



**Mark H. Smith**  
I N C O R P O R A T E D

# **UTILIZING THE ALM ANALYSIS IN A RISING RATE ENVIRONMENT**

**PRESENTED BY:  
CYNTHIA R. WALKER, CEO**

*(Webinar will begin on the hour)*

# LEARNING OBJECTIVE

**Look**

Look at how balance sheet composition can affect IRR analysis



**Explore**

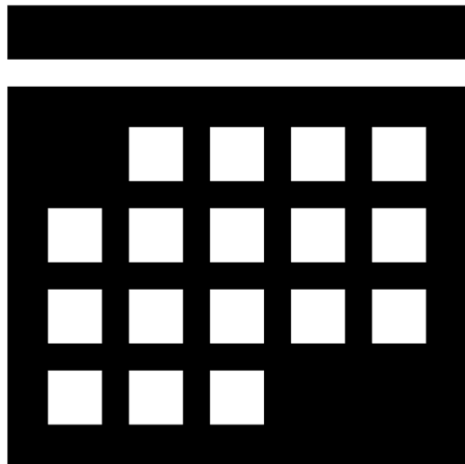
Explore ways to better utilize the results of your IRR Analysis



**Review**

Review liquidity trends as interest rates increase and inflation remains high

# DATA FROM NCUA CALL REPORTS

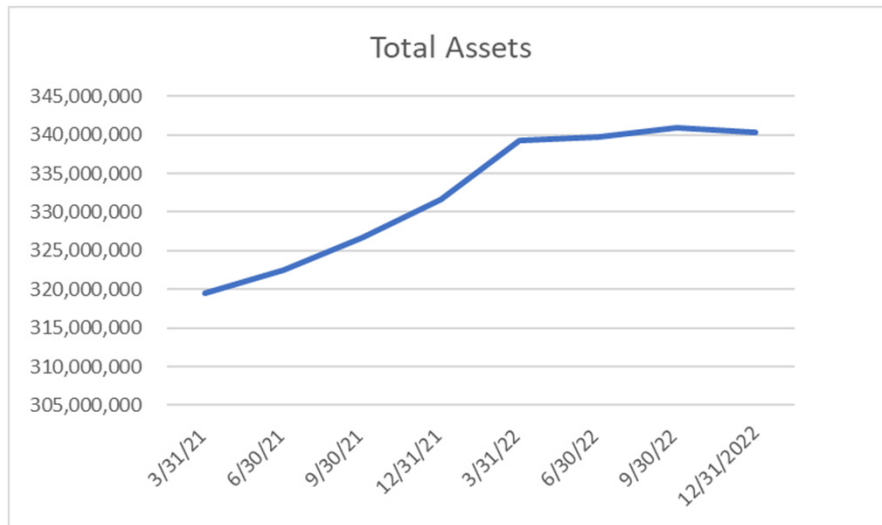


