set of scenarios and review the statistical results. The model produced a distribution of fair value calculation results that estimate the liability to the NCUSIF. We focused our attention on three particular numbers within the distribution:

1. The maximum fair value of the estimated liability.
2. The average fair value, which we utilized as our estimated minimum liability.
3. The expected fair value, which represents the 90th percentile number covering 90% of the distribution of fair value calculations.

At this time, we are using the 90th percentile fair value as our estimated liability of $3.7 billion. As new information is gathered, we will incorporate it into our variables and utilize our model to refine this estimate. As information becomes more stable and specific, our estimate will become more certain.

How can the estimated liability be reduced?

The fair value of the estimated liability may be reduced by any action or event that reduces the probability that the NCUSIF would have to fulfill the terms of the guarantee or reduces the NCUSIF's exposure to loss. The following are examples of actions and events that would reduce the estimated liability by reducing the probability of default and the loss given default:

- Actions by corporate credit unions to enhance profitability, including:
    - Reductions in compensation or expenses;

    - Reductions in the cost of capital; or
    - Improvements in the spread (net interest income percentage);
- Improvements in the market for Mortgage Backed Securities (MBS) and Asset Backed Securities (ABS), either as the result of government actions or improvement in the real estate market; or
- The addition of capital with a loss position subordinate to the NCUSIF's exposure.

Increasing liquidity in the corporate credit unions reduces the likelihood of selling securities at "fire sale" prices, but doesn't reduce the loss upon default, which is a key driver in the liability determination. Improved liquidity should reduce the probability of failure as the leverage position changes and the corporate credit unions are less reliant on borrowed funds. Reduction in the probability of failure reduces the amount of the NCUSIF liability but not by any great amount over estimated levels of improvement.

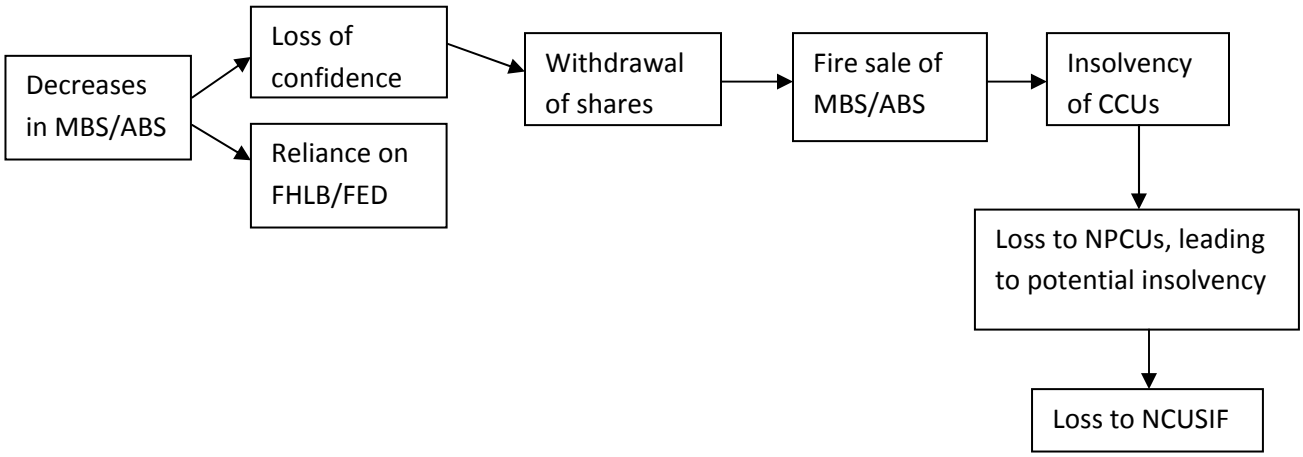
A further decline in general interest rates may decrease the cost of capital and reduce the loss given default.

Participation of the non-federally insured credit unions in the cost of the stabilization program may provide a small savings for the federally insured credit unions (FICUs). The total assessment rate for FICUs would decrease from 0.80% of insured shares to 0.79% of insured shares.

It should be noted that the estimated liability will increase with any action or event that increases the probability the NCUSIF would have to fulfill the terms of the guarantee or increases the exposure to loss.

What would have happened if NCUA had not taken action?

If NCUA had not taken action to provide support for the corporate credit union system, the long term impact on natural person credit unions and the NCUSIF could be much worse. Continued declines in the market value of the MBS/ABS would have further eroded confidence in the corporate credit unions and resulted in additional credit rating downgrades. The withdrawal of shares, either as a result of credit rating downgrades or due to other reasons, would eventually have resulted in the liquidation of the MBS/ABS portfolios and the realization of associated losses, which would have rendered some corporate credit unions insolvent. The resulting liquidation of the corporate credit unions would have resulted in the allocation of permanent losses within the credit union system in addition to systemic concerns with the payment systems. A significant number of natural person credit unions would be insolvent, and the resulting NCUSIF assistance to liquidate or merge these institutions would further reduce the NCUSIF's equity with no potential for recovery.



What is the benefit of the NCUA's action to stabilize the corporate credit union system?

The largest benefit of the corporate stabilization action is the preservation of flexibility. Natural person credit unions can safely invest in the corporate system, thus improving the system's liquidity and preventing the forced sale of the distressed investments and the realization of associated losses. The corporate credit unions will be able to act as opportunities develop to reduce the loss exposure either through the efforts of government actions or the eventual improvement in the economy. Finally, should the estimated losses to the NCUSIF as a result of the corporate stabilization actions not materialize; the premium assessments placed into the NCUSIF will be returned to the natural person credit unions that funded the actions.