



# Board of Directors Training – Investment Management

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*Lee Chandler*  
*Senior Vice President*  
*Vining Sparks*

# Agenda

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- General Duties of Directors
- What a Director Should Know
- Risks Found in Credit Unions
- Basic Financial Skills Required
- Timetable for Acquiring Financial Skills
- Management of a Credit Union
- Duties of Credit Union Directors
- Investment Management
- Interest Rate Risk

# General Duties of Directors

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1. The board of directors is responsible for the general direction and control of a federal credit union. The board may delegate operational functions to management, but not the responsibility for the credit union's direction.

2. A director must carry out his or her duties in good faith, in a manner reasonably believed to be in the best interests of the membership, and with such care, including reasonable inquiry, as an ordinarily prudent person in a like position would use under similar circumstances.

# General Duties of Directors

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3. A director must administer the affairs of the credit union fairly and impartially and without discrimination in favor of or against any particular member.

4. A director must have at least a working familiarity with basic finance and accounting practices, including the ability to read and understand the credit union's balance sheet and income statement and the ability to ask, as appropriate, substantive questions of management and auditors.

# General Duties of Directors

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5. A director must direct the operations of the federal credit union in conformity with the Federal Credit Union Act, NCUA's Rules and Regulations, other applicable laws, and sound business practices.

6. A director may rely on information prepared or presented by employees or consultants the director reasonably believes to be reliable and competent and who merit confidence in the particular functions performed.

# What a Director Should Know

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A director must understand the specific activities in which his or her credit union engages. In particular, a director must understand not only how these activities generate revenue for the credit union but also, and perhaps most importantly, the various risks associated with these activities that could lead to financial loss.

Directors must understand the internal control structures at the credit union that limit and control these risks.

# What a Director Should Know

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At a minimum, a director should be able to examine the credit union's balance sheet, income statement and be able to answer the following questions:

1. What does this line item mean?
2. Why is it important to the credit union?
3. Is the value of the line item changing over time? If so, what does that change (either positive or negative) mean?
4. Is the change important to the credit union?

# Risks Found in Credit Unions

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It is essential that directors understand the risks found in credit unions.

- credit
- liquidity
- interest rate
- compliance
- strategic
- transaction
- reputation risk



# Basic Financial Skills Required

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- The key measure of the credit union's success or failure is its financial statements. As such, a director must understand these financial statements to participate in a meaningful manner in the direction and control of the institution.
- To be an effective director, an individual must have a certain base level of financial skills, consistent with the size and complexity of the credit union operation they serve.
- At a minimum, directors must have the ability to read and understand the credit union's balance sheet and income statement. If directors do not have the requisite skills when elected or appointed, they must obtain these skills in a timely manner.

# Timetable for Acquiring Financial Skills

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NCUA understands that directors are, generally, uncompensated volunteers who have other important demands that compete for their time.

The decision to serve as a director, however, is a commitment which includes understanding the financial statements, risks and controls of the credit union so as to properly exercise authority over the credit union's direction.

Directors without the requisite financial skills will have six months from the date of election or appointment to acquire the enumerated skills.

# Management of a Credit Union

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“While the board may delegate execution of operational functions (to management), the ultimate responsibility for direction and control is not delegable.”

- The board may delegate management functions to senior management. The board, however, must directly exercise its authority to hire, fire, determine duties, set compensation, and discipline senior management.
- The board must also ensure that appropriate policies are in place to guide senior management in the execution of their duties.

Directors must ensure they are properly informed about what is happening in the credit union. Directors should not rely solely on the reports of senior management, but also consider the reports of the supervisory committee and internal and external auditors, other employees, and consultants reporting directly to the BOD.

# Duties of Credit Union Directors

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“ Director must carry out his or her duties in good faith, in a manner reasonably believed to be in the best interests of the membership of the credit union, and with such care, including reasonable inquiry, as an ordinarily prudent person in a like position would use under similar circumstances.”

- Directors must always focus on the best interests of the membership as a whole
- A credit union’s primary purpose is not to seek the biggest possible profit or return on assets (ROA); nor is it appropriate to seek asset growth just for the sake of growth.
- The primary purpose of a credit union is to provide quality, low cost financial services that the members need.

# Investment Management

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The investment portfolio serves as an important **source of liquidity** and can represent a substantial portion of a credit union's assets. Likewise, investment **income** can serve as an important source for meeting a credit union's operating expenses, dividend payments, and reserve requirements. Thus, the examiner's assessment of management's ability to invest prudently is an important part of the examination.