**DATES: 3/31/2021  
TO 12/31/2022**

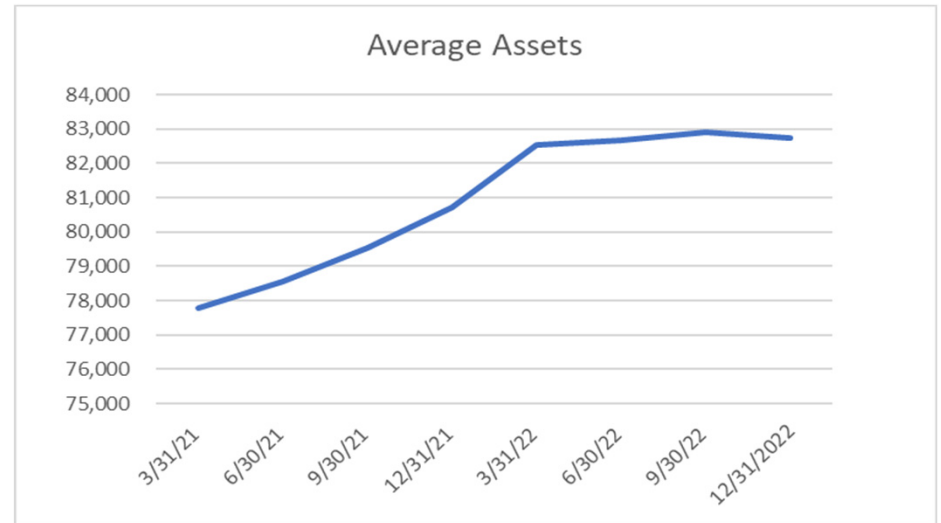
**STATES: ALL**

**ASSET SIZE: UP TO  
\$500 MILLION**

# TOTAL ASSETS

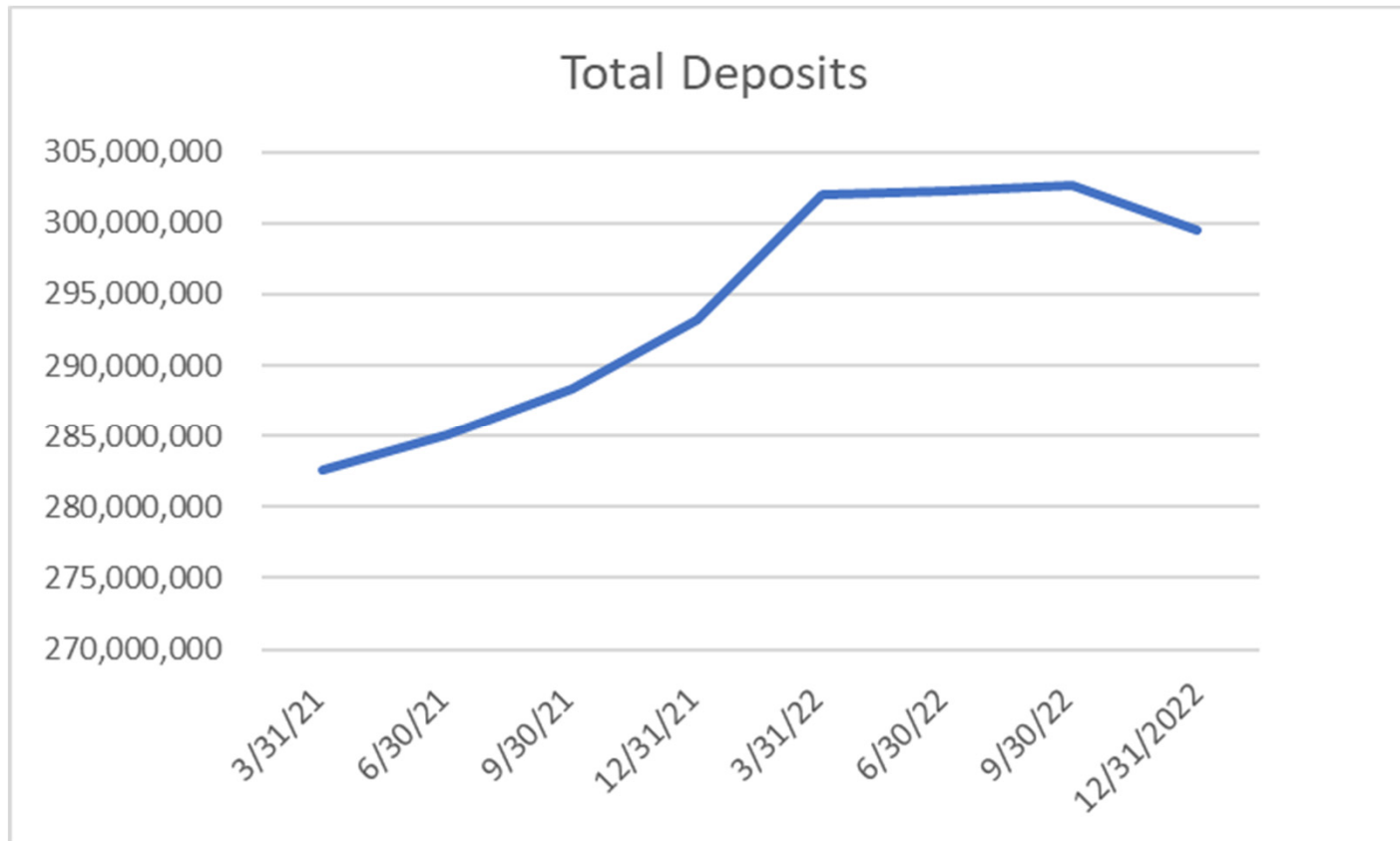


# AVERAGE ASSETS



## ASSET GROWTH HAS SLOWED

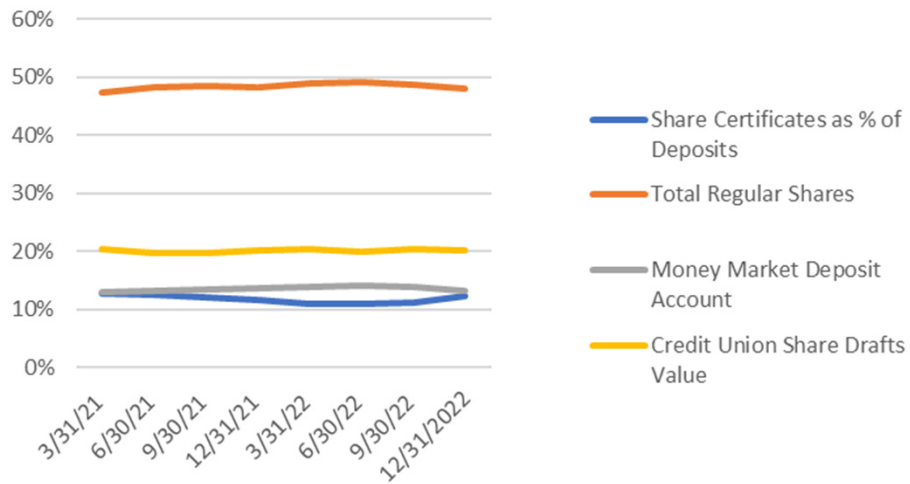
# TOTAL DEPOSITS



## DEPOSIT GROWTH HAS REVERSED DIRECTION

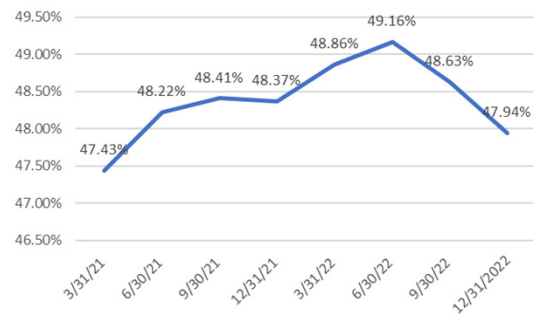
# TOTAL DEPOSITS

Share Types as a % Deposits

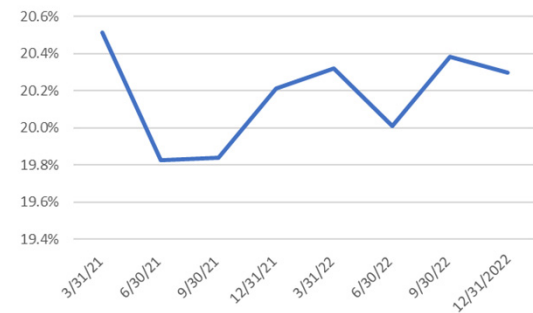


Fewer Regular Shares and Share Drafts Increase Interest Rate Risk

Regular Shares as % of Deposits

