CU*ANSWERS CONCENTRATION RISK OFFERINGS 2011

CONCENTRATION RISK SUMMARY REPORT

MY CREDIT UNION

FISCAL YEAR 2011

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SAMPLE CONCENTRATION RISK SUMMARY REPORT

LEGAL DISCLAIMER

OVERVIEW OF NCUA REQUIREMENTS

Concentration risk management requires credit unions to defend their capital position with respect to the risks inherent in their loan, share, and investment portfolios. From a regulatory standpoint, the NCUA has an interest in reducing the number of credit unions that pose a threat to the National Credit Union Share Insurance Fund. Credit Unions who do not manage their risk effectively are in jeopardy of serious administrative action from the NCUA.

To successfully win the argument that the credit union is adequately managing concentration risk, the leadership of each credit union must prove three critical items to the examiner's satisfaction:

1. What risks lie across the entire spectrum of investments;

2. Under what conditions do those risks become a significant threat to safety and soundness of the capital of the credit union or to the Fund; and

3. What steps is the credit union prepared to take in order to reduce the risk?

A copy of the 10-CU-03 Letter to Credit Unions outlining the requirements for managing concentration risk is reproduced at the end of this report.

BOARD RESPONSIBILITIES

The NCUA has declared that responsibility for managing concentration risk falls to the credit union board of directors. In order to meet these requirements, the credit union board of directors must have a policy in place that defines the following:

1. The risk concentrations for the credit union in the area of the loan portfolio, both individually and aggregated.

2. The risk limits for the organization.

3. What actions the credit union will take if concentration risk exceeds risk limits.

A sample policy has been included at the end of this report. This report will also offer guidance on appropriate risk limits based on the findings for your individual credit union.

PRESERVING CAPITAL

The board should have a philosophy based on the amount of capital the board is willing to risk in its product and investment lines. CU*Answers recommends that this risk philosophy not include potential losses that would drop the capital position of the credit union below 8% of net worth. The capitalization of the credit union as a percentage of net worth deeply informs the NCUA's view of credit union stability. While at 8% of net worth a credit union is considered to be well-capitalized, at 6% of net worth a credit union is forced into capital restructuring and at 3% of net worth the credit union risks liquidation. Therefore, limits based on risk to the capital of the credit union form a strong basis for managing risk concentrations.

FLAGGING RISK CONCENTRATIONS

The NCUA's basic tenet for managing concentration risk requires the credit union to justify any risk concentrations that exceed 100% of net worth. This includes common asset classes, such as residential real estate loans, and concentrations that are subject to loss due to market conditions (for example, the effect of regional unemployment on your members' ability to repay both their mortgages and their automobile loans). The NCUA also requires the board of directors of every credit union to set risk limits, which are the maximum levels a concentration risk can rise before the board is compelled to take action. CU*Answers recommends flagging each segment based on the following criteria:

> Green Flag: A concentration risk that does not exceed 100% of net worth or the risk limits set by the board. The credit union has the option of monitoring the concentration risk. The credit union probably should monitor the risk when the concentration is close to 100% or trends indicate that the concentration will rise to above 100% within 12-24 months.
>
> Yellow Flag: A concentration risk that exceeds 100% of net worth but does not exceed the risk limits set by the board of directors. The credit union must provide justification for this concentration and must monitor this concentration risk, including testing the portfolio at regular intervals (generally, at least quarterly).
>
> Red Flag: A concentration risk that exceeds the risk limits set by the board of directors. Not only must the credit union provide justification for this risk and monitor this concentration, but the credit union must also take action on the segment up to an including divestment of the segment. The NCUA will not accept raising the risk limits without material justification from the board of directors, meaning before the risk limits can be raised the board of directors must have some kind of supporting evidence that raising the risk limits will not strongly impact the capital position of the credit union.

Credit unions with large and complex loan or investment programs should establish a specific risk management committee as a sound business practice. The composition of the committee will depend on the size and complexity of the credit union, but should be limited to a small number of senior executives and one or more board members. The agenda of this committee should be limited to risk management issues, specifically: concentration risk, credit risk, interest rate risk, liquidity risk, and financial performance.

REPORT OVERVIEW

In order to help your financial institution meet concentration risk management guidelines, the following information is contained in this report:

1. The current capital ratio, as a percentage of net worth, and the losses it will take to drop the credit union below the safe ratio of 8%.
2. Appropriate segmentation of the loan portfolio.
3. Review of named borrower concentrations.
4. Identification of segments which must or should be monitored by the credit union.
5. Identification of the levels of interest rate risk.
6. Credit risk segmentation.
7. Results of static and dynamic portfolio testing.
8. Suggested reasonable risk limits the board may set.

USING THIS REPORT

CU*Answers recommends this report be submitted to the credit union board of directors. The actions taken by the board of directors will vary by credit union, but some of the possibilities include the following:

- Approval of a concentration risk policy.
- Justification of any concentrations that exceed 100% of net worth.
- Monitoring, at least on a quarterly basis, any concentrations that exceed 100% of net worth.
- Setting of risk limits for each identified portfolio segment or named borrower concentration.
- Review, at least on an annual basis, the risk limits of the policy, and ensure those risk limits have not been exceeded.
- The board of directors should review and enter this report into the meeting minutes.

METHODOLOGY

1. Some risks can be quantified with 100% accuracy, and some cannot. Concentration Risk cannot be quantified with certainty, it can only be estimated.

> Example of accurate quantification: If I buy a single lottery ticket, I am risking 100% loss of $1 against the infinitesimal chance I will become a millionaire as a result of the purchase. From a pure statistical standpoint, I might as well have set the dollar bill on fire, but at least from a numbers perspective I can quantify the risk with near precision.

In contrast we cannot, and no one can, offer the same sort of precision with respect to Concentration Risk. Concentration Risk is about predicting the future, and there is no way to absolutely guarantee the future with certainty. No one knows exactly how many people will default on their loans in a given credit union in a given year. So we have to do our best to develop a predictive model grounded in reality that gives each individual credit union a reliable indicator of their risk.

2. In dealing with Concentration Risk, we are estimating whether members can repay their loans and what that does to the capitalization ratio. Because we cannot measure this future outcome with precision, we have to construct a model for our analysis. The guiding principle is what the statistician George Box said 30 years ago, "All models are wrong, but some are useful." The utility of the CU*Answers model depends on whether it helps credit unions pass examinations, and to a lesser extent how the model helps with credit union future growth planning.

3. The CU*Answers model for Concentration Risk analysis is based on the following:

    a. The baseline factor is the capitalization ratio of the credit union. If the potential loss to the credit union portfolio drops the ratio below 8%, we consider that credit union to be at risk of administrative action.

    b. The next step is to divide the portfolio into segments as a percentage of credit union net worth. We know from the NCUA letter that any segment exceeding 100% of net worth in the individual or the aggregate must be justified and monitored by the credit union. We also know that the NCUA, understandably, will not accept division of the portfolio into a large number of tiny segments is unacceptable.