The investment area affects all seven risks found in credit union operations – credit, **interest rate**, liquidity, transaction, compliance, strategic, and reputation.

The key investment references for this chapter are *NCUA Rules and Regulations* §703, IRPS 98-02, and related Guidance Papers.

# Assessments the Board Must Make

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- Do we have sufficient expertise & understanding?
  - Do we have the expertise we need? Is education needed?
- What will our process be?
  - Policies and Procedures
  - Management
  - Measurement systems
  - Reporting
- How restrictive will we be in our policies?
  - Risk tolerance
- How will we stay on top of things?
  - Board report content and frequency of review

# Investment Management

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## Examination Objectives

- Determine adequacy of the credit union's investment policy, procedures, and internal controls
- Assess legality of investments and compliance with related regulations, accounting procedures, and other guidelines
- Evaluate suitability of the investment portfolio in relation to the credit union's business plan, asset-liability management (ALM) strategies, liquidity, and net worth position
- Determine fair value of the investment portfolio and the effect of realized or potential losses from investment transactions on the credit union's earnings and capital position
- Review correction of investment-related problems by management

# Sample Policies

## Examination Objectives

- Determine adequacy of the credit union's investment policy, procedures, and internal controls
- Assess legality of investments and compliance with related regulations, accounting procedures, and other guidelines

The screenshot shows the myVINING SPARKS website interface. At the top, there is a dark blue header with the logo on the left and navigation links for 'Company', 'Join a Meeting', 'Help', and 'Log Out' on the right. Below the header is a secondary navigation bar with categories: 'MARKET PLACE', 'ECONOMIC & MARKET DATA', 'EDUCATION & RESOURCES', 'MY REPORTS', and 'MY PORTFOLIO'. A user profile for C. Lee Chandler, Senior Vice President, is displayed with contact information. The main content area is titled 'Policies/Regulatory' and contains a list of documents under three sections: 'Asset/Liability Policy', 'Investment Policy', and 'Liquidity Policy'. Each document entry includes a title and a file icon. To the right of the main content, there is a sidebar titled 'Education & Resources' with a list of links including 'Webinar Archive', 'Publication Archive', 'Policies/Regulatory', and '2013-2015 Credit Union Forum'.

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MARKET PLACE ECONOMIC & MARKET DATA EDUCATION & RESOURCES MY REPORTS MY PORTFOLIO

**C. Lee Chandler**  
Senior Vice President  
800-786-1245 | Email | Info

### Policies/Regulatory

Asset/Liability Policy	
Policy	
Table 1	

Investment Policy	
Policy	
Investment Policy Table	
Investment Policy Changes for Other-than-temporary Impairment	

Liquidity Policy	
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### Education & Resources

- ▶ Webinar Archive
- ▶ Publication Archive
- ▶ Policies/Regulatory
- ▶ 2013 Credit Union Forum
- ▶ 2014 Credit Union Forum
- ▶ 2015 Credit Union Forum



# Performance Profile Report

Evaluate suitability of the investment portfolio in relation to the credit union's business plan, asset-liability management (ALM) strategies, liquidity, and net worth position

	Your Portfolio	VS Bond Accounting Statistics by Quartile Wtd. Avg. <sup>1</sup>				
		1	2	3	4	Median
<b>Yield On Investments</b>						
Yield On Investments <sup>2</sup>	2.26%	2.28%	1.88%	1.63%	1.34%	1.72%
<b>Portfolio Allocation</b>						
Treasuries	0.00%	0.00%	0.49%	2.38%	1.96%	0.00%
CDs	0.61%	2.43%	2.11%	7.30%	13.08%	0.40%
Agencies	4.84%	10.20%	13.37%	16.50%	46.63%	9.36%
MBS Fixed	14.06%	21.86%	21.09%	25.52%	17.68%	15.68%
SBA Fixed	34.54%	10.28%	3.01%	2.83%	1.00%	0.00%
ARM	9.83%	15.68%	15.37%	16.57%	8.23%	10.08%
SBA Floating Rate	36.13%	13.11%	12.35%	7.77%	4.28%	0.00%
Agency CMO	0.00%	18.96%	24.47%	14.39%	6.02%	0.80%
Private CMO	0.00%	0.32%	2.18%	0.07%	0.05%	0.00%
Asset-Backed, Other Amortizing	0.00%	0.42%	1.86%	4.34%	0.90%	0.00%
Municipals	0.00%	6.70%	3.13%	1.86%	0.13%	0.00%
Corporates, Other Non-Amortizing	0.00%	0.03%	0.59%	0.47%	0.03%	0.00%
<b>Price Volatility</b>						
Down 300	1.42%	2.45%	1.62%	1.63%	1.32%	1.45%
Down 200	1.76%	2.61%	1.71%	1.71%	1.36%	1.55%
Down 100	1.73%	2.27%	1.60%	1.62%	1.34%	1.57%
Base	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Up 100	-2.75%	-3.28%	-2.46%	-2.18%	-2.00%	-2.34%
Up 200	-5.73%	-6.93%	-5.30%	-4.60%	-4.21%	-4.98%
Up 300	-8.71%	-10.66%	-8.27%	-7.11%	-6.47%	-7.76%
Up 400	-11.58%	-14.33%	-11.27%	-9.66%	-8.72%	-10.48%
<b>2-Year Cashflow Principal (As % Total Portfolio)</b>						
Down 300	49.26%	50.13%	54.30%	54.99%	68.34%	58.79%
Down 200	46.40%	49.13%	53.83%	54.67%	68.22%	58.06%
Down 100	41.42%	43.82%	49.23%	50.45%	65.72%	52.96%
Base	32.23%	34.33%	40.73%	43.24%	60.40%	42.75%
Up 100	23.94%	22.61%	29.39%	36.33%	45.34%	32.85%
Up 200	22.05%	20.37%	26.77%	34.30%	43.48%	29.80%
Up 300	20.97%	19.13%	25.31%	33.05%	42.44%	27.97%