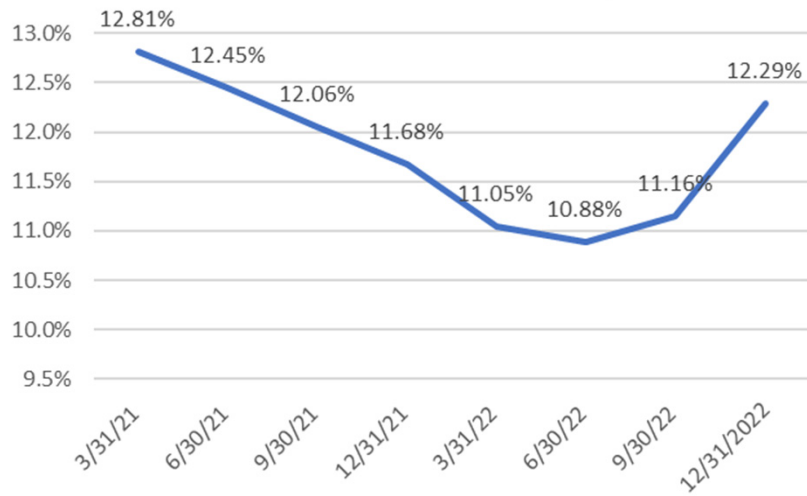


Share Drafts as a % of Deposits

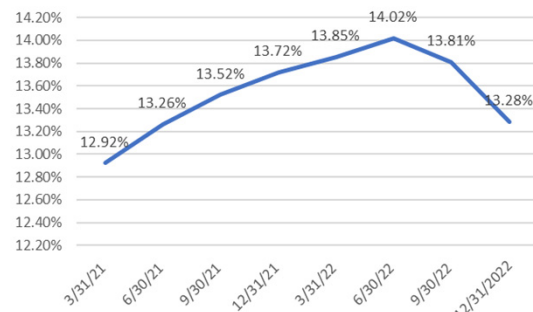


More CD Increase Interest Rate Risk

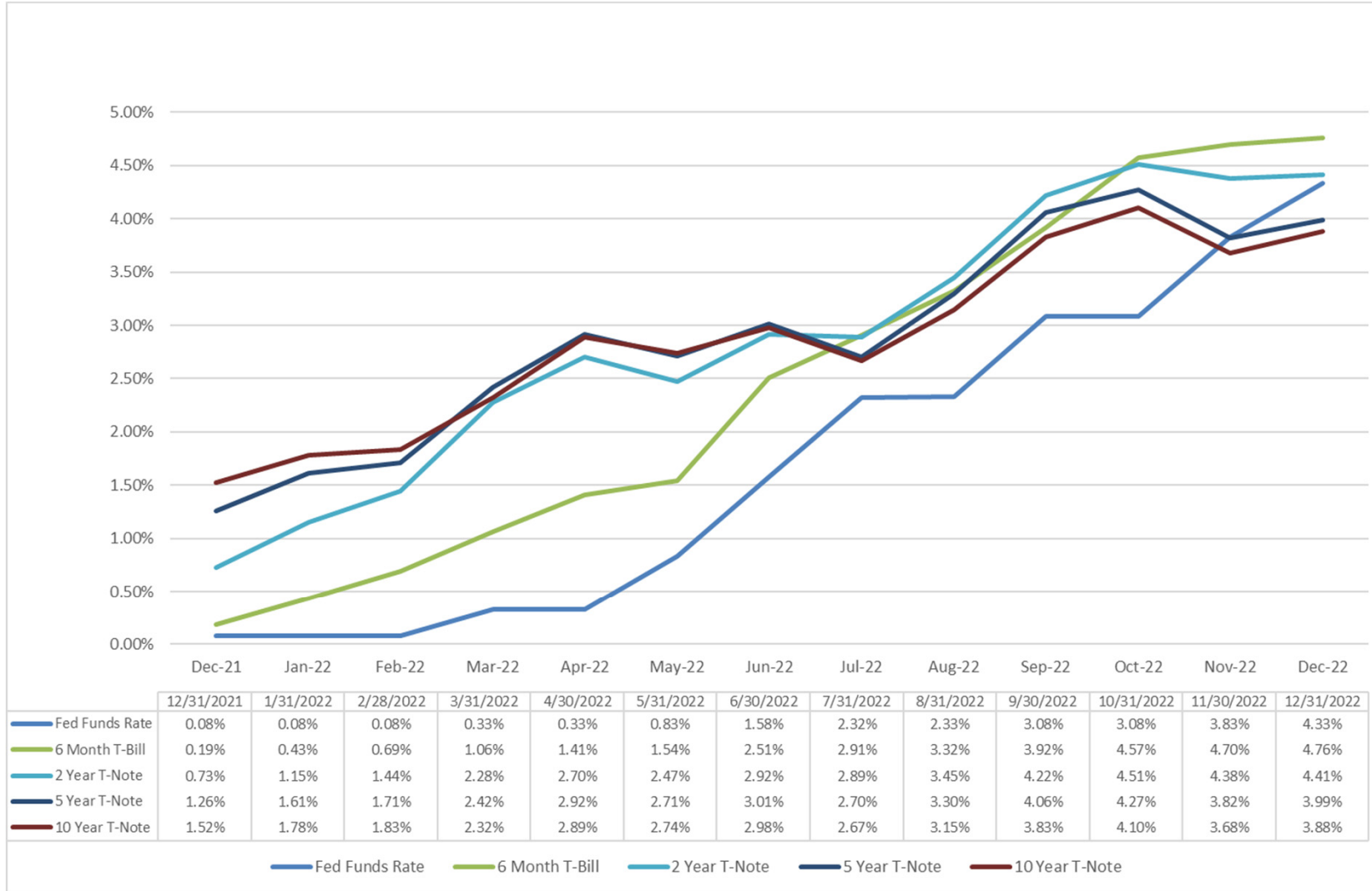
Share Certificates as % of Deposits



Money Market as % of Deposits



# TREASURY RATES HISTORY



# 12-MONTH PERCENTAGE CHANGE, CONSUMER PRICE INDEX

(NOT SEASONALLY ADJUSTED)





# INFORMAL CONCLUSION FROM TALKING WITH CLIENTS

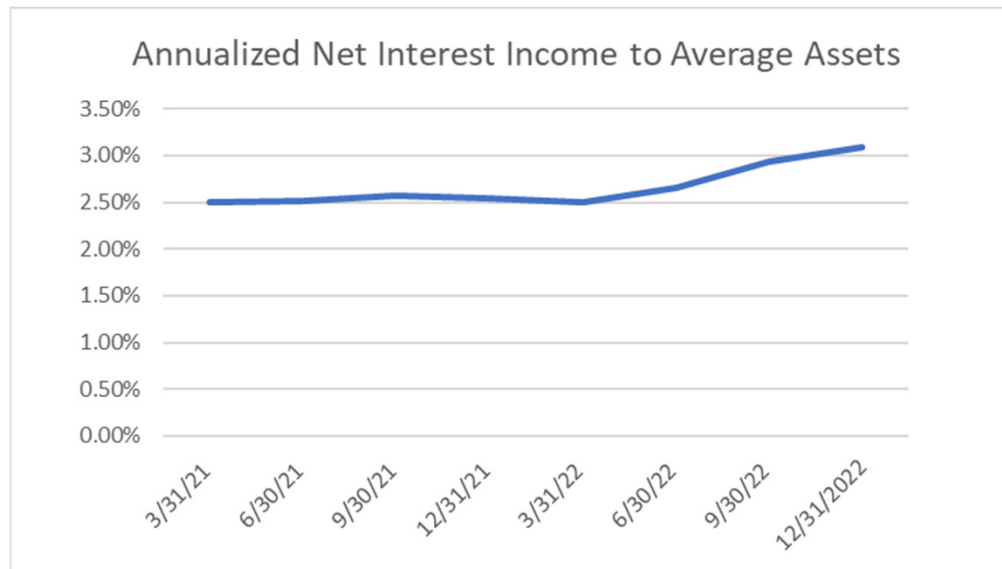
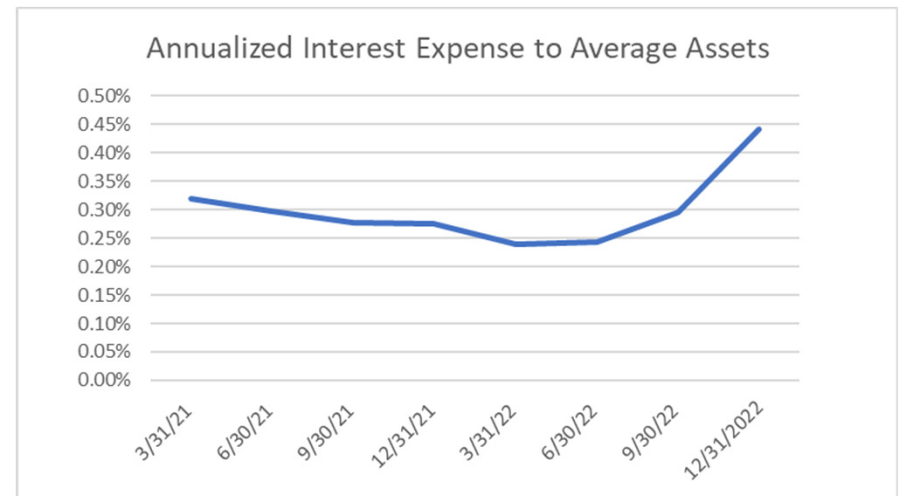
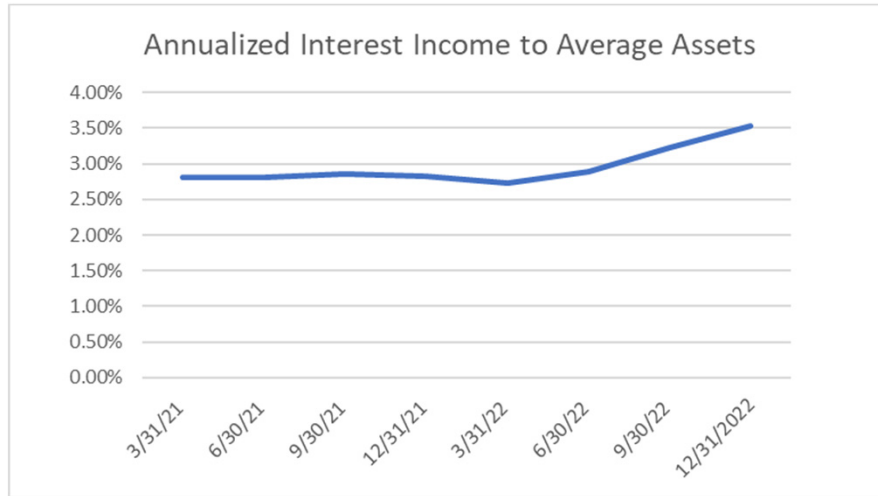
Deposits leaving to chase higher CD rates – small %