    Justifying 100%+ concentrations can be based on numerous factors, including the credit union charter and general performance of the portfolio segment.

    c. We then examine the historical loss ratio (HLR) of the credit union. HLR is an imperfect stat, but it is the best that we have to determine the base risk of loss. Poor HLR can be the result of some combination of underwriting standards, economic conditions, and luck. As best we can, we determine what factors primarily influence the HLR score. Credit risk (see below) also provides some insight into why the HLR is the way it is. The sheer number of loans that have passed through this portfolio segment also need to be factored in. A credit union's HLR is much more reliable if 1000 loans have been processed in the segment over the past three years as opposed to 10.

    d. We then look at probable negative economic conditions and shock the portfolio accordingly. In many cases the factor used will be regional unemployment. We know that regional unemployment strongly correlates to portfolio losses. (In fact, unemployment rates almost certainly cause portfolio losses, but we haven't acquired enough data sets to state this with 100% confidence). Fuel prices are another factor used independently or in conjunction with unemployment. These factors used to shock the portfolio are called Event Risk Multipliers (ERM).

    e. We then take a reasonable approximation of negative ERM and use that to shock the portfolio. This is called Static Pool Testing (the testing is static because we do not figure in growth rates, but instead

METHODOLOGY, CONTINUED

take the portfolio "as is"). We may also take a couple of standard deviations from the mean ERM and see what that does to the portfolio. If we see large losses in any of the portfolio segments, we warn the credit union that these areas of the portfolio put the credit union at risk and that the credit union should consider some kind of action to hedge against loss in this portfolio segment.

f. Our next step is to factor in growth rates in each portfolio segment (this is called "Dynamic Pool Testing"). We use the same ERM variables and see what happens to the capitalization ratio of the credit union. If we see substantial losses in the portfolio once growth is factored in, we can advise the credit union to limit their exposure should our ERM model in fact approximate reality on the ground during the fiscal year.

g. The final step in this analysis is to estimate potential risk limits for the credit union in each portfolio segment. We ask what should be the maximum growth of a particular segment over the fiscal year, based on the potential loss exposure. Remember that if the risk limits are exceeded, the credit union must take action on that segment which the minimum of which is additional monitoring or testing. The credit union is not permitted to arbitrarily raise the limits on the segment.

4. We also do what the NCUA refers to as "Named Borrower or Aggregate Commercial Relationship" testing. Rather than grouping the portfolios by segments, we group by SSN or Employer ID and see what actual exposure the credit union has. In essence, we are asking whether there is a single borrower out there, be it personal or corporate, who present a risk of administrative action if the single borrower were to default. Our threshold for this is risk is 15% of net worth; if the credit union exposure is at least 15%, then we assume the credit union is at risk and should monitor or consider hedging that risk.

5. We also do credit risk analysis, where we look at the loans by credit grade and determine whether there is significant bubble of risk in the grade of loans. The HLR ratio is used to help determine if the credit union is at risk because the amount of loans made to high-risk borrowers substantially threatens the capitalization ratio. We can use this to recommend to the credit union whether underwriting standards need to be tightened.

JUSTIFYING CONCENTRATIONS

Any concentration above 100% of net worth needs to be documented, justified, and monitored by the credit union. There are several ways to justify the risk in each segment, here are some examples:

> Actual exposure to capital position: Is the credit union truly exposed by the concentration? High concentrations can be misleading if the actual exposure to capital is low, as in the case of government-backed securities.
>
> Historical loss and lending history: Is there a strong history to fall back on? While the past is not always a signpost to the future, past performance on a well-monitored and researched concentration can assist in defending the credit union's position.
>
> Credit Union objectives: Does the credit union's position in a particular market meet their objectives? The credit union needs to substantiate how the market position helps grow or modify the balance sheet.
>
> Credit Union Charter: Does the Charter and membership limit the asset base and portfolio of the credit union? For example, a credit union chartered to serve farmers is going to see larger concentrations in agriculture loans.
>
> Balance: Is the risk exposure in a specific portfolio balanced by the overall aggregate portfolio?
>
> Delinquency rate: Does this segment have a low historical delinquency rate?
>
> Loan type: Is this a loan type that is unlikely to see several go bad all at once? Does the credit union have data to support this?
>
> Results of stress testing: Do the tests indicate how extreme of a shock the portfolio can withstand? What is the probability that the portfolio will actually suffer the kinds of shocks that would incur serious losses?

There may be other ways to justify concentrations as well, the point being the credit union will need to justify to the examiner why the concentration is so high and prove that the concentration is being monitored appropriately.

BOARD ACTION PLANS

When risk limits are reached and portfolio or borrower segments are red flagged, the NCUA expects management of the credit unions to have a set of predetermined actions to take. A credit union should have these plans set in writing in order to protect management and the board from accusation that risk is not managed appropriately. A material red flag is a credit union that simply raises the established limit when it is reached *without advanced analysis* supporting the rationale for the change in policy.

Generally speaking, the credit union's action plan should follow steps similar to these:

> *Perform elevated scenario and sensitivity analysis*: The credit union should undertake a deep dive into the possible scenarios that might impact the concentration and how sensitive this concentration is to market conditions. The board will need this data to justify either maintaining the high levels of concentration or mitigating the amount of concentration. At the very least, the board needs to have an expanded review of the risk environment of that segment.
>
> *Review the performance of existing borrowers*: What is the loss ratio of existing borrowers in this segment? What is the default rate? Determine whether the historical performance of existing borrowers suggests the credit union is safe.
>
> *Review risk mitigation options*: What options are available, if any, to help reduce the risks in the segments or by the named borrowers?

CU*Answers recommends that the credit unions follow the steps above with an open mind and not just as an exercise for raising risk limits. If the data tends to show that the credit union is putting its capital at serious risk the credit union needs to heed that warning.

The credit union should be prepared to take more substantial steps when a segment or named borrower materially threatens the safety and soundness of the credit union. These options include the following:

> *Reducing limits or thresholds on risk concentrations*: The credit union should consider looking over the entire portfolio and reducing risk limits overall so as to avoid overextending capital reserves in case of serious losses.
>
> *Reducing exposure to new business lines*: The credit union should consider taking a cautious approach when investing in a new business line, and avoid undue concentrations until a record can be built up regarding loss ratios and default rates.
>
> *Transferring risk to other parties*: This can be accomplished by either selling directly or as part of securitization transactions. The general idea is to divest the credit union of excessive concentrations of risk.
>
> *Ceasing the product or service line*: Ultimately, the credit union may decide that a particular product is simply too risky and must be ceased.