# Performance Profile Report

Evaluate suitability of the investment portfolio in relation to the credit union's business plan, asset-liability management (ALM) strategies, liquidity, and net worth position

## BALANCE SHEET COMPONENT GROWTH

	YE2012	YE2013	YE2014	YE2015	1Q2016
<b>Assets</b>	228,847	252,460	298,628	334,845	341,359
<i>Change in Volume</i>	16,764	23,613	46,168	36,217	6,514
<i>Percentage Change</i>	7.90%	10.32%	18.29%	12.13%	1.95%
<b>Loans</b>	110,241	145,237	200,512	241,744	253,793
<i>Change in Volume</i>	2,269	34,996	55,275	41,232	12,049
<i>Percentage Change</i>	2.10%	31.74%	38.06%	20.56%	4.98%
<b>Cash on Dep. and Invs.</b>	102,968	91,135	79,048	74,388	63,120
<i>Change in Volume</i>	9,298	-11,833	-12,087	-4,660	-11,268
<i>Percentage Change</i>	9.93%	-11.49%	-13.26%	-5.90%	-15.15%

## EARNINGS TRENDS

	YE2012	YE2013	YE2014	YE2015	1Q2016
Net Interest Margin	3.20%	3.17%	3.93%	4.27%	4.52%
Return on Avg. Assets	0.45%	0.63%	0.39%	0.52%	0.46%
Return on Avg. Equity	3.47%	4.70%	3.24%	4.87%	4.59%

## CAPITAL RATIOS

	YE2012	YE2013	YE2014	YE2015	1Q2016
Capital/Assets	14.95%	13.18%	12.19%	11.50%	11.54%
Net Worth/Assets	13.66%	12.98%	11.33%	10.59%	10.50%

## 12 MONTH ASSET CASHFLOW

	Y1 Port. CF	Est. Loan CF <sup>1</sup>	Liquid Funds <sup>2</sup>	Total Liquidity	Liquidity/Assets
Down 300	16,652	128,501	29,386	174,539	52.13%
Down 200	15,736	113,121	29,386	158,243	47.26%
Down 100	13,786	103,864	29,386	147,036	43.91%
Base	8,810	94,747	29,386	132,943	39.70%
Up 100	7,956	89,335	29,386	126,677	37.83%
Up 200	7,641	86,034	29,386	123,061	36.75%
Up 300	7,486	85,123	29,386	121,995	36.43%
Up 400	7,394	85,123	29,386	121,903	36.41%

# Performance Profile Report

Evaluate suitability of the investment portfolio in relation to the credit union's business plan, asset-liability management (ALM) strategies, liquidity, and net worth position