Deposits leaving due to inflation and higher cost of living

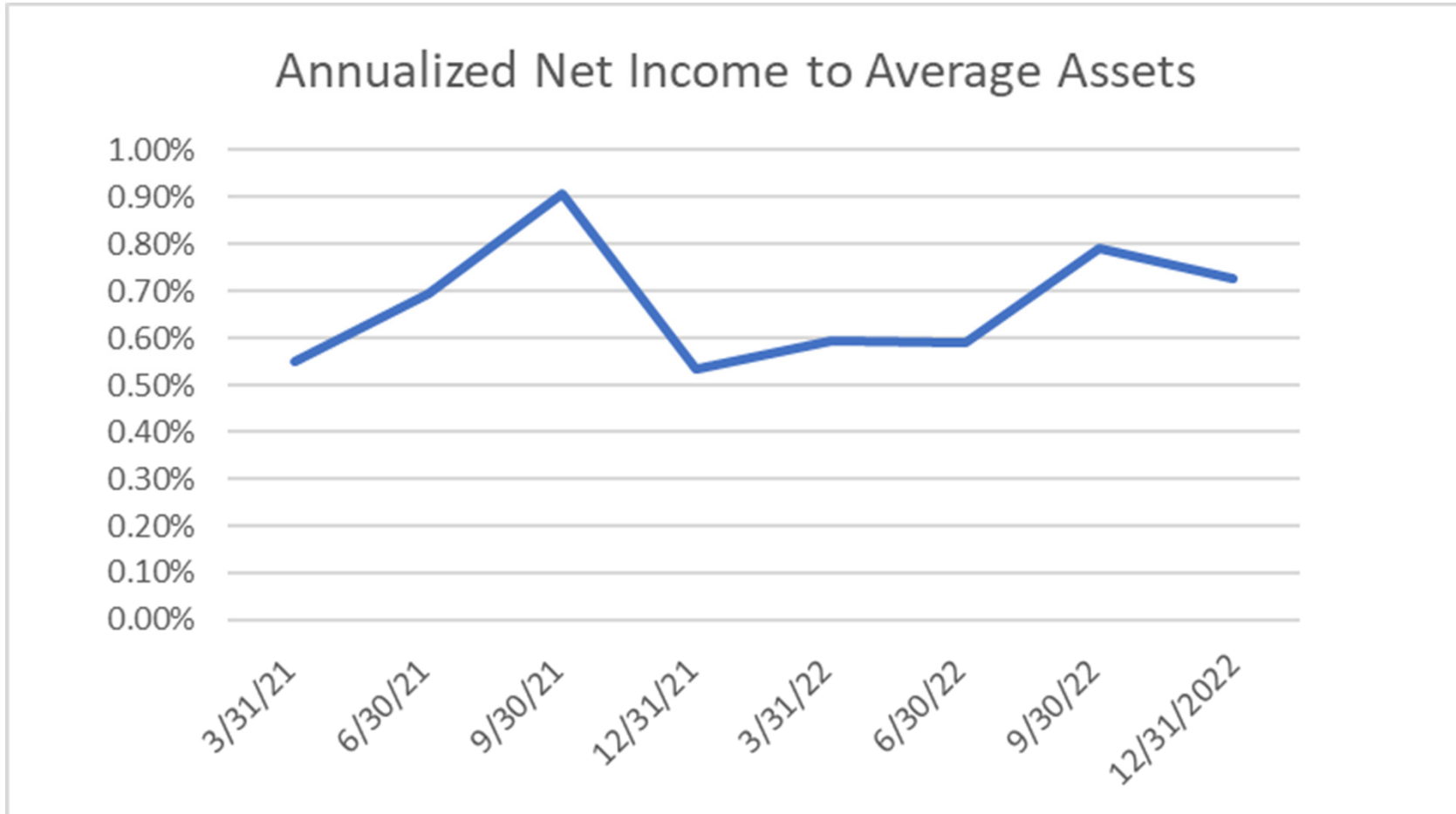
Deposit outflows due to pent up response to covid restrictions such as travel

