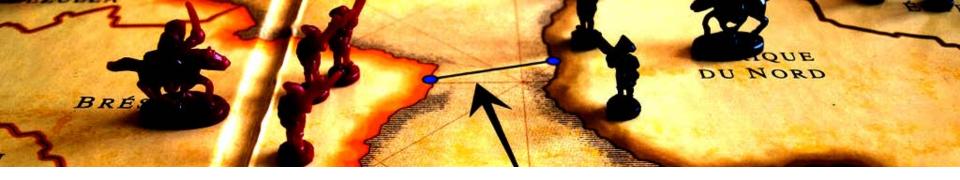


#### **LEGAL DISCLAIMER**

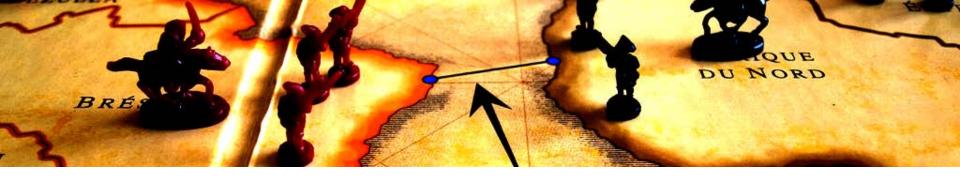
The information contained in this presentation does not constitute legal advice. We make no claims, promises or guarantees about the accuracy, completeness, or adequacy of the information contained in this presentation. You should retain and rely on your own legal counsel, and nothing herein should be considered a substitute for the advice of competent legal counsel. These materials are intended, but not promised or guaranteed to be current, complete, or up-to-date and should in no way be taken as an indication of future results. All information is provided "as is", with no guarantee of completeness, accuracy, timeliness or of the results obtained from the use of this information, and without warranty of any kind, express or implied, including, but not limited to warranties of performance, merchantability and fitness for a particular purpose. In no event will CU\*Answers, its related partnerships or corporations, or the partners, agents or employees thereof be liable to you or anyone else for any decision made or action taken in reliance on the information provided or for any consequential, special or similar damages, even if advised of the possibility of such damages.



#### WHAT'S THE STORY BEHIND CONCENTRATION RISK?

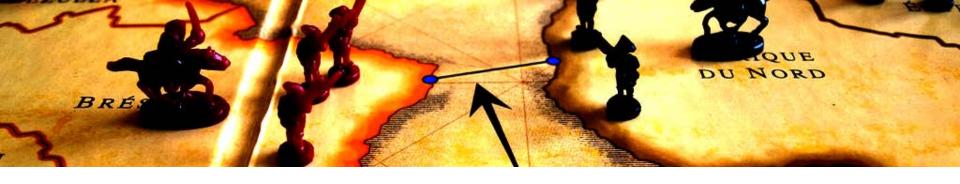
Correctly or not, concentration risk was one of the factors cited for bank and credit union failure after the crash of 2007.

Concentration risk is a villain.



#### THE NCUA RESPONSE

The NCUA issued letter 10-CU-03, a rather rambling document mandating that every credit union manage their risk concentrations.

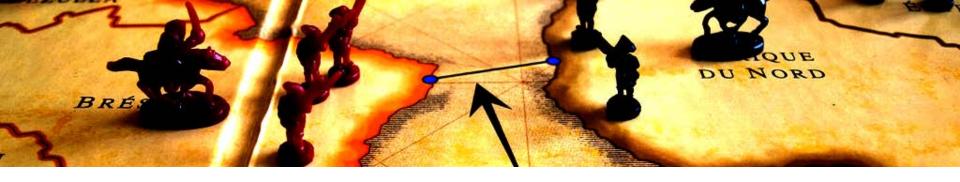


#### WE CAN DEFINE CONCENTRATION RISK EASILY ENOUGH

Don't have everything riding on a single product or service.

If something bad happens, the financial institution loses everything.