## INTEREST RATE RISK SUMMARY

	-300	-200	-100	Base	+100	+200	+300
<b>Period-End Balance Sheet</b>							
Total Assets	334,845	334,845	334,845	334,845	334,845	334,845	334,845
Total Liabilities	301,195	301,195	301,195	301,195	301,195	301,195	301,195
Members' Equity	33,650	33,650	33,650	33,650	33,650	33,650	33,650
Liabilities and Members' Equity	334,845	334,845	334,845	334,845	334,845	334,845	334,845
<b>Economic Value</b>							
Economic Value of Assets	344,045	342,612	339,264	334,413	328,686	322,837	317,347
Economic Value of Liabilities	316,274	314,736	304,722	294,090	286,746	279,959	273,491
Net Economic Value (NEV)	27,771	27,876	34,542	40,323	41,940	42,877	43,856
\$ Change in NEV	(12,552)	(12,447)	(5,781)	0	1,617	2,554	3,533
% Change in NEV	-31.13%	-30.87%	-14.34%	0.00%	4.01%	6.33%	8.76%
<b>Income Statement</b>							
Interest Income	16,047	17,004	17,797	18,522	19,283	20,013	20,747
Interest Expense	1,619	1,619	1,634	1,986	2,841	3,762	4,682
Net Interest Income (NII)	14,428	15,384	16,162	16,536	16,442	16,251	16,065
\$ Change in NII	(2,108)	(1,152)	(374)	0	(95)	(286)	(471)
% Change in NII	-12.75%	-6.97%	-2.26%	0.00%	-0.57%	-1.73%	-2.85%
Provision	3,677	3,677	3,677	3,677	3,677	3,677	3,677
Non-Interest Income	10,206	10,206	10,206	10,206	10,206	10,206	10,206
Non-Interest Expense	19,886	19,886	19,886	19,886	19,886	19,886	19,886
Net Income	1,071	2,028	2,806	3,180	3,085	2,894	2,708
ROA	0.32%	0.61%	0.84%	0.95%	0.92%	0.86%	0.81%
ROE	3.18%	6.03%	8.34%	9.45%	9.17%	8.60%	8.05%
Yields	5.08%	5.39%	5.64%	5.87%	6.11%	6.34%	6.57%
Rates	0.55%	0.55%	0.55%	0.67%	0.96%	1.27%	1.58%
Spread	4.54%	4.84%	5.09%	5.20%	5.15%	5.08%	5.00%
Margin	4.57%	4.87%	5.12%	5.24%	5.21%	5.15%	5.09%
<b>Liquidity</b>							
Asset Cashflows Plus Borrowing Capacity	207,397	161,715	150,508	136,415	130,149	126,533	125,467
Liabilities Cashflow	105,105	105,105	105,105	105,105	105,339	105,375	105,553
1-Year Static Coverage Excess/(Deficit)	102,292	56,611	45,403	31,310	24,810	21,158	19,914
Coverage Ratio	1.97	1.54	1.43	1.30	1.24	1.20	1.19
Total Borrowing Capacity	32,858	32,858	32,858	32,858	32,858	32,858	32,858

# Performance Profile Report

Determine fair value of the investment portfolio and the effect of realized or potential losses from investment transactions on the credit union's earnings and capital position

	Yields Down 300 Basis Points		
	Balance Sheet Gap <sup>1</sup>	ECR <sup>2</sup>	Income Statement Gap <sup>3</sup>
	A	B	A X B
<b>Rate Sensitive Assets</b>			
Loans			
Fixed Rate	6,370	100%	6,370
Floating Rate	110	100%	110
Fixed-Rate Securities (Principal Cashflows)			
CDs	3,694	100%	3,694
Securities (Floating Rate)			
Total Cash on Deposit	2,423	100%	2,423
<b>Total Rate Sensitive Assets</b>	<b>12,597</b>		<b>12,597</b>
<b>Rate Sensitive Liabilities</b>	<b>A</b>	<b>B</b>	<b>A X B</b>
Share Drafts (48%)	3,309	10%	331
Regular Drafts (42%)	8,530	28%	2,388
Money Market Shares (81%)	8,750	52%	4,550
Svgs<1yr: Share Certificates (95%)	463	90%	417
IRA/KEOGH Accounts <1yr (95%)	2,056	80%	1,645
<b>Total Rate Sensitive Liabilities</b>	<b>23,108</b>		<b>9,331</b>
Rate Sensitive Gap (Assets - Liabilities)	-10,511		3,266
Total Assets	33,338		33,338
Gap as a % of Total Assets	-31.53%		9.8%
Change in Net Interest Margin (\$)			-98
Change in Net Interest Margin (%)			-2.9%
Net Interest Margin (%)			2.84%
% Change in Net Interest Margin			-10.35%

	Yields Up 300 Basis Points		
	Balance Sheet Gap <sup>1</sup>	ECR <sup>2</sup>	Income Statement Gap <sup>3</sup>
	A	B	A X B
	5,977	100%	5,977
	110	100%	110
	3,694	100%	3,694
	2,423	100%	2,423
	<b>12,204</b>		<b>12,204</b>
	<b>A</b>	<b>B</b>	<b>A X B</b>
	3,309	10%	331
	8,530	28%	2,388
	8,750	52%	4,550
	463	90%	417
	2,056	80%	1,645
	<b>23,108</b>		<b>9,331</b>
	-10,904		2,874
	33,338		33,338
	-32.71%		8.62%
			86
			.26%
			2.84%
			9.11%

<sup>1</sup>One Year Balance Sheet gap includes all balances that may change in rate in the next 12 months.