CU*Answers recommends that the extent of the board actions be based on the board's appetite for risk and the risk to capital the credit union is willing to expose. The credit union should be prepared to justify any increase in the risk limits to the NCUA, and as always be prepared to demonstrate an understanding of the risks and capital exposure faced by the credit union.

SUMMARY OF FINDINGS

My Credit Union is a strongly capitalized financial institution. My Credit Union has no serious risks in the loan portfolio with respect to segments and named borrowers. Per the 10-CU-03 NCUA letter, My Credit Union must take the following actions:

1. Must justify and monitor concentrations in Aggregated Business Real Estate, Residential Real Estate (1st mortgages) and Aggregate Residential Real Estate.

2. Must justify and monitor a Named Borrower concentration.

My Credit Union is still responsible for having a concentration risk policy and for setting risk limits for each of the managed concentrations identified in this report.

Item	*Result*	*Finding*	*Actions Required*
Capital Ratio	10.00%	Safe	None
Credit Risk Segmentation	710	Safe	None
Managed Concentrations	125% Aggregated Business Real Estate	Monitor	Credit Union must justify and monitor
	120% Residential Real Estate (1st)	Monitor	Credit Union must justify and monitor
	170% Aggregate Residential Real Estate	Monitor	Credit Union must justify and monitor
Static Test Results	9.26% Capital Ratio	Safe	None
Dynamic Test Results	9.07 Capital Ratio	Safe	None
Risk Limits	8.90% Capital Ratio	Safe	None
Named Borrower	17.50% Business 3	Monitor	Credit Union must justify and monitor

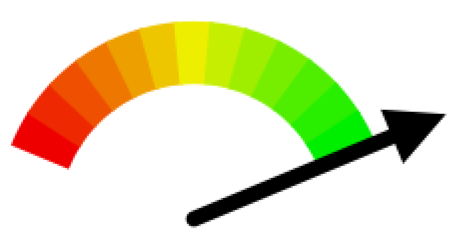
CAPITALIZATION RATIO

The Capitalization ratio of the credit union is the most important factor when analyzing concentration risk. The ratio is calculated by determining capital as a percentage of net worth including ALLL. A credit union should not allow the capitalization ratio to drop below 8%. At a ratio of 6% or below, the credit union can expect administrative action by the NCUA. At 3% or below, the credit union can expect to be merged or liquidated.

My Credit Union is a strongly capitalized financial institution. My Credit Union will not fall below the 8% capitalization threshold unless the credit union suffers losses in excess of $2.00 million dollars during the fiscal year. Due to the significant amount of reserve capital My Credit Union may, at the discretion of the board of directors and executive management, engage in an aggressive growth strategy over the fiscal year without violating NCUA regulations regarding concentration risk. Both management and the board should take due care when managing the portfolios not to engage in risk that has a significant probability of dropping the credit union to below 8% capitalization.

My Credit Union	
Credit Union Assets	$100,000,000.00
Credit Union Net Worth	$9,000,000.00
Credit Union ALL	$1,000,000.00
Credit Union Capital Ratio	10.00%
Maximum Exposure Before 8%	$2,000,000.00
Finding	Strongly Capitalized

My Credit Union Capitalization Ratio



CREDIT RISK SEGMENTATION

Credit risk segmentation was completed utilizing member credit scores and segmenting them by standard credit risk buckets. Listed below were the results of that segmentation. The average risk score for the total portfolio of My Credit Union was found to be very high at 710.

Based upon the analysis it is not necessary to monitor for any specific buckets relative to credit risk as the credit unions internal loan policies are managing that area very well. In the event the credit unions lending strategies change or the credit union begins to experience larger loan losses relative to lower grade paper the board of directors may want to establish limits on these buckets as a percentage of net worth.

Score range	Percentage of Portfolio	Percentage of Net Worth	Number of Accounts Past Due over Two Months
730 - 999	48%	143%	0
680 - 729	21%	57%	1
640 - 679	13%	24%	3
600 - 639	9%	17%	0
0 - 599	9%	17%	3
Average Score: 710 (very high)			

My Credit Union Credit Risk Segmentation

MANAGED CONCENTRATIONS

A credit union must manage portfolio risk concentrations subject to similar types of financial shocks. Portfolio segments must be monitored by the credit union should the total (net of participation) exceed 100% of the credit union's net worth.

The following is a breakdown of My Credit Union's portfolio concentrations:

Segment	*Total (net of participation)*	*Percentage of Net worth*	*HLR (historical loss ratio)*	*PLE potential loss exposure*	*% of CU Net worth*
Business Real Estate-Non Owner Occupied	$5,000,000.00	50.00%	0.50%	$25,000	0.25%
Business Real Estate-Owner Occupied	$6,000,000.00	60.00%	0.50%	$30,000	0.30%
Business Residential-Owner Occupied	$1,500,000.00	15.00%	0.50%	$7,500	0.08%
Aggregate Business Real Estate	**$12,500,000.00**	125.00%	**0.50%**	**$62,500**	**0.63%**
Residential Real Estate-1st	$12,000,000.00	120.00%	0.80%	$96,000	0.96%
Residential Real Estate-2nd (Sec 13)	$5,000,000.00	50.00%	0.80%	$40,000	0.40%
Aggregate Residential Real Estate	**$17,000,000.00**	170.00%	**0.80%**	**$136,000**	**1.36%**
Vehicles-Direct	$5,000,000.00	50.00%	0.40%	$20,000	0.20%
Vehicles-Indirect	$1,000,000.00	10.00%	0.40%	$4,000	0.04%
Aggregate Vehicles	**$6,000,000.00**	60.00%	**0.40%**	**$24,000**	**0.24%**
Consumer Secured (Mobile Homes, Share Secured, HHG)	$1,000,000.00	10.00%	0.50%	$5,000	0.05%
Consumer Unsecured	$8,000,000.00	80.00%	2.75%	$220,000	2.20%
Aggregate Consumer	**$9,000,000.00**	90.00%	**0.50% at 1 mil and 2.75% at 8 mil**	**$225,000**	**2.25%**
TOTALS	**$44,500,000.00**	**445.00%**		**$447,500**	**4.48%**

Based on these findings, My Credit Union must justify and monitor the following segments:

Segment	*Total (net of participation)*	*Percentage of Net worth*	*HLR (historical loss ratio)*	*PLE potential loss exposure*	*% of CU Net worth*
Aggregate Business Real Estate	**$12,500,000.00**	125.00%	**0.50%**	**$62,500**	**0.63%**
Residential Real Estate-1st	$12,000,000.00	120.00%	0.80%	$96,000	0.96%
Aggregate Residential Real Estate	**$17,000,000.00**	170.00%	**0.80%**	**$136,000**	**1.36%**

PORTFOLIO TESTING METHODOLOGY

My Credit Union has chosen three specific economic indexes to monitor relative to loan performance.