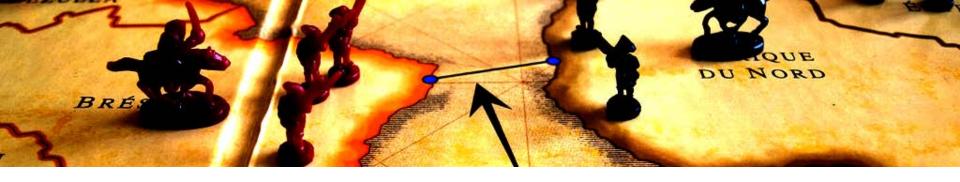


#### **AN EXAMPLE**

Washington Mutual Bank had significant concentrations in option arm loans to high risk borrowers. When the loans went bad, so did WaMu.





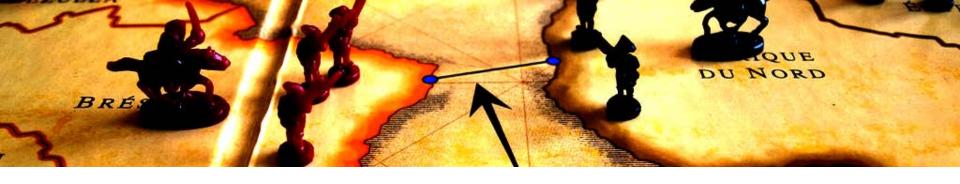


#### THE PROBLEM

Concentration risk cannot be known, it can only be estimated.

How can you tell when a concentration poses a threat?

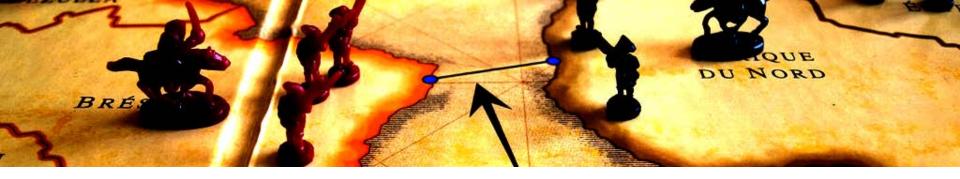




#### **NOT ALL BAD**

The NCUA does offer some guidance when it comes to managing concentration risk.



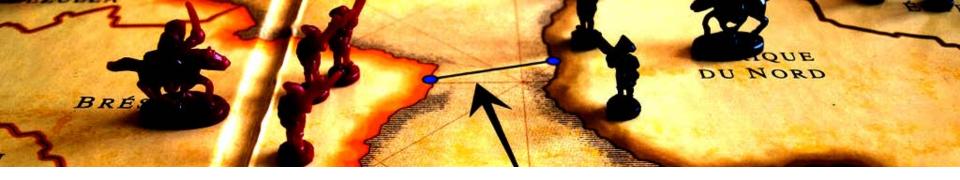


#### **SEGMENTATION**

You have to divide your portfolio into segments.

Three rules on segmentation.



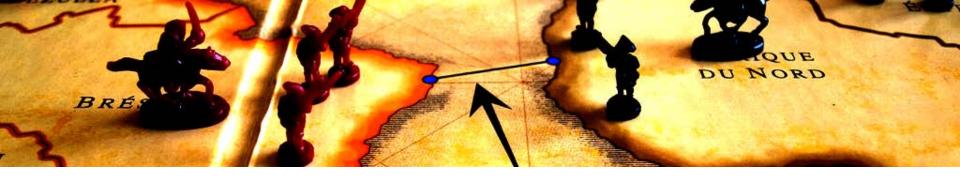


#### **SEGMENTATION RULE 1 – GROUP BY SIMILAR**

# Segments must be divided into loan categories that are subject to the same kind of economic shocks.



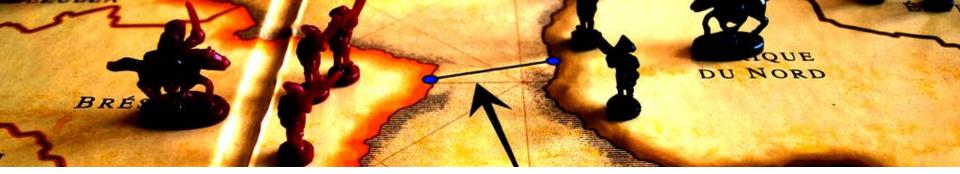
Photo by Paul Joseph



#### **SEGMENTATION EXAMPLE**

For example, you might group your first mortgages in one group, because these loans are affected by unemployment. You might divide your auto loans in another because these loans are affected by gas prices.