Supply constraints are lifting, and postponed purchases are occurring

# NET INTEREST INCOME (ANNUALIZED)

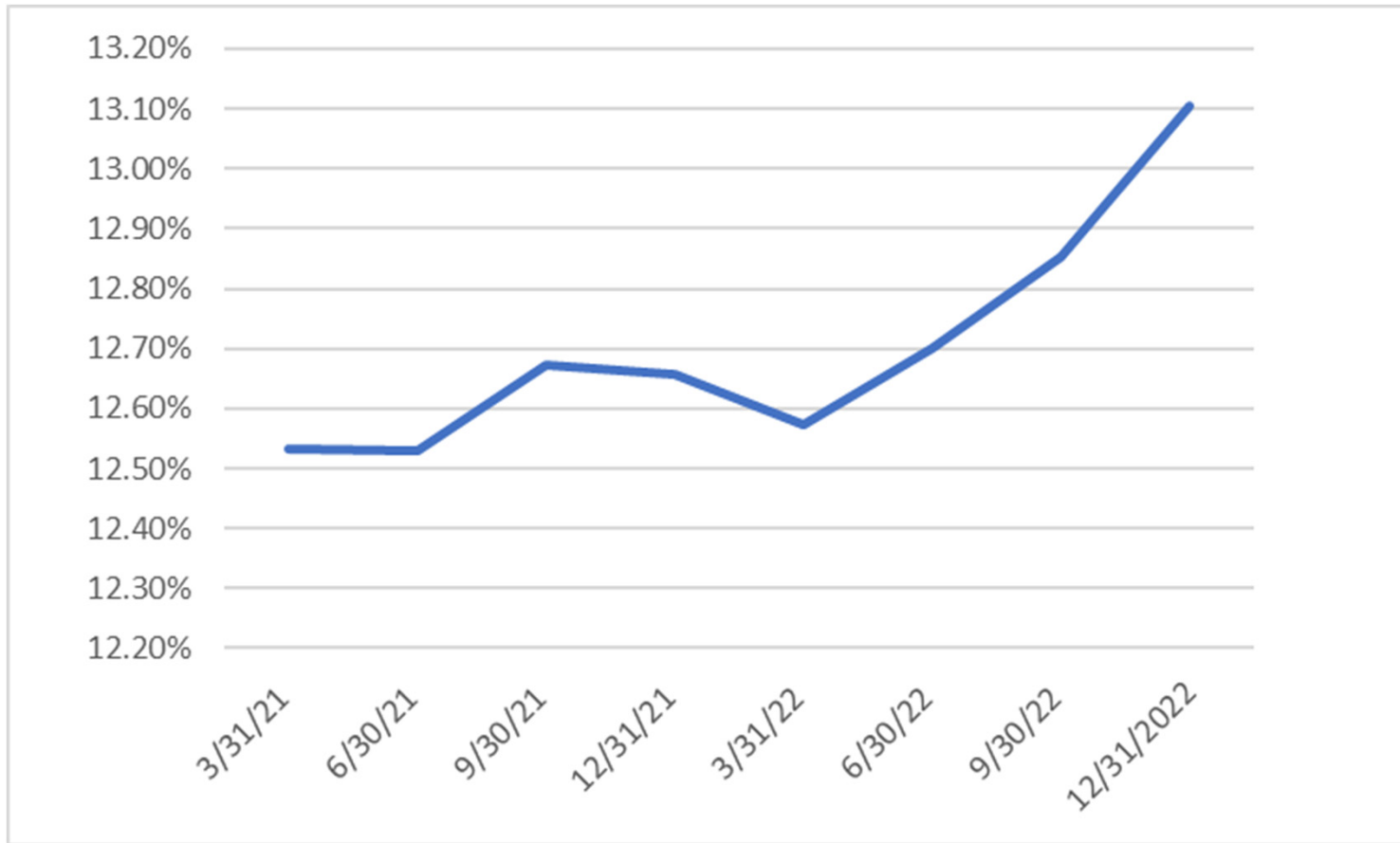


# RETURN ON AVERAGE ASSETS



# NET WORTH RATIO

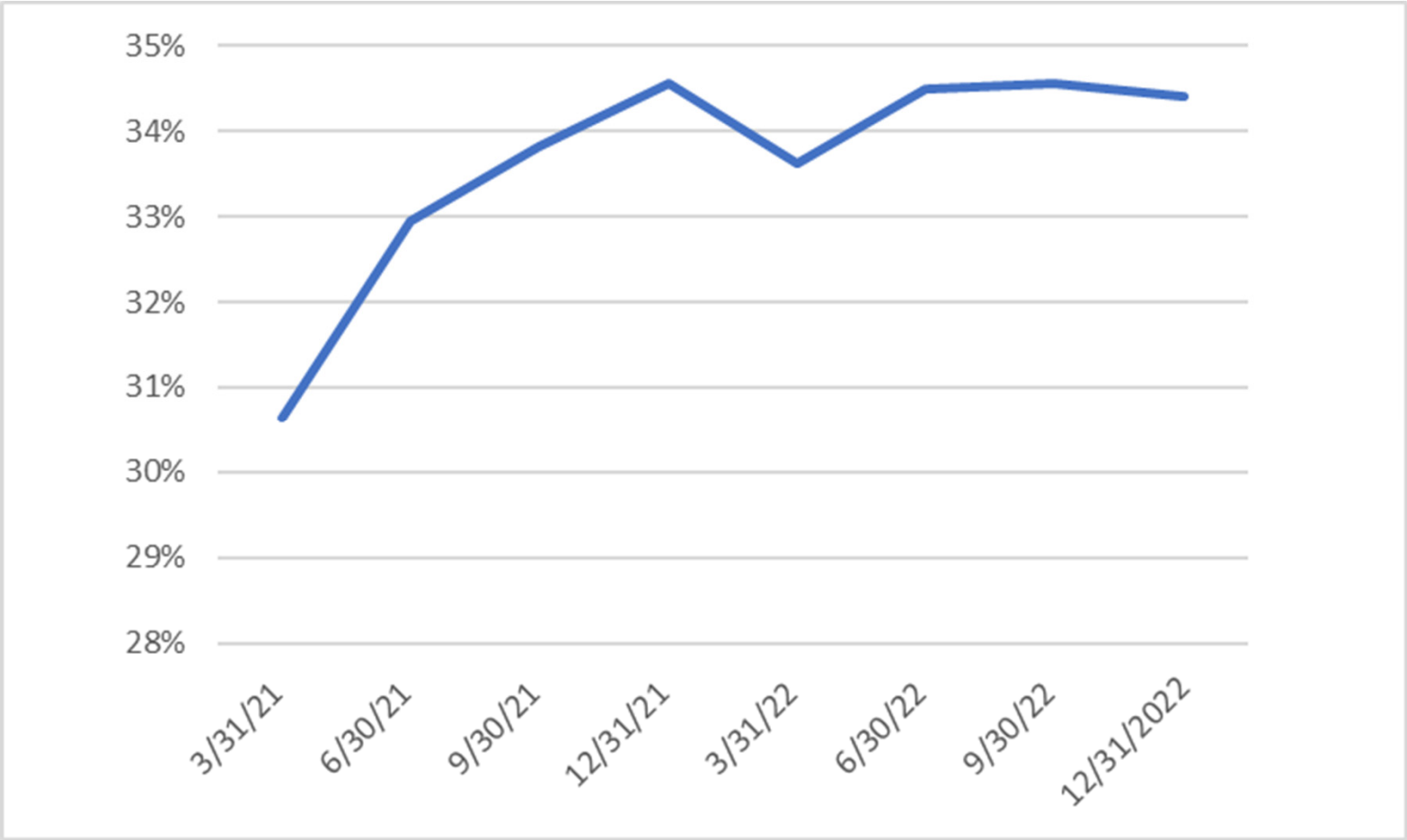
## MORE NET WORTH = MORE RESILIENCE



# POLL QUESTION #1

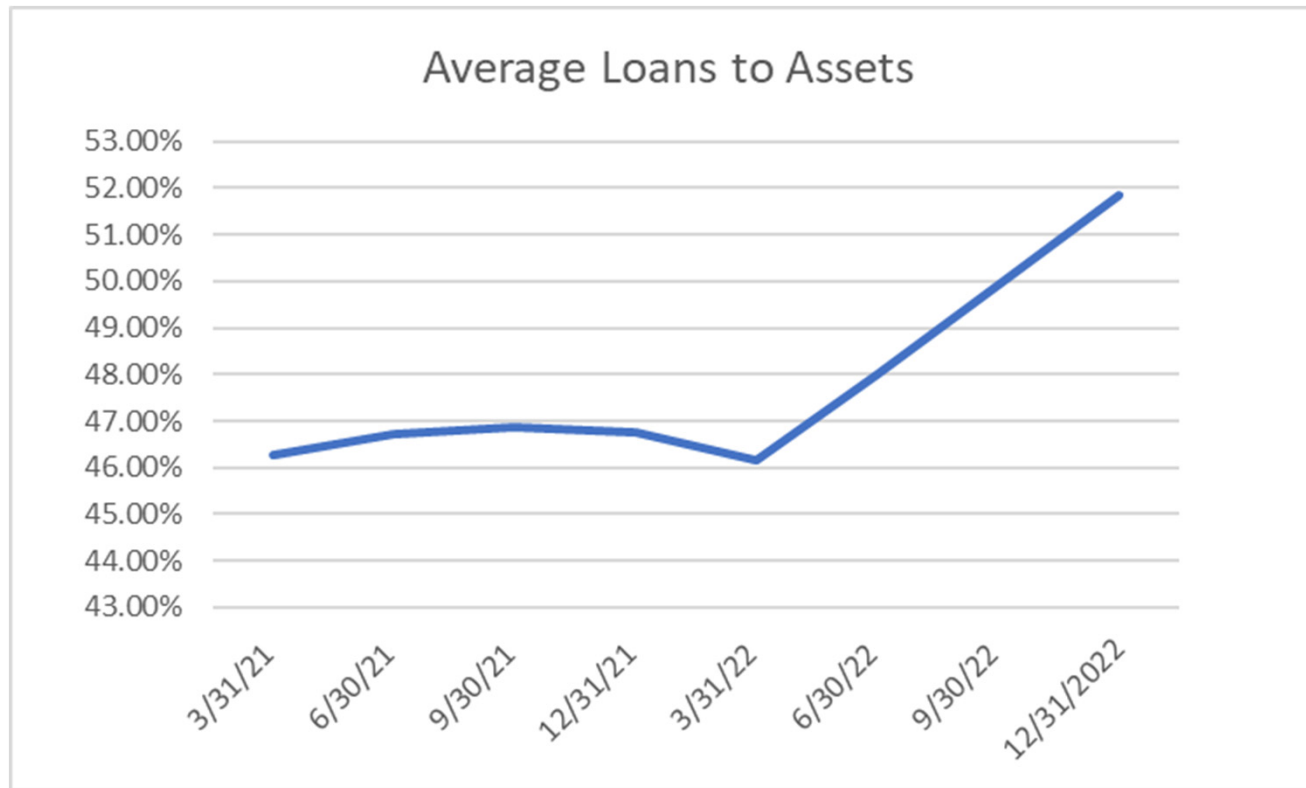
# NET LONG-TERM ASSETS TO TOTAL ASSETS

MORE LONG-TERM ASSETS = MORE INTEREST RATE RISK



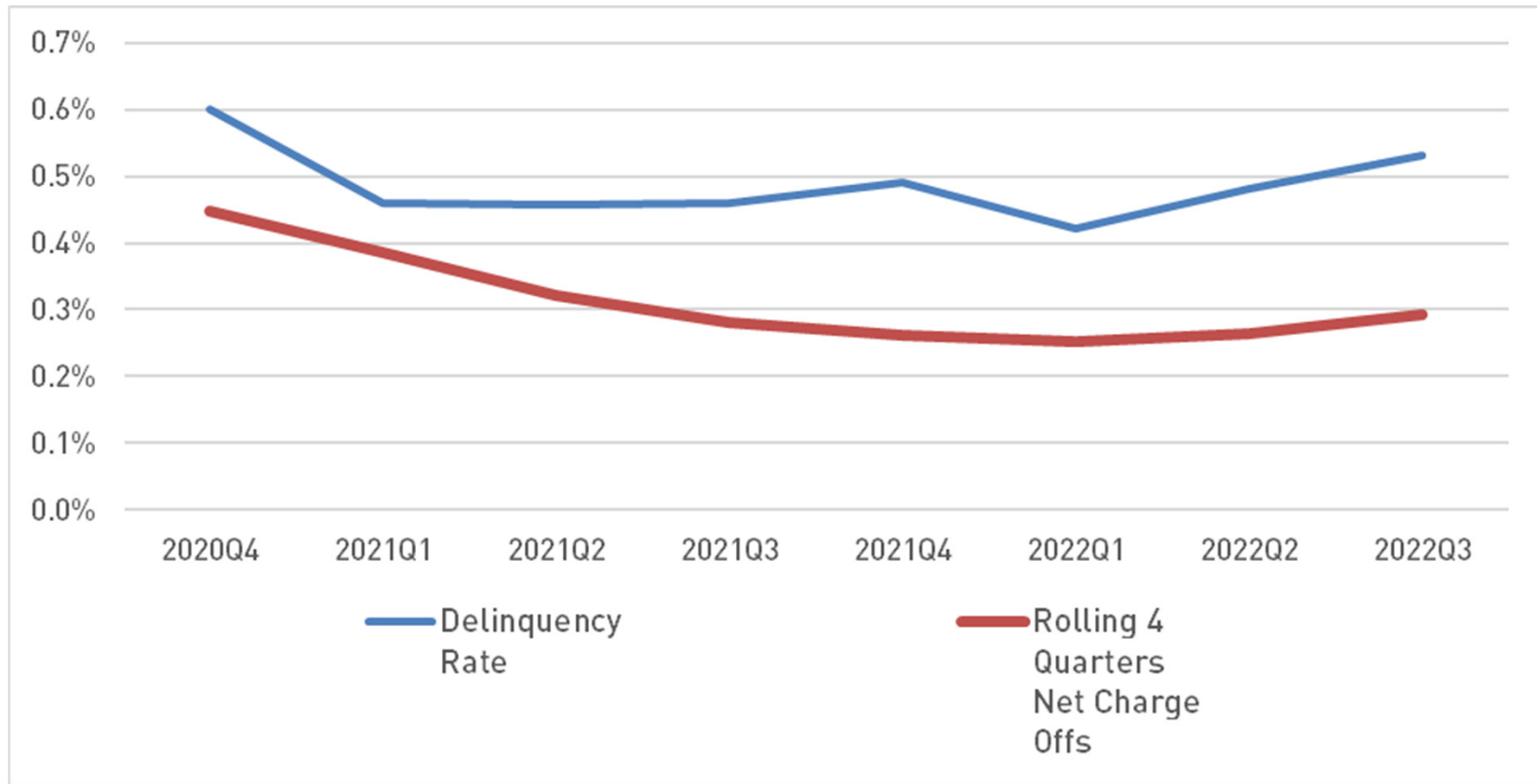
# AVERAGE LOANS TO TOTAL ASSETS

## LOAN GROWTH ALSO IMPACTING LIQUIDITY



- **PRICE NEW LOANS CORRECTLY**
- **CONSIDER EQUIVALENT TERM INVESTMENT YIELDS**
- **BUILD IN COST OF FUNDS NOW AND MOVING FORWARD**
- **ADD CREDIT RISK**