The first is the three county jobless rate. The jobless rate in which the credit union believes represents a normal climate in the three county area is 7%. Currently the average of the three counties has fallen and as of October of 2010 was 12.10%. This represents a 72% increase from the base and will be used to amplify the historical loss ratio in every segment.

The second index is the cost of fuel. The cost of fuel can have a direct impact on the quality of the credit unions automobile loan portfolio and therefore will be used an event to shock the consumer secured portfolio as well as the jobless rate. The credit union believes most consumers can afford to drive their cars when gas is at or below $2.80 per gallon. Fuel costs are expected to rise to the $3.20 per gallon representing a 14% increase from the base.

The three county foreclosure statistics will be used as the third economic index and will be applied to the real estate portfolio. The credit union has not experienced losses in the portfolio until the number of the three county foreclosure exceeded 90. As of the end of 2009 that rate has risen to 339 representing an increase of 276%. The real estate portfolio will be shocked by both the unemployment and foreclosure increases above base.

By adding the event multiplier into the calculation, the credit union can see the potential increase in their loss exposure as expressed by the formula:

Total (net of participation) x HLR x 1+(Event Multiplier) = Potential Loss Exposure

By running this formula, the credit union can see how much capital is exposed in each segment under this scenario.

County unemployment statistics were obtained by accessing the State of Michigan Labor Market Information database at:

http://www.milmi.org/cgi/dataanalysis/AreaSelection.asp?tableName=Labforce

Foreclosure findings were obtained through the Database of Michigan Foreclosures at the Detroit Free Press:

http://www.freep.com/article/20100114/NEWS06/100113066/Database-Michigan-foreclosure-rates-by-county

STATIC TEST RESULTS

Static testing assumes no growth in any of the portfolios. Static testing indicates that should the event risks come to pass, My Credit Union faces potential loss of approximately $742,000.00 over the fiscal year. This projected loss is substantially below the $2,000,000.00 loss necessary to drop My Credit Union's capital ratio to below 8%.

Segment	*Total (net of partici-pation)*	*Percentage of Net worth*	*HLR (historical loss ratio)*	*Event risk multiplier*	*PLE potential loss exposure*
Business Real Estate-Non Owner Occupied	$5,000,000.00	50.00%	0.50%	25.00%	$31,250
Business Real Estate-Owner Occupied	$6,000,000.00	60.00%	0.50%	25.00%	$37,500
Business Residential-Owner Occupied	$1,500,000.00	15.00%	0.50%	25.00%	$9,375
Aggregate Business Real Estate	**$12,500,000.00**	125.00%	**0.50%**	**25.00%**	**$78,125**
Residential Real Estate-1st	$12,000,000.00	120.00%	0.80%	25.00%	$120,000
Residential Real Estate-2nd (Sec 13)	$5,000,000.00	50.00%	0.80%	25.00%	$50,000
Aggregate Residential Real Estate	**$17,000,000.00**	170.00%	**0.80%**	**25.00%**	**$170,000**
Vehicles-Direct	$5,000,000.00	50.00%	0.40%	100.00%	$40,000
Vehicles-Indirect	$1,000,000.00	10.00%	0.40%	100.00%	$8,000
Aggregate Vehicles	**$6,000,000.00**	60.00%	**0.40%**	**100.00%**	**$48,000**
Consumer Secured (Mobile Homes, Share Secured, HHG)	$1,000,000.00	10.00%	0.50%	25.00%	$6,250
Consumer Unsecured	$8,000,000.00	80.00%	2.75%	100.00%	$440,000
Aggregate Consumer	**$9,000,000.00**	90.00%	**0.50% at 1 mil and 2.75% at 8 mil**	**25.00%**	**$446,250**
TOTALS	**$44,500,000.00**	**445.00%**			**$742,375**
Capital Ratio After Losses: 9.26% Safe					

DYNAMIC TEST RESULTS

Dynamic testing assumes growth in the portfolio segments, and tests whether that growth impacts the credit union's capital ratio. For My Credit Union, the test assumes 20% increase across the portfolio.

At 20% growth across the board, the following findings are made:

1. Consumer Unsecured Loans must now be justified and monitored by the credit union.
2. Aggregate Vehicles do not need to be monitored and justified yet, but will need to if growth trends continue.
3. My Credit Union now has a potential loss exposure of approximately $934,000.00, which still leaves the credit union with a capital ratio of 9.07%.

4. The largest potential losses come from the Residential Real Estate and Consumer Unsecured Loans. My Credit Union should pay particular attention to loss ratios with respect to these portfolio segments should the credit union attempt a growth strategy over the fiscal year.

Segment	*Percentage increase in Portfolio*	*Resulting Portfolio Size*	*Resulting % of net worth*	*PLE potential loss exposure*
Business Real Estate-Non Owner Occupied	20.00%	$6,000,000	64.81%	$37,500
Business Real Estate-Owner Occupied	20.00%	$7,200,000	77.77%	$45,000
Business Residential-Owner Occupied	20.00%	$1,800,000	19.44%	$11,250
Aggregate Business Real Estate	**60.00%**	**$15,000,000**	162.03%	**$93,750**
Residential Real Estate-1st	20.00%	$14,400,000	155.55%	$144,000
Residential Real Estate-2nd (Sec 13)	20.00%	$6,000,000	64.81%	$60,000
Aggregate Residential Real Estate	**40.00%**	**$23,800,000**	257.09%	**$238,000**
Vehicles-Direct	20.00%	$6,000,000	64.81%	$48,000
Vehicles-Indirect	40.00%	$1,400,000	15.12%	$11,200
Aggregate Vehicles	**40.00%**	**$8,400,000**	90.74%	**$67,200**
Consumer Secured (Mobile Homes, Share Secured, HHG)	20.00%	$1,200,000	12.96%	$7,500
Consumer Unsecured	20.00%	$9,600,000	103.70%	$528,000
Aggregate Consumer	**40.00%**	**$12,600,000**	136.10%	**$535,500**
TOTALS		**$59,800,000**	**645.95%**	**$934,450**
Capital Ratio After Losses: 9.07% Safe				

RISK LIMITS

Below are some suggested risk limits for My Credit Union. By employing these limits, My Credit Union risks approximately half of the available capital, assuming no further capital growth over the fiscal year. The board of directors is free to adopt or reject these limits as they see fit. The board should ensure that the decisions made regarding a portfolio segment that has reached the policy limit are documented in the meeting minutes.