Good news: as long as you can establish reasonable justification for the segmentation, you are good to go!

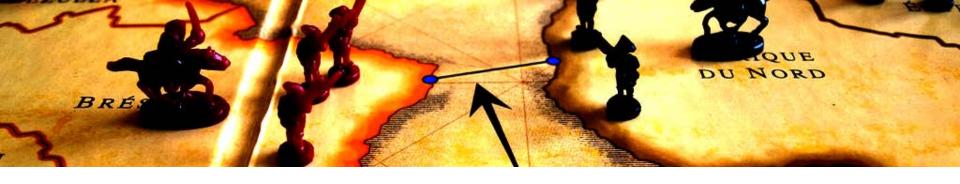


#### SEGMENTATION RULE 2 DO NOT OVER-SEGMENT

You can't divide the portfolio up into so many segments that it appears to a trained examiner you are actually hiding concentrations.



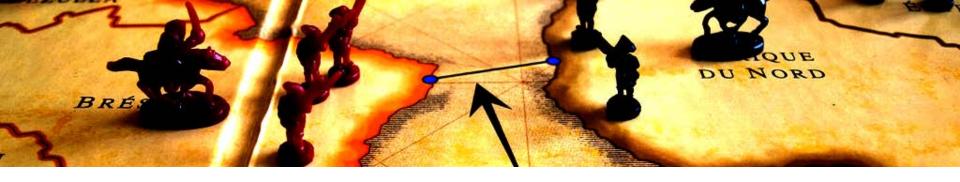
NO!



## SEGMENTATION RULE 3 NAMED BORROWER AND AGGREGATED COMMERICAL RELATIONSHIP

You also have to find in your portfolio named borrowers who have different types of loans in large value amounts.

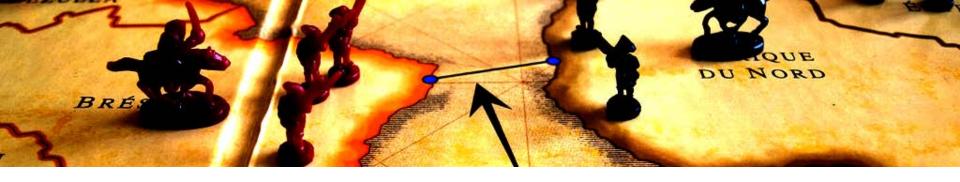
If this single borrower defaulted on all their loans, would that wipe you out?



### SEGMENTATION RULE 3 NAMED BORROWER

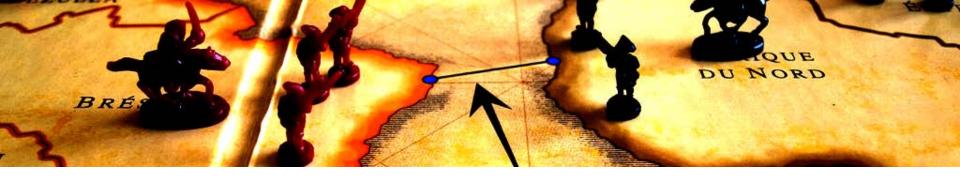
This is just a different way of having all your eggs in one basket.





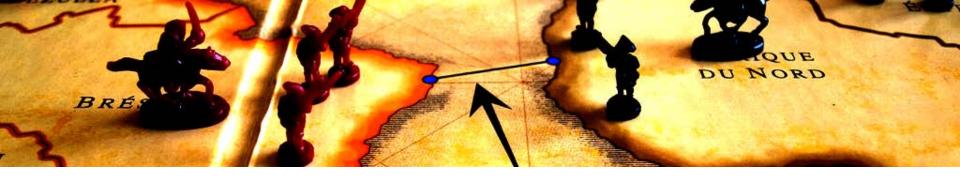
#### **100% NET WORTH RULE**

The next rule is any concentrations in your portfolio that exceed 100% of your net worth must be justified and monitored.