- **ADD SERVICING COSTS**

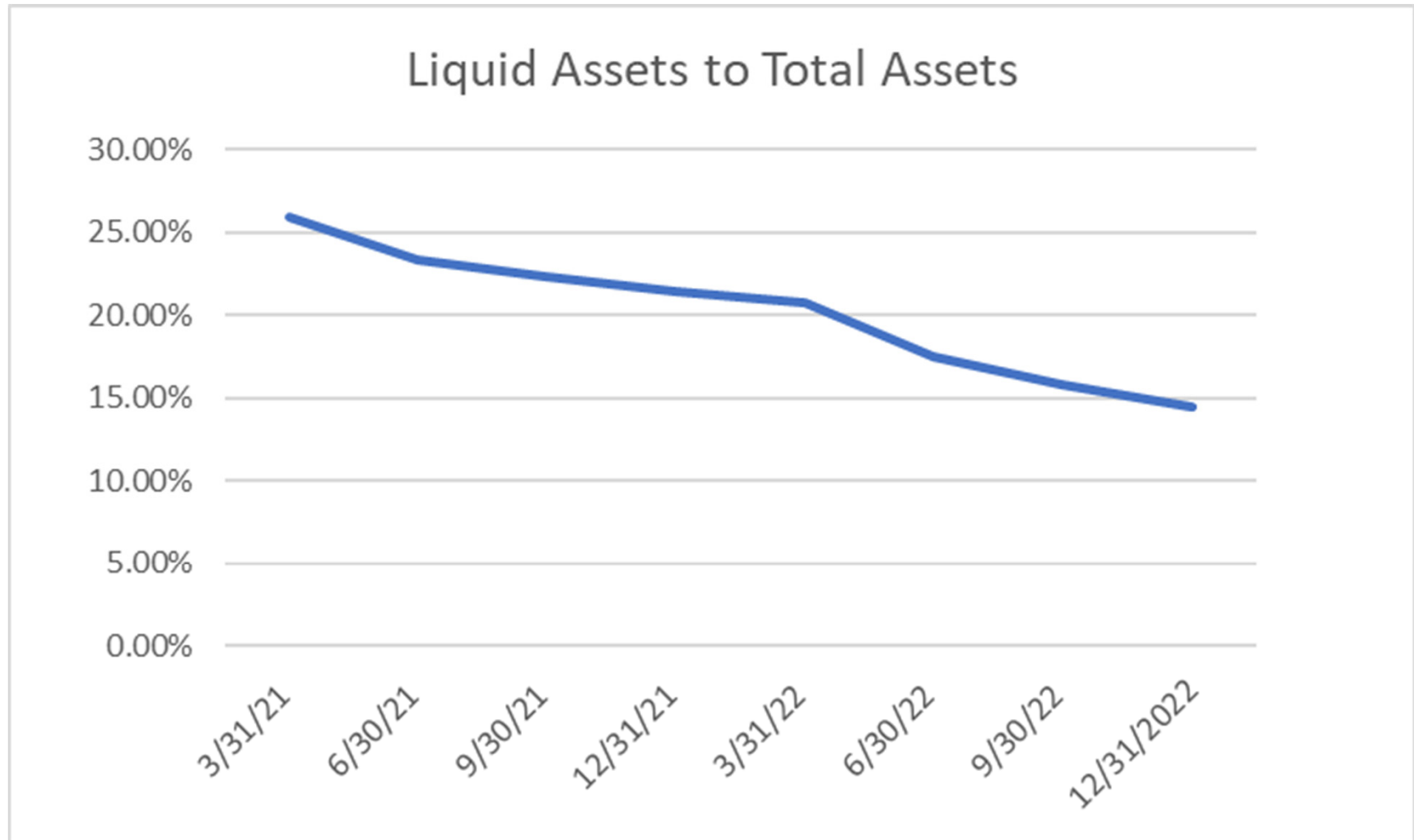
# DELINQUENCY





# LIQUID ASSETS TO TOTAL ASSETS

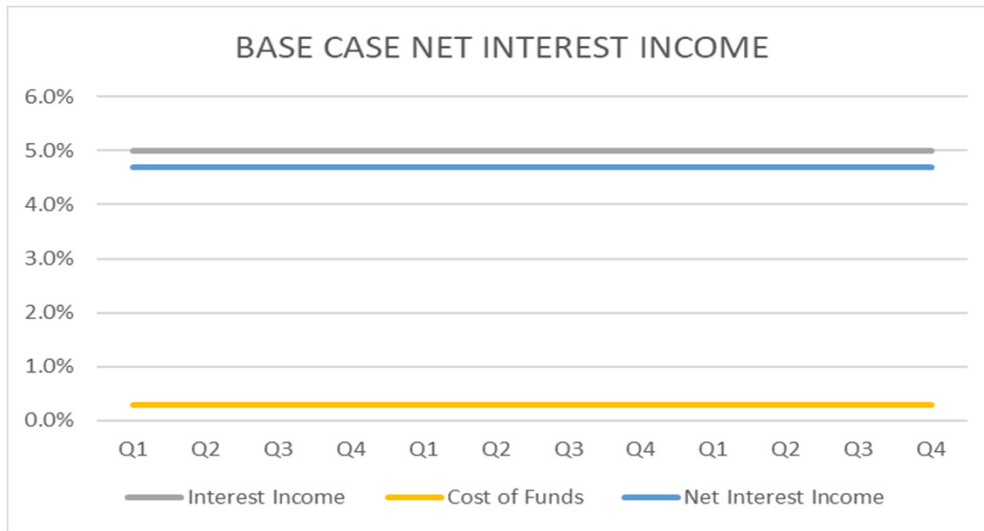
FEWER LIQUID ASSETS = MORE INTEREST RATE RISK



The background features a light blue gradient with intricate, repeating geometric patterns. At the top, there is a horizontal band with a repeating pattern of interlocking circles. Below this, the background is mostly a soft, light blue wash. In the bottom left corner, there is a faint, semi-transparent grid pattern. On the right side, there are larger, more complex decorative elements, including swirling lines and what appears to be a stylized architectural or mechanical structure.