<sup>2</sup>The Earnings Change Ratio estimates the change in rate of a rate sensitive instrument per 100bp move in rates.

<sup>3</sup>In the Liability section, the default ECRs are in parentheses. If changed in column B, custom ECRs were applied.

# Performance Profile Report

Determine fair value of the investment portfolio and the effect of realized or potential losses from investment transactions on the credit union's earnings and capital position

Portfolio Market Value	\$41,218,725
Tax Rate	0.00%
Assets <sup>1</sup>	\$341,359,000
Equity Capital <sup>1</sup>	\$34,548,000

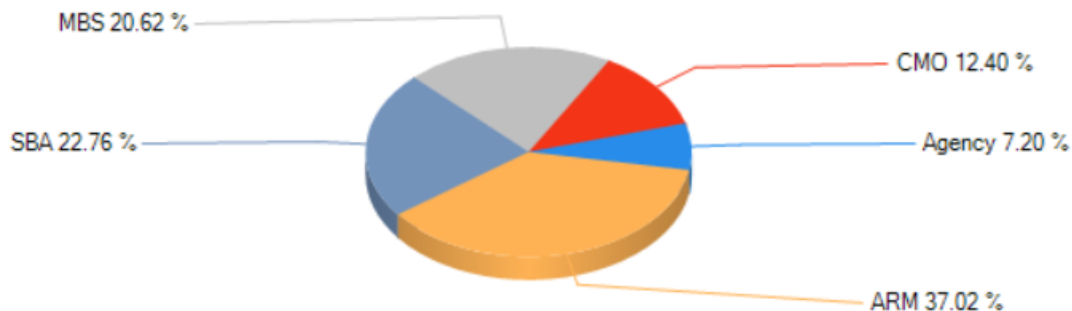
## PORTFOLIO IMPACT - CAPITAL VALUE AT RISK - ALL BONDS

	Price Volatility Pct	Gain Loss	Capital Tax Eff	Assets Tax Eff	Capital Ratio	Capital Pct Chg
Down 300	1.42%	\$903,392	\$35,451,392	\$342,262,392	10.36%	1.67%
Down 200	1.76%	\$1,046,904	\$35,594,904	\$342,405,904	10.40%	2.08%
Down 100	1.73%	\$1,034,872	\$35,582,872	\$342,393,872	10.39%	2.05%
Base	0.00%	\$320,039	\$34,868,039	\$341,679,039	10.20%	0.00%
Up 100	-2.75%	(\$813,684)	\$33,734,316	\$340,545,316	9.91%	-3.25%
Up 200	-5.73%	(\$2,042,653)	\$32,505,347	\$339,316,347	9.58%	-6.78%
Up 300	-8.71%	(\$3,268,465)	\$31,279,535	\$338,090,535	9.25%	-10.29%
Up 400	-11.59%	(\$4,455,160)	\$30,092,840	\$336,903,840	8.93%	-13.70%

# Board Reporting for Investments

## Review Investment Sector Allocations

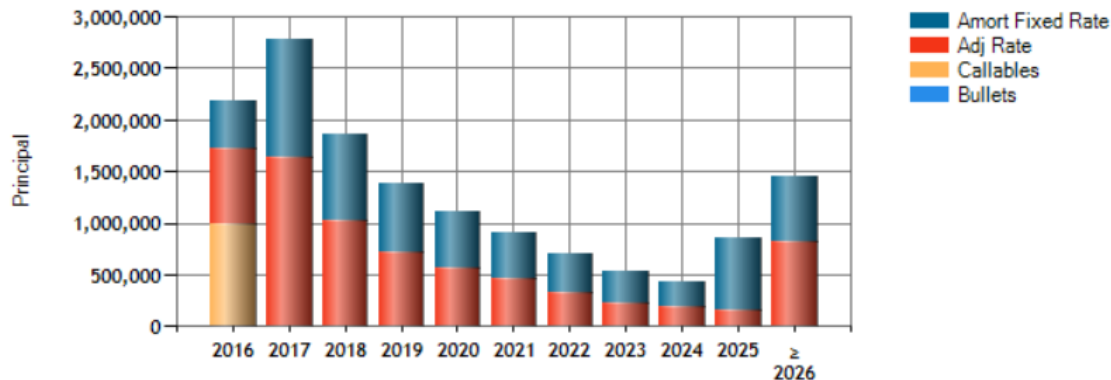
Type	Book Yld	Count	Current	Gain / Loss
Agency	1.71%	4	1,000,000	8,999
ARM	1.40%	14	5,144,077	-11,239
CMO	1.42%	4	1,722,894	-16,811
MBS	1.97%	6	2,865,659	36,609
SBA	2.28%	5	3,163,056	36,306
	<b>1.74%</b>	<b>33</b>	<b>13,895,687</b>	<b>53,864</b>