#### **NET WORTH RULE – NAMED BORROWER**

Named borrower is similar, but you want to monitor these at least when the concentrations reach 15% of net worth.

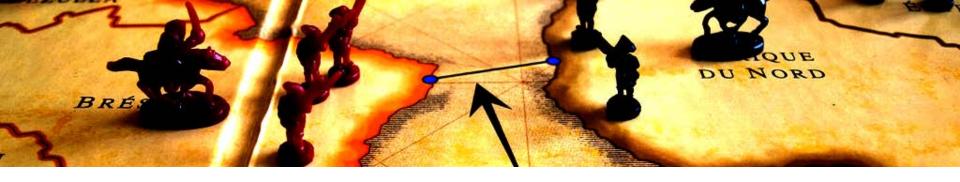


#### **JUSTIFICATION RULE**

There are many different ways to justify to an examiner a concentration over 100% of net worth.

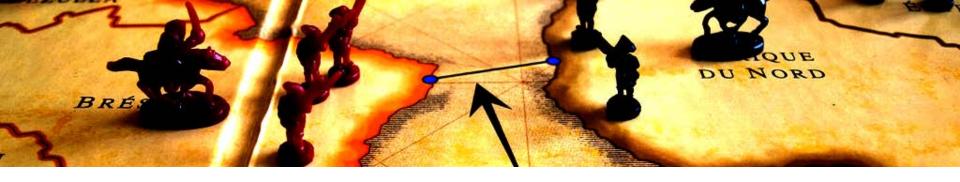
Just avoid saying: 
"We're making a lot of money off of it!"





#### WAYS TO JUSTIFY CONCENTRATIONS

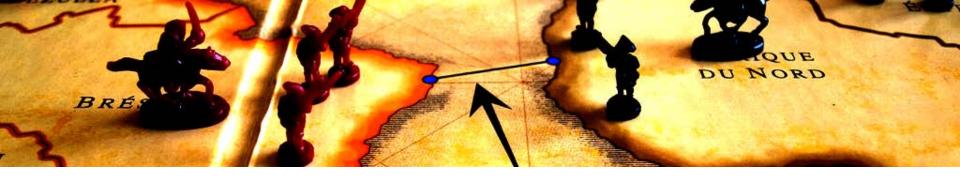
Charter
Low Delinquency Rate
Strong Underwriting
Lending History
Stress Testing



#### **MONITORING**

Monitoring large concentrations usually needs to be done no less than a quarterly basis.



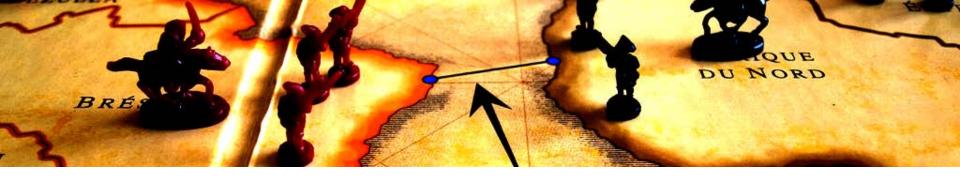


#### **TESTING CONCENTRATIONS**

You also have to test the portfolio.

You have to develop reasonable scenarios regarding adverse economic conditions and see how the portfolio responds.



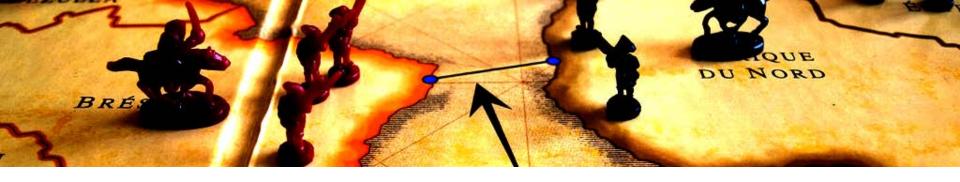


#### **TESTING CONCENTRATIONS**

The NCUA has said it will look closely at:

- Real Estate Loans
- Member Business Loans
  - Loan Participations
    - Construction and Development
- •Investments in Mortgage-Related Securities



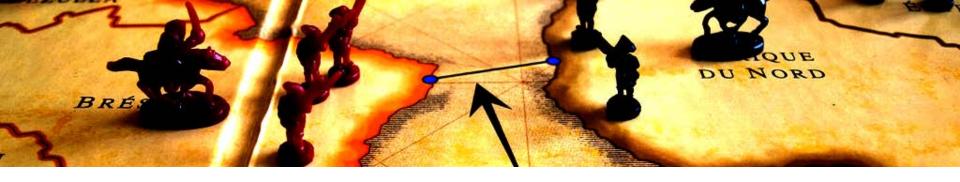


#### **CAPITALIZATION RATIO**

There are many ways to test the portfolio.