The purpose of setting the risk limits is for the credit union to take action once those limits have been reached. These actions may include any of the following actions:

Expanding the review of the risk environment for the particular sector(s);

Performing elevated scenario and sensitivity analyses;

Expanding the review of performance of existing borrowers;

Reviewing growth and limitations for new business lines;

Reviewing risk mitigation options and timeframes for reduction of risk, if necessary;

Segment	*Policy Limit as % of net worth*	*Portfolio Maximum*	*PLE Exposure on Max*
Business Real Estate-Non Owner Occupied	100.00%	$9,065,550	$56,660
Business Real Estate-Owner Occupied	100.00%	$9,065,550	$56,660
Business Residential-Owner Occupied	75.00%	$6,799,163	$42,495
Aggregate Business Real Estate	**200.00%**	**$24,930,263**	**$155,814**
Residential Real Estate-1st	180.00%	$16,317,990	$163,180
Residential Real Estate-2nd (Sec 13)	100.00%	$9,065,550	$90,656
Aggregate Residential Real Estate	**280.00%**	**$25,383,540**	**$409,650**
Vehicles-Direct	100.00%	$9,065,550	$72,524
Vehicles-Indirect	20.00%	$1,813,110	$14,505
Aggregate Vehicles	**120.00%**	**$10,878,660**	**$87,029**
Consumer Secured (Mobile Homes, Share Secured, HHG)	15.00%	$1,359,833	$8,499
Consumer Unsecured	90.00%	$8,158,995	$448,745
Aggregate Consumer	**105.00%**	**$20,397,488**	**$544,273**
TOTAL	**900.00%**	**$81,589,950**	**$1,101,238**
Capital Ratio After Losses: 8.90% Safe			

NAMED BORROWER

The NCUA also expects credit unions to keep a close eye on large aggregates held by individual named borrowers. This is to prevent the insolvency of the individual or corporate borrower from severely impacting the credit union's capital position. In effect, the NCUA is simply asking credit unions not to destabilize their capital position due to having too many large loans concentrated in just a few borrowers.

CU*Answers suggests using a simple formula for determining exposure. Take the total loan value and subtract the amount guaranteed to obtain the net. Determine the loan as a percentage of net worth. If the percentage exceeds 15%, yellow flag this concentration and continue to at least monitor this portfolio. If the percentage exceeds 25%, red flag the concentration and consider taking action to protect the credit union in the event the named borrower should default. An example of how this table works is as follows:

Assuming a credit union with $10,000,000.00 in net worth has three large loan concentrations out in three separate businesses. With regard to the first business, the net loan is $1,000,000.00 (total minus guarantees). In the second case, although the loan amount is much larger, the large guarantee actually means the credit union is less exposed than with the smaller first loan. In the final example, because the loan has no security, the credit union would be wise to at least monitor the concentration since a default by this business would devour large reserves of capital.

Business	*Total Loan Value*	*Less Guaranteed*	*Net loan*	*% of net worth*
Business 1	$1,500,000.00	$500,000.00	$1,000,000.00	10.00%
Business 2	$2,500,000.00	$1,750,000.00	$750,000.00	7.50%
Business 3	$1,750,000.00	$0.00	$1,750,000.00	17.50%

GLOSSARY OF TERMS

Capital Ratio: Capital as a percentage of Credit Union Net Worth. The capital ratio of the credit union is the key statistic for determining the risk a credit union faces with regard to concentration risk. CU*Answers does not recommend allowing the capital ratio to drop below 8%, as a credit union risks administrative action once the capital ratio falls below that level.

Concentration Risk: A risk concentration is any single exposure or group of exposures with the potential to produce losses large enough (relative to capital, total assets, or overall risk level) to threaten a financial institution's health or ability to maintain its core operations. Essentially the NCUA is looking for bubbles within the credit union portfolio that could cause the credit union to fail.

Credit Risk: The probability that a borrower will repay a debt based on the credit history of the borrower.

Dynamic Portfolio Testing: A determination on whether growth trends within a portfolio segment pose a threat to the safety and soundness of the financial institution should economic conditions deteriorate.

Event Risk Multiplier: A factor, based on real-world economic conditions, that causes a certain percentage of loss to a portfolio.

Historical Loss Ratio: The ratio of losses incurred on a portfolio segment over a given period of time.

Named Borrower Concentration Risk: Concentration risk based not on loan type, but rather who is repaying the loan. The NCUA is looking for borrowers who, if they fail to repay the loans, could impact the safety and soundness of the credit union.

Net Worth: The total assets minus total outside liabilities of the credit union.

Potential Loss Exposure: The predicted losses to a portfolio segment based on the Historic Loss Ratio and the Event Risk Multiplier.

Risk Limits: The maximum growth of a portfolio segment, as established by the credit union board of directors.

Static Portfolio Testing: A test of the portfolio as a snapshot in time, without assuming growth or reduction of the portfolio or the capital ratio of the credit union.

NCUA LETTER TO CREDIT UNIONS

Concentration Risk

Credit union officials and management have a fiduciary responsibility to identify, measure, monitor, and control concentration risk. Concentration risk must be managed in conjunction with credit, interest rate and liquidity risks; as a negative event in any category may have significant consequences on the other areas, as well as strategic and reputation risks.

Concentration risk has increased in importance during the recent economic recession. Poor risk management of residential and commercial mortgage loan concentrations, in particular, is having an adverse effect on credit unions nationwide; resulting in significant loan losses, earnings deterioration, capital depletion, and increased credit union failures. Most of the recent large losses to the National Credit Union Share Insurance Fund (NCUSIF) are due to poor management of large concentrations in various asset classes in relation to the asset size and net worth level of the failed institutions.

What is concentration risk?

A risk concentration is any single exposure or group of exposures with the potential to produce losses large enough (relative to capital, total assets, or overall risk level) to threaten a financial institution's health or ability to maintain its core operations.

Avoiding concentrating too much in any single product or service is a core tenet of effective risk management and when violated increases the risk of loss to the credit union and to the NCUSIF. Too much reliance on any single product or service increases the potential for adverse consequences from "event risk" (i.e. a negative event, such as a housing market crash, that significantly affects the financial condition of the institution). Every asset, liability, product, service, and third party provider presents a risk of loss to the credit union under varying conditions or events. Some risks are less likely than others to occur. It is up to credit union management to identify the risk in each product or service line, quantify the risk and set appropriate concentration limits based on the analysis.
What are some types of concentration risk?

Concentration risk is present in many forms across credit union operations. Examples include:

Asset classes (e.g. residential real estate loans, member business loans, automobile loans, loan participations or investments).

Concentrations within a class of assets. Examples include, but are not limited to:

- Residential Real Estate Loans – collateral type, lien position, geographic area, non-traditional terms (such as interest-only, payment option, or balloon payment), fixed or variable interest rate, low or reduced underwriting documentation, and loan-to-value (LTV).