# Board Reporting for Investments

Review Investment Cash Flows (in the base case and shocked rate scenarios)

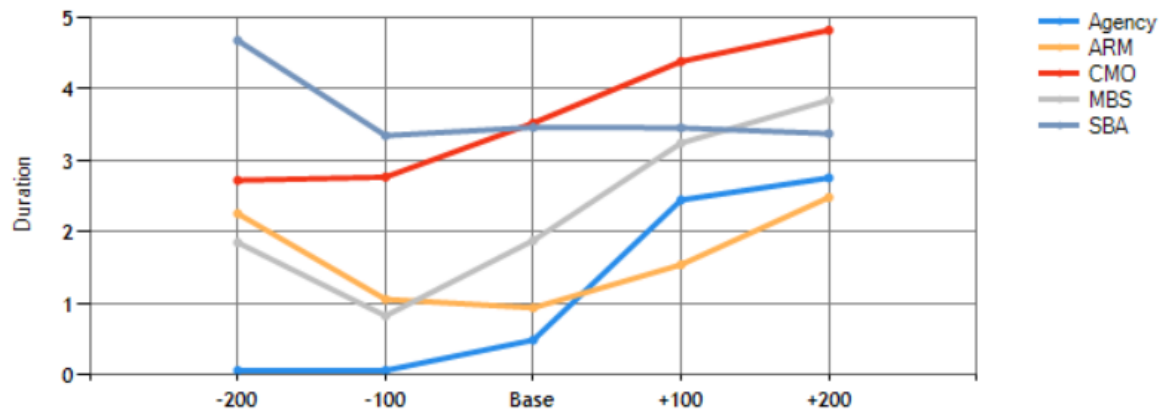
Year	Bullets	Callables	Amortizing Adj. Rate	Amortizing Fixed Rate	Total
2016		1,000,000	714,663	470,488	2,185,151
2017			1,639,264	1,129,740	2,769,004
2018			1,023,661	830,688	1,854,350
2019			728,913	648,161	1,377,074
2020			571,236	533,047	1,104,283
2021			462,133	444,318	906,451
2022			334,260	374,121	708,381
2023			235,735	292,357	528,092
2024			195,589	242,408	437,997
2025			164,025	684,769	848,794
≥ 2026			816,269	634,090	1,450,359
		<b>1,000,000</b>	<b>6,885,749</b>	<b>6,284,187</b>	<b>14,169,936</b>



# Board Reporting for Investments

## Review Investment Duration

Type	Book Yld	Count	Current	Gain / Loss	EFFECTIVE DURATION				
					-200	-100	Base	+100	+200
Agency	1.71%	4	1,000,000	8,999	0.1	0.1	0.5	2.4	2.8
ARM	1.40%	14	5,144,077	-11,239	2.3	1.1	0.9	1.5	2.5
CMO	1.42%	4	1,722,894	-16,811	2.7	2.8	3.5	4.4	4.8
MBS	1.97%	6	2,865,659	36,609	1.8	0.8	1.9	3.2	3.8
SBA	2.28%	5	3,163,056	36,306	4.7	3.3	3.5	3.5	3.4
	<b>1.74%</b>	<b>33</b>	<b>13,895,687</b>	<b>53,864</b>	<b>2.6</b>	<b>1.7</b>	<b>2.0</b>	<b>2.7</b>	<b>3.3</b>