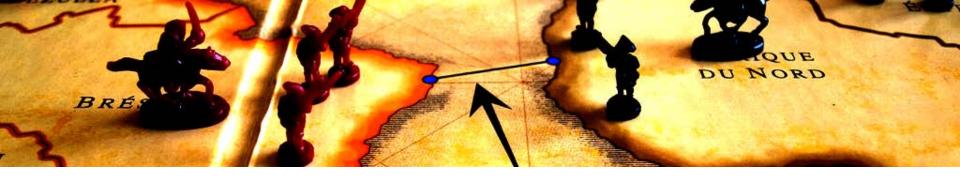
Our recommendation is to test the portfolio against the capitalization ratio of the credit union.

Two reasons.



#### **CAPITALIZATION 1**

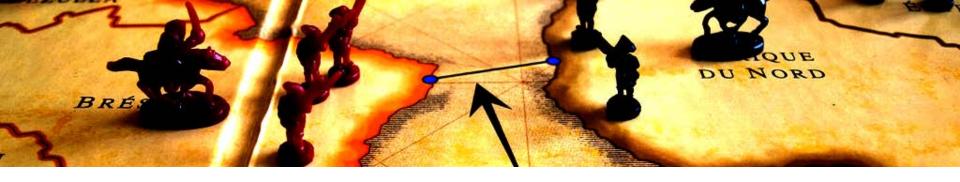
The NCUA's primary goal is to preserve the National Credit Union Share Insurance Fund ("Fund"). Concentration risk is considered a major danger to the Fund.



#### **CAPITALIZATION 2**

The capitalization ratio deeply informs the NCUA position as to the safety and soundness of the credit union.

Drop below 7% capitalization, and you can expect trouble.

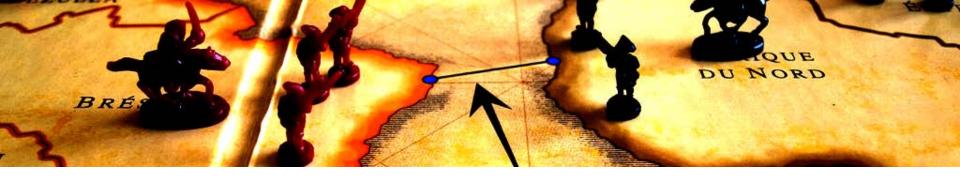


The board of directors of each credit union is responsible for setting risk limits for each segment (for example, 125% of net worth).

Risk limits are the maximum size the portfolio can reach before action must be taken.

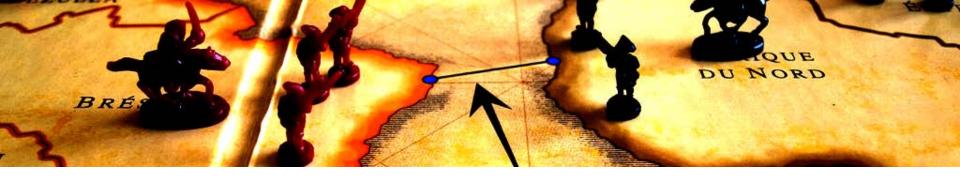
Of course, there are rules for risk limits as well.





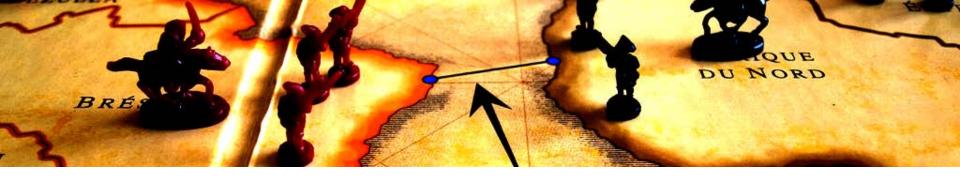
The risk limits have to be reasonable; based on results of testing and not set so astronomically high that the limits can never be reached.