- Member Business Loans (MBLs) – types of loans (e.g. real estate, working capital, and credit cards), collateral type, payment feature (such as interest-only, balloon payments), loan term, geographic area, and LTV.

- Loan Participations – types of loans (e.g. residential real estate, MBL, and automobile) and the sub-classes associated with the types, originating lender, and geographic area.

- Loans to one borrower or associated group of borrowers (may include several different types of loans – residential real estate, MBLs, consumer loans, etc)..

- Investments – types of investments (e.g. Treasury securities, certificates of deposit, and mortgage-backed securities), collateral type, interest rates, issuer (public or private), tranche priority, and broker.

Liabilities (e.g. rate sensitive share deposits or callable borrowings).

Third-party providers (e.g. CUSOs, indirect loan partners or mortgage brokerage firms).

Services provided to other parties (e.g. loan underwriting and/or servicing, insurance services, and investment consultation).

When reviewing the types of concentrations in a credit union, examiners must be cognizant of other asset categories that may seem unrelated. For instance, the types of loans and characteristics of the loans may be one form of concentration risk that is easily identified. However, similar characteristics may exist in a loan participation portfolio or an investment portfolio. A clear example of this concept would be a credit union that holds a portfolio of real estate loans and also a portfolio of mortgage backed securities. There are common event risks in these types of assets that must be quantified and mitigated by management.

What are the largest exposures (risk concentrations) in credit unions?

Concentration in credit portfolios is considered to be the most significant source of risk to financial institutions. Trends in credit union balance sheets reflect increased exposure to concentration risk in areas of their credit portfolios, such as:

Real estate loans (fixed rates) – As of December 31, 2009, real estate loans held by credit unions comprise 54 percent of total loans. Of the $217 billion in first mortgage loans, over 60 percent have fixed rate terms. In addition, fixed rate first mortgage loans have increased by 55 percent since 2005.

Member business loans – As of December 31, 2009, member business loans totaled $35 billion. Credit unions grew their member business loan portfolios by 9.8 percent in 2009.

Loan participations – As of December 31, 2009, credit union participations outstanding totaled $12.4 billion, and participation lending increased by 11.6 percent in 2009.

Construction and Development (C&D) loans – As of December 31, 2009, credit unions owned $2.4 billion in commercial and residential C&D loans. While this trend has declined since 2007, the real estate market downturn could continue to have an adverse effect on credit unions with concentrations of C&D loans in their portfolio.

Investments in Mortgage-Related Securities – As of December 31, 2009, credit union investments in mortgage-related securities totaled $58.7 billion; which is in addition to the real estate loan exposure stated above. Investments in mortgage-related securities have more than doubled since 2005.

How is concentration risk identified and measured?

Each product or service carries some risk of financial exposure or loss for the credit union. Management needs to perform a risk assessment which demonstrates their understanding of the risk of the product or service, quantifies the potential loss exposure, and documents a rational business decision on the acceptable concentration level based on the analysis.

The larger the concentration level, the more robust and advanced the analysis and risk management techniques should be. For instance, the sophistication and depth of risk management systems and analysis conducted on a real estate portfolio that represents 20 percent of total loans could be acceptably less than a real estate portfolio that represents 50 percent of total loans. Another example is the level of due diligence conducted on a third party service provider. The more important the service to the core operation of the credit union and the higher the amount of activity and dollar volume of credit union activity it handles, the more sophisticated and robust the due diligence oversight needs to be.

Similar to the depth and sophistication of the initial review, management must increase the intensity and depth of on-going monitoring and review of products and services with high concentrations. To measure and monitor concentration risk, credit unions must start with the systems used to store and analyze their data. For more complex products, establishing comprehensive data warehousing will allow management to track changes in the quality of their various lines of business over time. Without an all-inclusive process to maintain and analyze data, the board of directors and senior management will not have the tools necessary to make strategic and operational decisions in a safe and sound manner.

Maintaining Comprehensive and Accurate Data

Credit union management must emphasize the importance of maintaining comprehensive and accurate data for each risk area. This includes a quality control function to ensure that data entry and changes are accurate and timely.

The credit union should have a data processing system capable of warehousing data on various lines of business, commensurate with its size and complexity, to properly identify and measure concentration risk. For example, this would include maintaining information relevant to the loan portfolio such as loan type, interest rate, interest rate reset dates (if applicable), payment amount, payment shock (the potential increase in payment from an interest rate reset or conversion from interest-only to principal and interest payments), credit score (including original and updated periodically), collateral description, and collateral value (including original and updated periodically). Another example would include maintaining information relevant to the investment portfolio such as type, interest rate, collateral information, market value (original and updated periodically), and external rating (original and updated periodically). This is not an all-inclusive list, but rather a starting point for evaluating if the data processing system is capable of maintaining this type of data.

If the credit union does not have the data processing capability, management should contract with a third party to provide data warehousing and reporting. If management elects to pursue this route, examiners should review their initial and ongoing due diligence of the vendor to ensure it is in accordance with published guidance and safe and sound business practices.

Risk Rating System

Developing an effective, accurate, and timely risk rating system is an important tool for managing concentration risk in the loan portfolio. Risk ratings should be objective, sensitive to changes in borrower and/or loan characteristics, and validated via an independent review function. With loan participations, credit unions should assess the loan utilizing their own internal rating system. In the absence of an internal rating system, management should not rely on the originating institution's system without completing timely, thorough, and ongoing due diligence of that system. Examiners should review management's documentation of the original and ongoing due diligence; ensuring that it is consistent with safe and sound business practices.

Reporting

Management reporting must be periodic and timely, in a format that clearly indicates changes in concentration risk and is commensurate with the size, complexity, and risk exposure of the credit union. The reports should not only measure concentration risk against board approved parameters, but should also measure how the risks change over time. For example, a key factor in determining concentration risk in a loan portfolio would be to measure credit score migration, by obtaining updated credit scores on a periodic basis and analyzing those borrowers who have a declining credit score. The frequency of reporting should be commensurate with the type and size of the concentration; for example, larger portfolios should have at least quarterly reporting.

How is concentration risk managed?

Implementing sound risk management practices is the key to managing concentration risk. When credit unions have significant concentrations on their balance sheet, examiners need to ensure risk management practices are commensurate with the risk assumed relative to net worth, and management clearly identifies and measures the risk taken.

The ultimate responsibility for setting the level of concentration risk assumed by the credit union rests with the board of directors. Senior management is responsible for maintaining concentration risk within the parameters set by the board of directors.

Concentration risk has a substantial influence on credit, strategic, reputation, interest rate, and liquidity risks as all are closely related. All of these risks impact net worth and must be supported by a net worth level commensurate with the risk in the balance sheet. The board of directors and senior management need to manage all of these risk areas simultaneously.

