Summary of Consultancy Report for NCUA on
Corporate Credit Union Portfolio Analysis

Purpose of 3rd Party Analysis of Corporate Credit Union Investments

In January 2009, as part of its ongoing corporate stabilization efforts, the NCUA Board authorized the engagement of a third party to conduct a comprehensive analysis of expected credit losses for select securities held by corporate credit unions.

The NCUA Board sought an independent analysis of corporate credit union residential mortgage backed securities (RMBS) to: (1) obtain an objective and independent third party's views of potential credit losses, market values and risks; and (2) obtain an additional tool to better assess the reliability of information developed and reported by the corporate credit unions.

The market turmoil and observance of wide ranging valuations of RMBS securities caused NCUA to seek this form of additional due diligence to augment the agency's analysis of the potential losses stemming from the corporate credit union portfolios and confirm the agency's risk management concerns.

Further impetus for obtaining an independent review includes the following:

- The portfolios with RMBS have highly complex structures that require considerable expertise to model and analyze;
- The growing difference between the book value of RMBS and their estimated market values;
- The increase in credit-rating downgrades for RMBS;
- The increased inability to sell RMBS due to the lack of liquidity and willing purchasers and the need to determine the impact of these issues;
- The corporate credit unions' reliance on internally generated valuation of the RMBS [despite the unprecedented conditions and resultant increase in valuation complexity];
- The increased concerns about the portfolio management abilities of the largest corporate credit unions; and
- The corporate credit unions' use of different methodologies to assess potential losses.

Residential Mortgage Backed Securities (RMBS) Valuation Issues

In the current economic environment, performance of the RMBS portfolio is driven by:

- Real estate prices,
- Changes in public policy,
- Servicer impacts, and
- Loan modifications.

RMBS continue to deteriorate from a fundamental credit and pricing perspective. On the credit side, the deterioration is caused by increased levels of severe delinquencies (90-plus days past due), foreclosures (increased real estate owned by lenders), declines in home prices, and regulatory changes such as mortgage cram-downs and streamlined loan modifications. In early 2009, the S&P/Case-Shiller Home Price Index for 20 major U.S. cities disclosed home prices

had fallen over 18% since November 2007, and had fallen 27% from their peak. Areas with the largest declines in value were the same areas with the highest concentration of non-Agency mortgages including the affordability products (pick-a-pay mortgages, no-doc loans) which helped create the earliest and largest run up in home prices. Market expectations imply a bottom in the real estate market will occur in 2010 with a peak-to-trough decline of 42%, another 15 percentage points from the 27% decline already incurred. Credit rating agencies observed increases in the level of loss severity (the level of losses incurred on foreclosed properties) which increased to above 45% for some loan types. As a result, current levels of credit support in RMBS, including subordination, excess interest and overcollateralization, were not sufficient for some securities to maintain their original rating at time of purchase (usually AAA).

With respect to the bid/ask spread for RMBS prices, there is a wide difference between the highest price that a buyer is willing to pay for a RMBS and lowest price for which a seller (banks and corporate credit unions) is willing to sell it due to market uncertainty and the volatility in the underlying cash flows. The corporate credit unions' RMBS portfolio is very sensitive to the negative impact associated with policy responses which cause an increased uncertainty in the financial markets. An increase in uncertainty in turn reduces the amount a purchaser is willing to pay for these securities. Most distressed RMBS assets are trading at or near their all-time lows. Purchasers are looking for yields in the double digits.

Selection of Pacific Investment Management Company LLC (PIMCO)

Many firms offer processes for evaluating mortgage risk across a wide range of loans and securities, using loan-level data combined with forecasted home price scenarios. NCUA sought to obtain such a firm based on the following criteria:

a) Strong reputation in the field of bond analysis,
b) Robustness of the valuation model,
c) Ability to provide output in the desired format,
d) Ability to perform custom shock scenarios,
e) Time required to perform analysis,
f) Cost, and
g) Independence from firms already used by corporate credit unions.

On-site visits were conducted with three vendors. PIMCO scored high on all of the selection criteria and is independent from the corporate credit union network as they are not a provider of services to the industry. Furthermore, PIMCO has successfully been engaged by other federal agencies for similar endeavors.