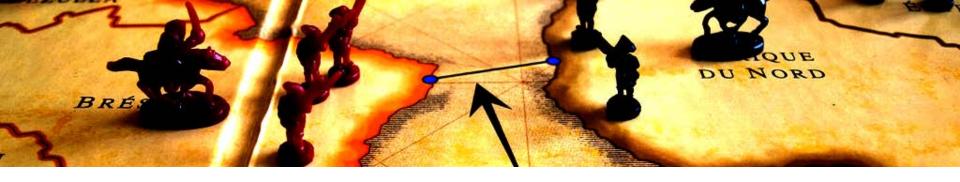
Risk limits cannot be arbitrarily raised once reached; credit unions must document good reasons for upping the risk limits.





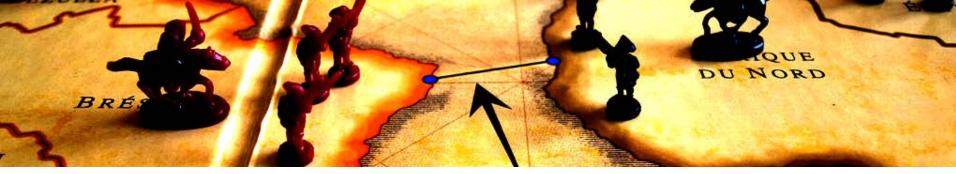
Reaching risk limits means the credit union must regularly monitor and test, and determine whether to remain invested in the product line or service.





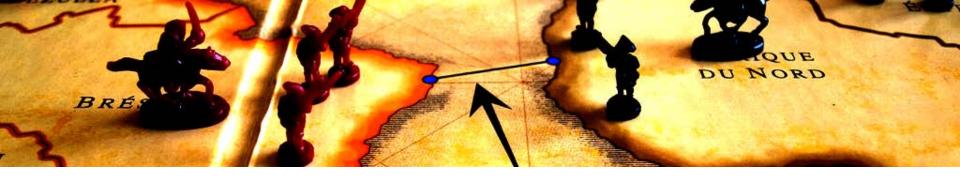
#### **POLICY**

You'll want to have a policy on concentration risk. The policy can be stand along or integrated into other risk policies such as ALM.



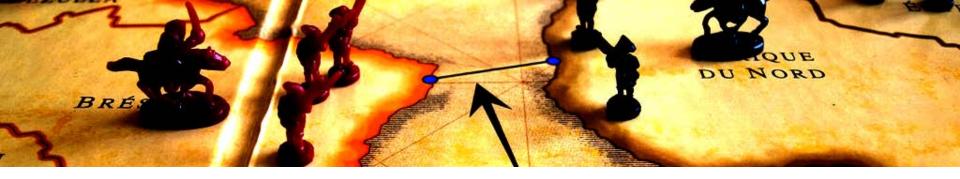
### CONCENTRATION RISK AND THE RISK PROFILE OF THE CREDIT UNION

Concentration risk decisions shouldn't be made in a vacuum; they should be part of ALM, credit risk decisions, and be generally integrated into the risk decisions of the credit union.



#### **CU\*BASE**

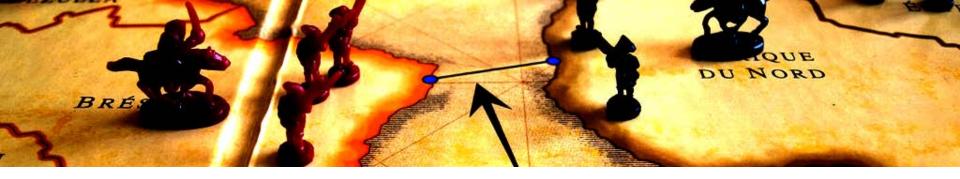
Fortunately, CU\*BASE offers all of the data you need to begin managing your own concentration risk.