One of the common flaws in managing risks within a credit union is to tie each risk independently to net worth, without monitoring the aggregate exposure of different risks to net worth. The result may be excessive reliance on the level of net worth to manage each individual risk. Effective risk management practices would not only include tying the limits of each product or service to net worth, but also consolidating the risks in products and services and measuring the totality of the risks against net worth.

Board Policy & Concentration Risk Limits

The board of directors must establish a policy which addresses its philosophy on concentration risk, limits commensurate with net worth levels, and the rationale as to how the limits fit into the overall strategic plan of the credit union. The board should use a global perspective when developing this policy, including identifying outside forces (such as economic or housing price uncertainty) which will affect the ability to manage concentration risk. For example, the board should not begin or expand a mortgage program that allows high loan-to-values at the height of a real estate bubble, which will likely lead to significant losses when the market declines.

The parameters set by the board should be specific to each portfolio and should include limits on loan types, share types, third party relationship exposure, etc. The risk limits should correlate to the overall growth objectives, financial targets, and net worth plan. The risk limits set forth in the concentration risk policy should be closely linked to those codified in related policies, including, but not limited to, real estate loan, member business loan, loan participation, asset/liability management (ALM), and investment policies. Concentrations that exceed 100 percent of net worth must be monitored carefully, and the board of directors should document an adequate rationale for undertaking that level of risk.

Third Party Oversight

When working with third parties, due diligence is essential to ensure the risks are properly identified and managed. Examples of third party services include purchase of participations in loans; underwriting, processing and safekeeping member loans; and purchase or safekeeping investments. Numerous guidance letters have been issued on this subject, and are listed in the references section of this letter. The guidance discusses the need for due diligence reviews to take into account the nature of the service, length and depth of expertise exhibited by the vendor, staffing changes, economic and regulatory changes, and risk mitigation strategies associated with vendor oversight. Also important to note is that due diligence is an ongoing process. It encompasses the original review at the outset of product or service implementation and should be updated periodically to monitor changes in the vendor's ability to deliver products or services which meet the credit union's expectations.

How is concentration risk monitored and controlled?

Once the appropriate risk management systems and policies are in place, it is essential monitoring and oversight become routine functions at the senior management level within the credit union. Ultimately, the board of directors is responsible for oversight and monitoring at a strategic level. Regular formal reporting to the board and senior management on compliance with the concentration and risk limits they establish is expected. In addition, management should implement appropriate internal controls, including segregation of duties, to ensure accurate reporting on concentration risk.

Compliance and Oversight

Senior management needs to implement procedures and controls to effectively adhere to and monitor compliance with established policies and strategies. Both the board and management must periodically review information that identifies and measures the level and nature of concentration risk and implement corrective action should the risk from any one area exceed the board approved tolerance level.

Credit unions with large and complex loan or investment programs should establish a specific risk management committee as a sound business practice. The composition of the committee will depend on the size and complexity of the credit union, but should be limited to a small number of senior executives and one or more board members. The agenda of this committee should be limited to risk management issues; specifically concentration risk, credit risk, interest rate risk, liquidity risk, and financial performance.

From a reporting perspective, management should demonstrate compliance with every board established policy limit dealing with concentration risk, as well as limits on associated risks such as credit, interest rate, and liquidity.

Scenario and Sensitivity Analysis

Credit unions should routinely perform portfolio-level scenario and sensitivity tests to quantify the impact of changing economic conditions on asset quality, earnings, and net worth. In general, scenario analysis uses the model to predict a possible future outcome given an event or a series of events, while sensitivity analysis tests a model's parameters without relating those changes to an underlying event or real world outcome. The outcome of sensitivity analysis is to determine which assumptions have the most impact on the model's results.

Credit unions should consider the susceptibility of portfolio segments with common risk characteristics to changing market conditions. Examples of common risk characteristics can be by loan type, investment type, collateral type, geographic area, individual or associational groups of borrowers, business lines, etc. An example scenario analysis for a concentration in HELOC mortgages would be the risk to earnings if unemployment in the area doubled while house market values declined by 25 percent, combined with the effect of interest rate resets and associated payment shock. An example scenario analysis for a concentration in 30-year, fixed-rate mortgages would be the risk to earnings and capital from liquidity and interest rate risks in a rising rate environment; where liquidity risk increases as mortgage cash flows decrease, and rising interest rate risk causes earnings to deteriorate as members seek higher dividend rates to maintain their deposits.

The analyses should be multi-faceted to explore the effect of single and multiple simultaneous negative events on the portfolio. The sophistication of scenario and sensitivity analyses should be consistent with the size, complexity, and risk characteristics of the portfolio as a whole.

What are basic review procedures for examiners related to concentration risk?

The following are some basic review steps and questions examiners should ask when conducting a review of concentration risk. Examiner expectations for the depth and sophistication of the responses from credit union management should increase if the initial review of a credit union's balance sheet reveals potentially high exposure.

Does the credit union have policies directly related to identifying, measuring, monitoring, and controlling concentration risk? Examiners should ensure credit unions consider the following when evaluating the board policies:

The level and nature of inherent risk on the balance sheet;

Management expertise;
Risk management practices;
Market conditions; and
Adequacy of reserves allocated for concentration risk.

Has the credit union developed appropriate policies and procedures, including establishing acceptable risk limits for each product and service on an individual and aggregate basis?

Has management assessed the adequacy of net worth based on the aggregate potential exposure to all forms of concentration risk, while also considering the potential credit, interest rate, and liquidity risk impact on net worth?

Has the credit union considered the various types of concentrations and their interrelationship, particularly between asset classes or common products and service characteristics, which may present higher risk when aggregated?

Has the credit union considered the "event risks" that may expose them to financial loss for each asset class, quantified the risk, and established appropriate risk tolerance limits based on the probability and potential impact from each event?

Do the board and senior management receive regular reports on the individual and aggregate exposure to concentration risk?

Does management have predetermined actions to take when risk limits are reached? Do they take the appropriate action? A material red flag is a credit union that simply raises the established limit when it is reached without advanced analysis supporting the rationale for the change in policy.

Is the credit union's system of identifying, measuring, monitoring, and controlling concentration risk commensurate with the level of potential concentration risk exposure?

When credit unions have significant loan concentrations, does management maintain reports and perform analysis of the following:

Origination and portfolio trends by product, loan structure, originator channel, credit score, LTV, debt-to-income ratio (DTI), lien position, documentation type, property type, appraiser, appraised value, and appraisal date;

Delinquency and loss distribution trends by product and originator channel with accompanying analysis of significant underwriting characteristics, such as credit score, LTV, and DTI;

Vintage tracking (i.e., static pool analysis);

The performance of third-party (brokers, auto dealers, and correspondents) originated loans; and,

Market trends by geographic area and property type to identify areas of rapidly appreciating or depreciating housing values?