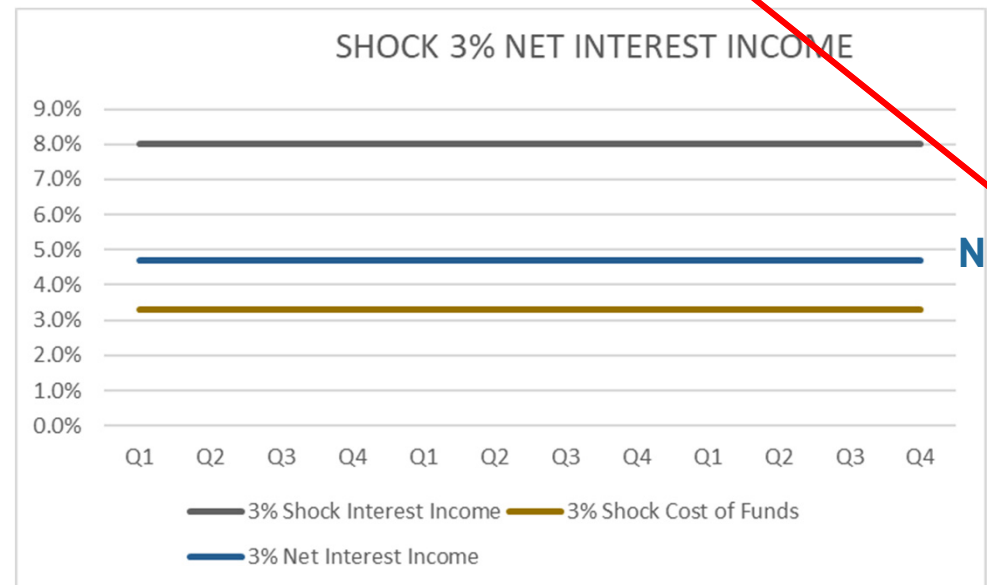
# **QUICK INCOME SIMULATION EXAMPLE**

# EXAMPLE 3% INSTANTENOUS AND PARALLEL UP SHOCK EVERYTHING REPRICES IMMEDIATELY



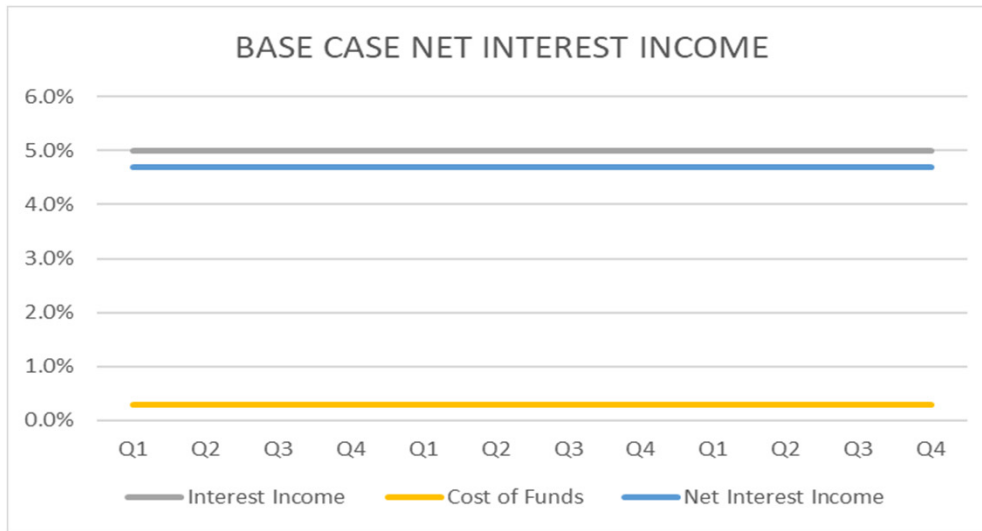
Loan yield 5%  
 Cost of funds .30%  
 NII 4.7%