#### **CU\*BASE - SEGMENTATION**

CU\*BASE
can help you
identify
segments in
your
portfolio.
MNRPTE

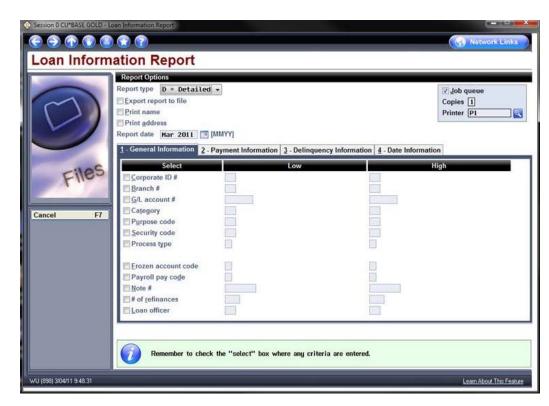


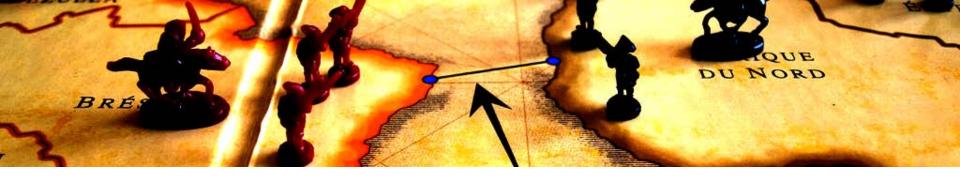


#### **CU\*BASE – NAMED BORROWER**

CU\*BASE can help you find named borrowers as well.

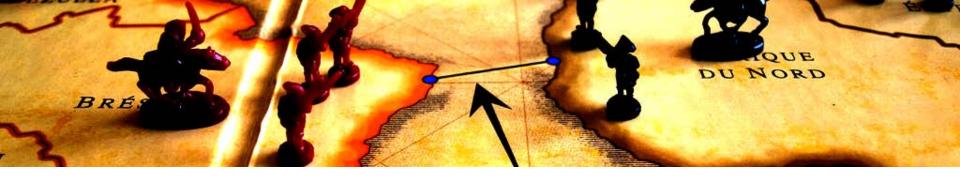
Keep in mind you may have to look at households if there are disparate SSNs.





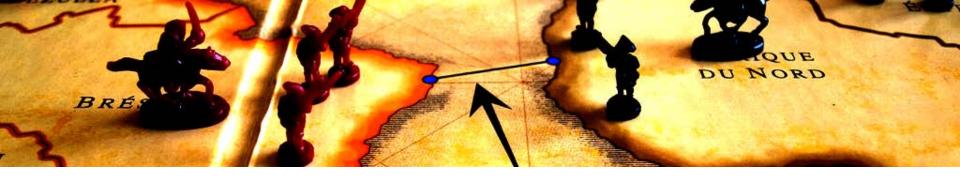
#### **CU\*BASE – TOTAL CAPITAL AND ASSETS**

## You can also find out your total capital and assets. MNGELE



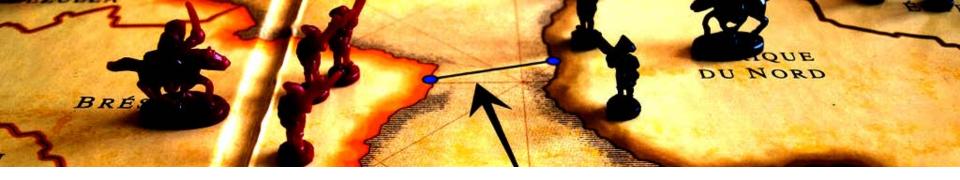
#### **CREDIT UNION RESPONSIBLITIES**

The credit union will still need to internally derive items like historical loss ratios and economic factors impacting portfolio performance.