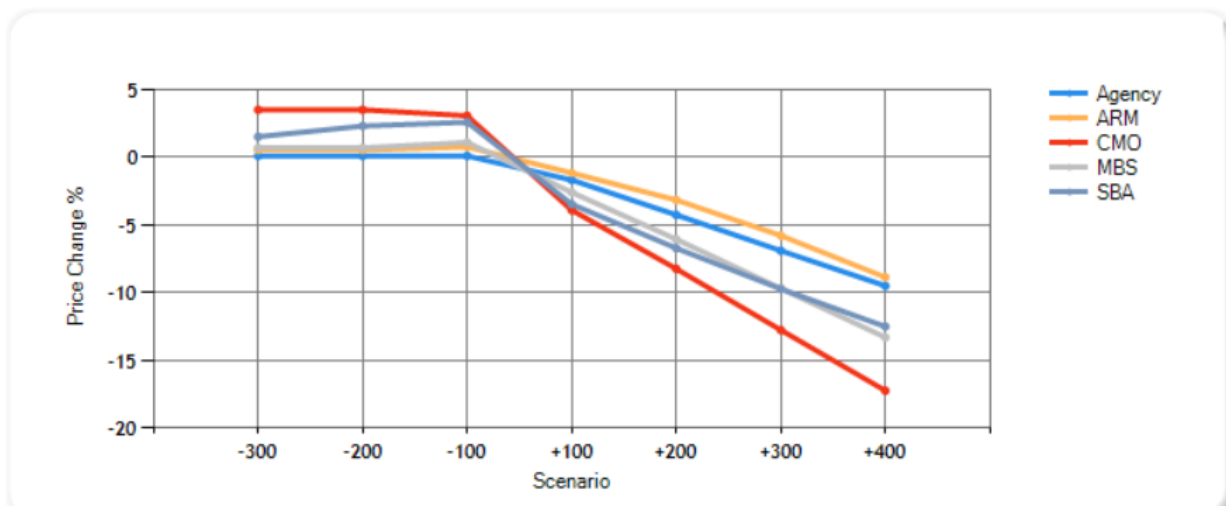




# Board Reporting for Investments

## Review Investment Price Volatility

Type	Book Yld	Count	Current	Gain / Loss	PRICE CHANGE %						
					-300	-200	-100	+100	+200	+300	+400
Agency	1.71%	4	1,000,000	8,999	0.1	0.1	0.1	-1.7	-4.3	-6.9	-9.5
ARM	1.40%	14	5,144,077	-11,239	0.5	0.5	0.7	-1.2	-3.2	-5.8	-8.9
CMO	1.42%	4	1,722,894	-16,811	3.5	3.5	3.0	-3.9	-8.3	-12.8	-17.2
MBS	1.97%	6	2,865,659	36,609	0.7	0.7	1.1	-2.6	-6.1	-9.7	-13.3
SBA	2.28%	5	3,163,056	36,306	1.5	2.3	2.6	-3.5	-6.7	-9.7	-12.5
	1.74%	33	13,895,685	53,864	1.1	1.3	1.5	-2.4	-5.3	-8.4	-11.7



# Board Responsibilities for Investments

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**Review  
Portfolio  
Activity**

**Review  
Risk  
Levels**

**Require  
Policy / Risk  
Limit  
Compliance**

## Specific Responsibilities

- Approve suitable securities list
- Approve pre-and post- purchase analysis procedures
- Approve risk limits

# Board Responsibilities for Investments

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- Annual review of policies and any updates or changes to policies
- Establishment of risk limits
- Setting policy limits and annual review of policy limits or changes to policy limits including limits for EAR, NEV, CAR, PVOL, duration, liquidity, and investment limits as a percentage of investments, assets, and /or capital
- Developing a list of approved investments and activities and prohibited investments and activities
- Purchase requirements including required documentation, segregation of duties and approval of transactions
- Review investment transactions – purchase and sale activity
- Internal control structure and audit review
- Approved broker list and annual review

# NCUA Supervisory Priorities for 2016 - IRR



**INTEREST RATE  
RISK RESOURCES**

Interest rate risk (IRR) remains a key supervisory focus as interest rates have begun to rise. Rising rates may prove challenging for those credit unions that hold high concentrations of long-term assets funded with short-term liabilities.

[ncua.gov/regulation-supervision/Pages/policy-compliance/resource-centers/interest-rate-risk.aspx](http://ncua.gov/regulation-supervision/Pages/policy-compliance/resource-centers/interest-rate-risk.aspx)

- NCUA is in the process of updating interest rate risk management supervisory guidance, which will be published in 2016.
- As part of this effort, NCUA field staff will transition to the updated IRR examination procedures over the course of 2016.
- The new procedures will improve the efficiency of reviews by focusing field staff resources on those credit unions with elevated levels of IRR and streamlining related exam procedures.