The RMBS Valuation Process

Essentially, the performance of a RMBS is directly dependent upon the performance of the underlying collateral (i.e., mortgages, home equity loans, and second mortgages). The security structure itself, coupled with potential credit enhancement features such as monoline insurance wraps, excess interest features, and the like also factor into the ultimate credit risk posed by the investment. Each firm's modeling process is proprietary but in general a firm employs a residential mortgage credit model to estimate the principal and interest payments, or cash flows, associated with real estate loans and/or real estate related assets.

The valuation models can break the security down to the most detailed level of data available, all the way down to the individual underlying loan where possible. The valuation models utilize certain data inputs from the individual loans within a security that correlate to the potential for losses, such as:

- Original and current loan-to-value ratio
- Original borrower FICO score
- Home occupancy (primary home, second home, investor)
- Loan purpose (purchase, refinance, cash-out)
- Mortgage rate (Fixed, ARM)
- Property location
- Property type
- Documentation level
- Payment history – (delinquency status)
- Loan servicer
- Loan originator
- Forward interest rates

In addition to such inputs, the valuation models take into account each security's structure (the rules governing the priority of cash flows) and estimate the following types of information related to performance of a bond:

- Monthly cash flows
- Projected loan-to-value – based on amortization and home price appreciation
- Future mortgage rates
- Prepayment probability
- Future delinquency rate
- Default probability
- Severity of default rates (loss given default)

Results of the PIMCO Analysis

The corporate portfolio analyzed is comprised entirely of various RMBS sectors including Collateralized Debt Obligations (CDOs) backed by Asset Backed Securities where the underlying loans are residential mortgages.

PIMCO conducted loan level analyses for each pool of mortgages collateralizing each RMBS in the corporate portfolio. PIMCO's average cumulative loss estimates for various RMBS sectors were consistent with projections issued by other market sources. At the direction of NCUA, PIMCO provided scenarios involving three cash flow projections and current market value prices for each security as described below:

1. A base case cash flow – the most likely outcome of cash flows based on the outlook for the housing market
2. A pessimistic cash flow – cash flows based on a worst case outlook for the housing market
3. An optimistic cash flow – cash flows based on the best case outlook for the housing market

4. Market value – derived from third- party vendors and PIMCO's internal analysis

The results of cash flow projections showed a wide range of possible value results due to the volatility in the items that impact cash flow projections. Market prices derived from third party vendors and PIMCO's internal analysis were significantly lower than the aggregate fair value of the same securities reported by the corporate credit unions (as of January 31, 2009). After analyzing PIMCO's valuation estimates, the NCUA refined its calculation of the fair value of the liability the NCUSIF must recognize in providing the guarantee of all shares. The fair value estimate prepared by NCUA in January 2009 depended heavily on the market value information reported by the corporate credit unions, since cash flow analysis was not available.

PIMCO Views

In its assessment of possible courses of action, PIMCO views were that the most attractive option, in the intermediate term, is for NCUA to continue to hold the portfolio. The greatest risk will be aggressive servicer modification of loan terms and/or principal forgiveness. They were also of the view that NCUA should monitor the options of whether or not to buy loss protection and to possibly repackage some of the senior RMBS securities to enhance portfolio liquidity. These strategies are influenced by capital reserve and accounting treatments.

Conclusion

Using PIMCO's report, NCUA was able to refine its analysis of how the estimated losses impact each portfolio relative to corporate credit unions' capital positions. The NCUA's refined analysis confirmed that the incidence of expected credit losses greater than total capital is concentrated primarily in two corporate credit unions, U.S. Central FCU and WesCorp FCU.

Obtaining the assessment of an independent, third party expert enabled NCUA to better evaluate the reliability of information developed by the corporate credit unions. It gave NCUA a contemporaneous understanding of the investment risks at a time when, virtually all agree, economic fundamentals were rapidly deteriorating. The PIMCO analysis serves to confirm NCUA's risk management concerns. Furthermore the PIMCO analysis will be used to:

- Assist NCUA in evaluating the quality of corporate credit union valuation methodologies;
- Improve the detail in the calculation of the fair value of the outstanding share guarantee; and
- Provide periodic updates to the analysis to assess how changing conditions are impacting the projected cash flows and market values.