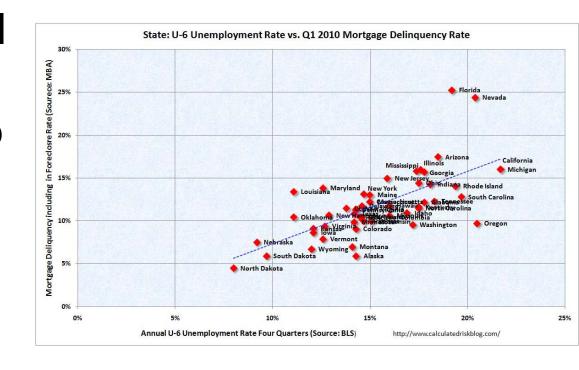
#### **AUDIT LINK ENGAGEMENT**

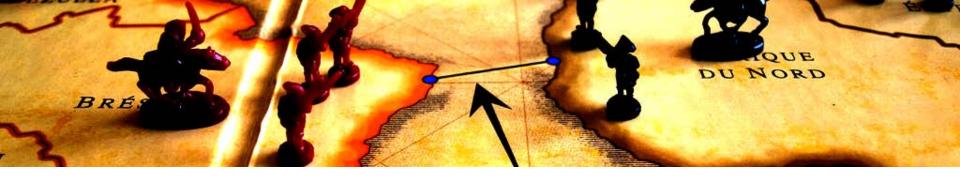
If you wish, you can engage AuditLink and we will help you develop your concentration risk report.



#### **AUDIT LINK ENGAGEMENT**

AuditLink will include data and charts to help justify our portfolio testing methodology.



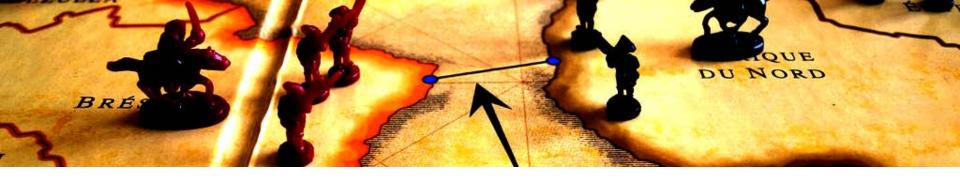


#### **AUDITLINK ENGAGEMENT**

AuditLink will provide a narrative with easy to read graphics so you can tell, at a glance, the performance of your credit union.

Capitalization Ratio

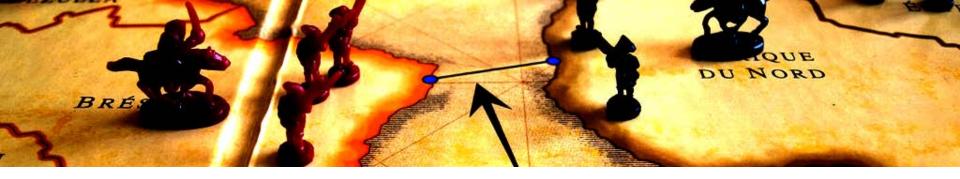




#### **AUDITLINK ENGAGEMENT**

## AuditLink's testing is thorough yet easy for you to explain to your board or an examiner.

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%

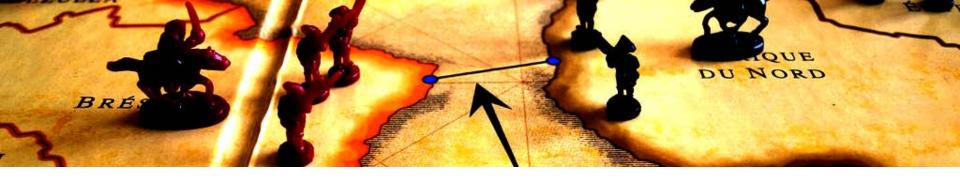


#### **AUDITLINK ENGAGEMENT**

#### **PRICING**

Pricing and other details for the engagement can be found on the AuditLink website.

Credit Union Assets	Cost
o-\$50m	\$1,500
\$50.1m to \$100m	\$2,000
\$100.1m to \$300m	\$3,000
\$300.1m and above	\$3,500
Annual Review	\$500
Quarterly Runs	\$250
Board Education and Presentation for Final Report	\$250
In-person presentation (travel expenses additional)	\$250



#### **AUDIT LINK**

Jim Vilker 800.327.3478 x167

Patrick Sickels 800.327.3478 x335

advisor.cuanswers.com