# NCUA Supervisory Priorities for 2016 - IRR

IRR Working Group  
E&I/ DCCM



## Interest Rate Risk Supervision and Adding 'S' to CAMEL

NCUA Board Briefing  
June 16, 2016

- The NCUA is replacing the 17/4 test, net long term asset ratio, and the SIRRT test with the NEV Supervisory Test.
- The NCUA is also setting standardized values for deposit premiums at 1% base and 4% up 300bps.
- Phased in over the next 6 months.

# NEV Supervisory Test

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## Why a NEV Supervisory Test

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1. Captures longer-term risk of embedded options
2. Capital-at-risk measure
3. Total-balance-sheet metric
4. Widely utilized in risk management
5. Superior to Call Report metrics (NLTA, SIRRT, 17/4)
6. Data exists in majority of larger institutions
7. NCUA can readily capture, archive and study
8. Better IRR review utility for small credit unions

# NEV Supervisory Test

Risk Level	Post-shock NEV	NEV Sensitivity (%)
Low	Above 7%	Below 40%
Moderate	4% up to 7%	40% to 65%
High	2% up to 4%	65% to 85%
Extreme	Below 2%	Above 85%

Note: NCUA has made use of a NEV metric in the current Examiner's Guide since 2000 in Chapter 13

# IRR Regulatory Focus Areas

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- Setting policy limits for EAR, NEV, and Capital At Risk
- Rate shocks include +400bps
- Non parallel ramp and parallel shock scenarios
- Developing specific assumptions for your credit union
- Sensitivity analysis (stress testing of assumptions)
- Non-maturity share study
- Identification and modeling of surge in shares
- Back-testing model results
- Independent model validation (in house or third party)



# Interest Rate Risk: EAR and NEV

<b>Standard Scenarios</b>	Asset Growth: 0.00%			Shift: Parallel			Interval: Shock		
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		Total Earning Assets EOM 244,879							
<b>Year One</b>		Dn 300	Dn 200	Dn 100	Base Case	Up 100	Up 200	Up 300	Up 400
Earnings At Risk		-15.01%	-9.08%	-2.76%	8,667	1.87%	0.53%	-3.66%	-10.32%
Net Interest Margin		3.00%	3.21%	3.43%	3.53%	3.60%	3.55%	3.40%	3.17%
<b>Year Two</b>		Dn 300	Dn 200	Dn 100	Base Case	Up 100	Up 200	Up 300	Up 400
Earnings At Risk		-31.54%	-20.38%	-7.48%	8,883	5.06%	6.85%	4.98%	0.82%
Net Interest Margin		2.49%	2.75%	3.28%	3.60%	3.83%	3.94%	3.90%	3.79%

<b>Standard Scenarios</b>		Asset Growth: 0.00%			Shift: Parallel			Interval: Shock		
Economic Value of Equity	32,873	28,057	26,339	30,452	34,085	35,911	36,147	34,695	31,458	
		-6,028	-7,746	-3,634		1,825	2,062	610	-2,627	
NEV at Risk		-17.68%	-22.73%	-10.66%		5.36%	6.05%	1.79%	-7.71%	

# Interest Rate Risk: NCUA Guidance

Chapter 13 NCUA Examiners Guide  
Sample Credit Union Policy Limits for IRR

<u>Basis of Measurement</u>	<u>IRR Limit</u>
Gap:	beyond +/- 20 percent change in any given period, or cumulatively over 12 months
Earnings Simulation:	
NII	after shock change > 30 percent over any 12 month period
NI	after shock change > 75 percent over any 12 month period
Asset Valuation:	after shock change in book value net worth > 50 percent <u>or</u> after shock value of net worth < 4 percent
NEV	after shock change in market value net worth > 50 percent <u>or</u> after shock value of net worth of < 4 percent

Table 1

<u>Basis of Measurement</u>	<u>Low</u>	<u>Moderate</u>	<u>High</u>
Gap:			
% change in any given period or cumulatively over 12 months	+/- 10%	+/- 10%-20%	> +/-20%
Earnings Simulation			
NII: after shock change over any 12-month period	< 20%	20-30%	> 30%
NI: after shock change over any 12-month period	< 40%	40-75%	>75%
Asset Valuation:			
after shock change in book value net worth	< 25%	25-50%	> 50%
<u>or</u> after shock value of net worth	> 6%	4-6%	< 4%
NEV:			
after shock change in market value net worth	< 25%	25-50%	> 50%
<u>or</u> after shock value of net worth	> 6%	4-6%	< 4%

Table 2



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**Thank You**  
**Lee Chandler**  
**Senior Vice President**  
**Vining Sparks**  
**[Ichandler@ViningSparks.com](mailto:Ichandler@ViningSparks.com)**

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