What options are available when a credit union or the examiner identifies elevated concentration risk?

The board of directors and management should have triggers and action plans in writing for any material risk area. If the credit union's monitoring activities identify concerns with a concentration, the board of directors must respond accordingly. Similarly, if an examiner believes there may be elevated concentration risk issues present in a credit union, and management has not properly quantified and mitigated the risk, they should require corrective actions of management that include, but are not limited to:

Expanding the review of the risk environment for the particular sector(s);
Performing elevated scenario and sensitivity analyses;

Expanding the review of performance of existing borrowers;
Reviewing growth and limitations for new business lines; and/or
Reviewing risk mitigation options and timeframes for reduction of risk, if necessary.

If management determines concentration risk is elevated, they should implement steps to mitigate the risk. If management does not properly assess or control the level of risk, examiners should require corrective actions to mitigate the risks, including but not limited to:

Reducing limits or thresholds on risk concentrations;

Reducing exposure to new business lines to address undue concentrations;

Transferring risk to other parties by either selling directly or as part of securitization transactions; and/or

Ceasing the product or service line.

Conclusion

Excessive concentration risk can severely impact the financial condition of a credit union. High concentrations in areas experiencing severe economic distress could result in significant losses exceeding a credit union's net worth. It is the fiduciary responsibility of management and officials of credit unions to identify, manage, monitor, and control the risks facing the credit union, including concentration risk. Examiners need to ascertain whether the board of directors and management understand and actively manage this risk. Credit union management should know what their concentration risk is and be able to demonstrate appropriate risk management and mitigation practices to minimize the risk of significant financial condition decline.

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SAMPLE POLICY

1.0 Purpose of Concentration Risk Policy

Concentration risk analysis is the art and science of providing reasonable assurance to regulators and key stakeholders that the financial institution is monitoring and prepared to take action on segments in the loan and investment portfolio that could have a material impact on the safety and soundness of the institution should those segments deteriorate in value due to market conditions.

> **1.1 No Guarantee of Outcomes.** Neither the concentration risk policy itself nor the reports generated is a guarantee of all possible outcomes.
>
> **1.2 Legal and Fiduciary Duties.** Nothing in this policy supersedes any legal or fiduciary duties the credit union may have to members or the public at large.

2.0 Scope and Definitions

2.1 Concentration Risk. A risk concentration is any single exposure or group of exposures with the potential to produce losses large enough (relative to capital, total assets, or overall risk level) to threaten a financial institution's health or ability to maintain its core operations. The credit union has a duty to monitor and report on risk concentrations that exceed 100% of net worth, as well as setting forth a rationale for accepting risk concentrations that exceed 100% of net worth.

2.2 Risk Limits. Risk limits are the highest level the risk concentrations are permitted to elevate as a percentage of net worth without the credit union taking additional action. Risk limits are set by the credit union board of directors and should be specific to each portfolio and should include limits on loan types, share types, and third party relationship exposure.

The risk limits should correlate to:

- The overall growth objectives;
- Financial targets; and
- Net worth plan.

The risk limits set forth in the concentration risk analysis should be closely linked to those codified in related policies, including, but not limited to:

- Real estate loan
- Member business loan
- Loan participation
- Asset/liability management (ALM)
- Investment policies

Acceptable risk limits should be established for each product and service on an individual and aggregate basis.

2.3 Concentration Risk Assessment. Management needs to perform a risk assessment which demonstrates their understanding of the risk of the product or service, quantifies the potential loss exposure, and documents a rational business decision on the acceptable concentration level based on the analysis. The larger the concentration level (for example a portfolio that represents 50% or more of total loans) the more robust and advanced the analysis should be.

2.4 Scenario and Sensitivity Testing. Scenario and sensitivity tests are made at the portfolio-level that quantify the impact of changing economic conditions on asset quality, earnings and net worth.

Scenario tests use a model to predict a future outcome given an event or series of events.

Sensitivity tests a model's parameters without relating those changes to an underlying event or real world outcome. The purpose of a sensitivity test is to determine which assumptions have the most impact on the model's results.

3.0 Policy

3.1 Board of Directors Responsibilities. The board of directors has the following responsibilities in managing concentration risk:

The board has ultimate responsibility for setting the level of concentration risk assumed by the credit union, by setting the risk limits for each portfolio.

The board must provide the rationale as to how the risk limits fit into the overall strategic plan of the credit union.

The board must document an adequate rationale for undertaking a concentration risk that exceeds 100% of net worth.

The board must take action once the risk limits on a particular portfolio have been exceeded.

3.2 Risk Management Committee (optional depending on size of the credit union). The credit union shall have a risk management committee comprised of two senior executives and one board member. The agenda of this committee shall be limited to risk management issues; specifically concentration risk, credit risk, interest rate risk, liquidity risk, and financial performance. The risk management committee is responsible for maintaining concentration risk within the parameters set by the board of directors, and providing reports on concentration risk to the board.

3.3 Reports. Reports to the board of directors from the Risk Management committee must follow the following parameters.

Risk Management Committee reporting must be periodic and timely, in a format that clearly indicates changes in concentration risk and is commensurate with the size, complexity, and risk exposure of the credit union. These reports should contain at a minimum the following information:

An assessment of the adequacy of net worth based on the aggregate potential exposure to all forms of concentration risk, and also considering the potential credit, interest rate, and liquidity risk impact on net worth.

Various types of concentrations and their interrelationship, particularly between asset classes or common products and service characteristics which may present higher risk when aggregated.

"Event risks" that may expose the institution to financial loss for each asset class, and quantified the risk, and established appropriate risk tolerance limits based on the probability and potential impact from each event.

The reports should not only measure concentration risk against board approved parameters, but should also measure how the risks change over time. The reports must also measure the adequacy of reserves allocated for concentration risk.

3.4 Actions. The board of directors and management should have triggers and action plans in writing for any material risk area. If the credit union's monitoring activities identify concerns with a concentration, the board of directors must respond accordingly with one or more of the following actions:

Expanding the review of the risk environment for the particular sector(s);

Performing elevated scenario and sensitivity analyses;

Expanding the review of performance of existing borrowers;

Reviewing growth and limitations for new business lines;

Reviewing risk mitigation options and timeframes for reduction of risk, if necessary;

Adjusting the risk limits. Note that it is a material red flag if the established risk limit is raised when it is reached without advanced analysis supporting the rationale for the change in policy.

Ultimately, the board will need to consider the following options if risk materially threatens the organization:

Reducing limits or thresholds on risk concentrations;

Reducing exposure to new business lines to address undue concentrations;

Transferring risk to other parties by either selling directly or as part of securitization transactions;

Ceasing the product or service line.