NII 4.7



NII 4.7

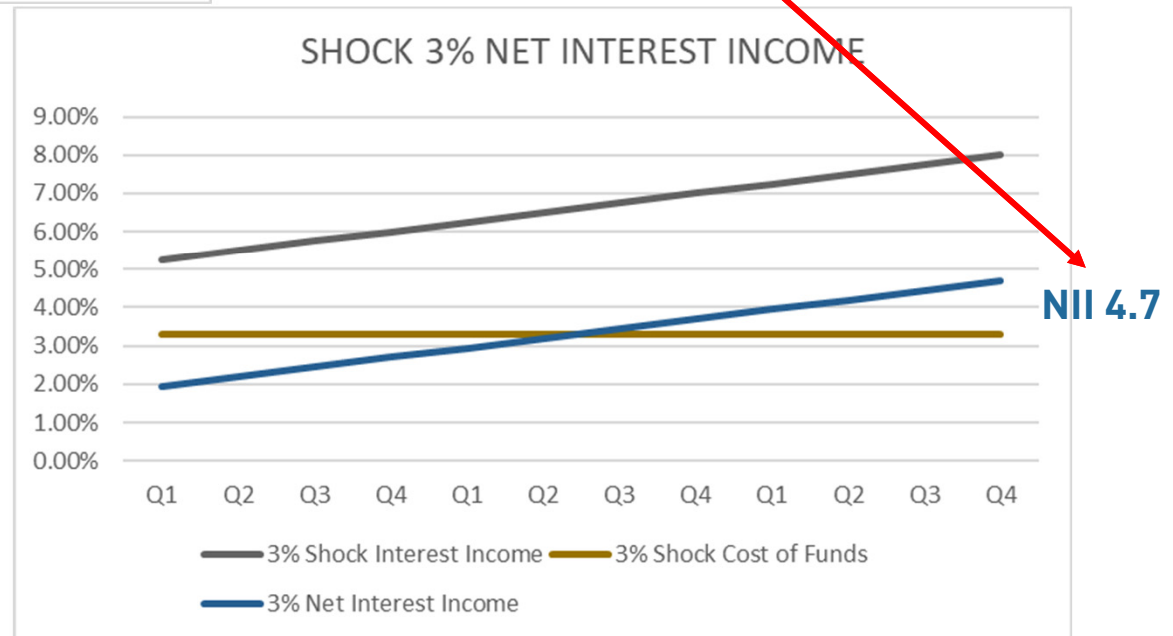
# EXAMPLE 3% INSTANTENOUS AND PARALLEL UP SHOCK 36 MONTH REPRICING OF ASSETS



Loan yield 5%  
Cost of funds .30%  
NII 4.7%

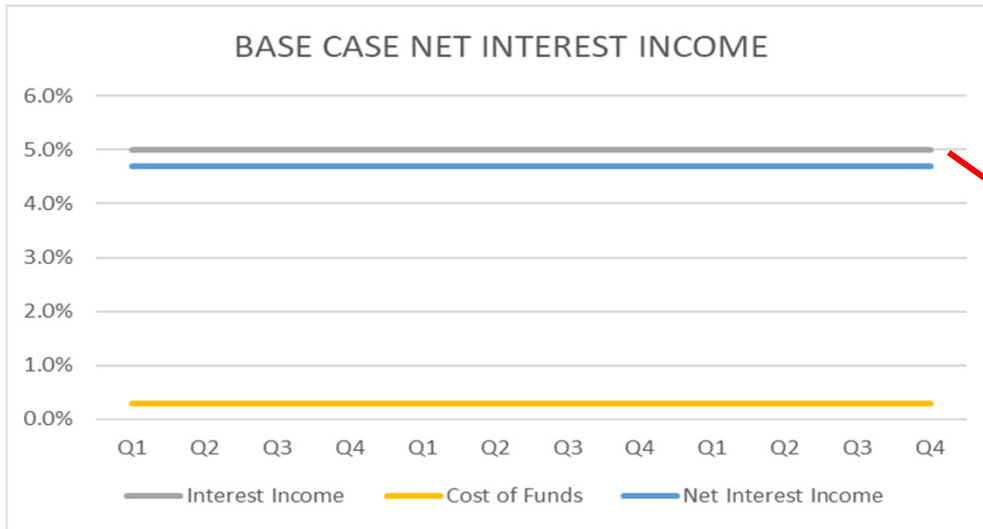
NII 4.7

LOAN YIELDS AND INVESTMENT YIELDS TAKE 36 MONTHS TO REPRICE  
COST OF FUNDS GO UP IMMEDIATELY



NII 4.7

# EXAMPLE 3% INSTANTENOUS AND PARALLEL UP SHOCK 60 MONTH REPRICING OF ASSETS



**NII 4.7%**

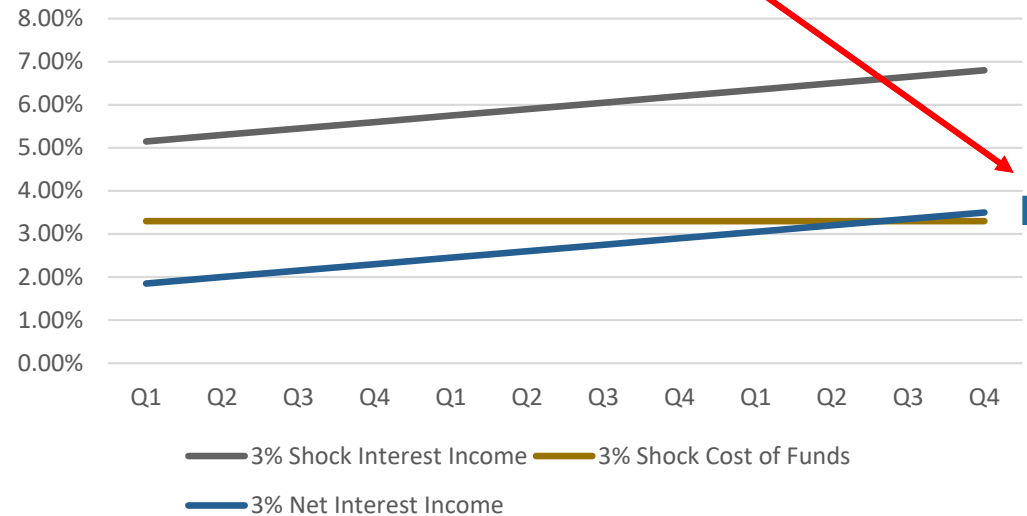
Loan yield 5%  
Cost of funds .30%  
NII 4.7%

LOAN YIELDS AND INVESTMENT YIELDS TAKE 60 MONTHS TO REPRICE

COST OF FUNDS GO UP IMMEDIATELY

**NII OF 4.7% NOT REALIZED**

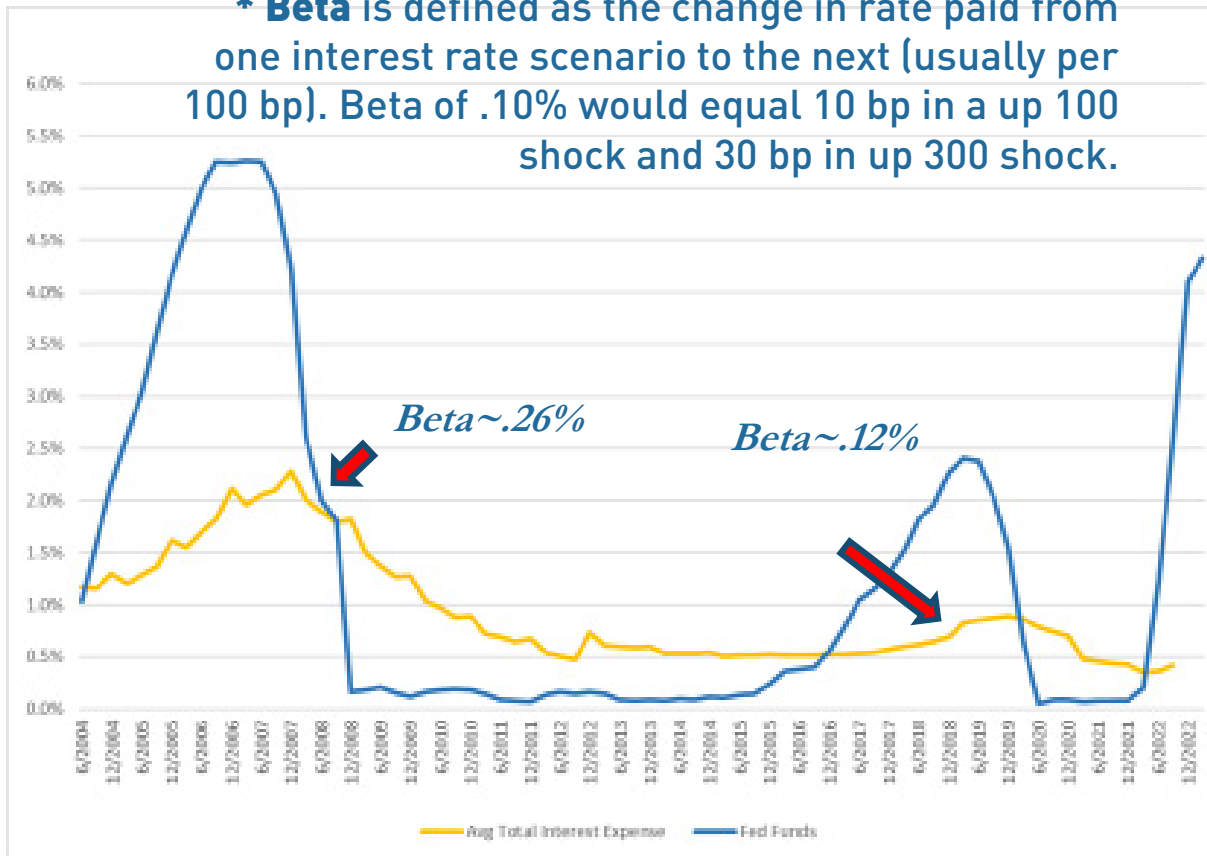
SHOCK 3% NET INTEREST INCOME



**NII 3.5%**

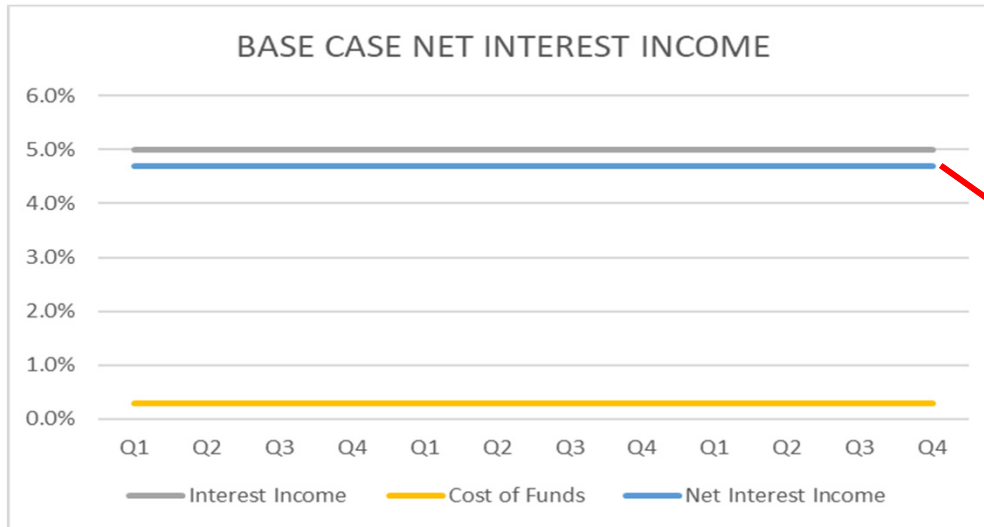
# TREASURY RATES TO COST OF FUNDS

\* **Beta** is defined as the change in rate paid from one interest rate scenario to the next (usually per 100 bp). Beta of .10% would equal 10 bp in a up 100 shock and 30 bp in up 300 shock.



**COST OF FUNDS WILL BE INCREASING**

# EXAMPLE 3% INSTANTENOUS AND PARALLEL UP SHOCK 60 MONTH REPRICING OF ASSETS AND COST OF FUNDS BETA

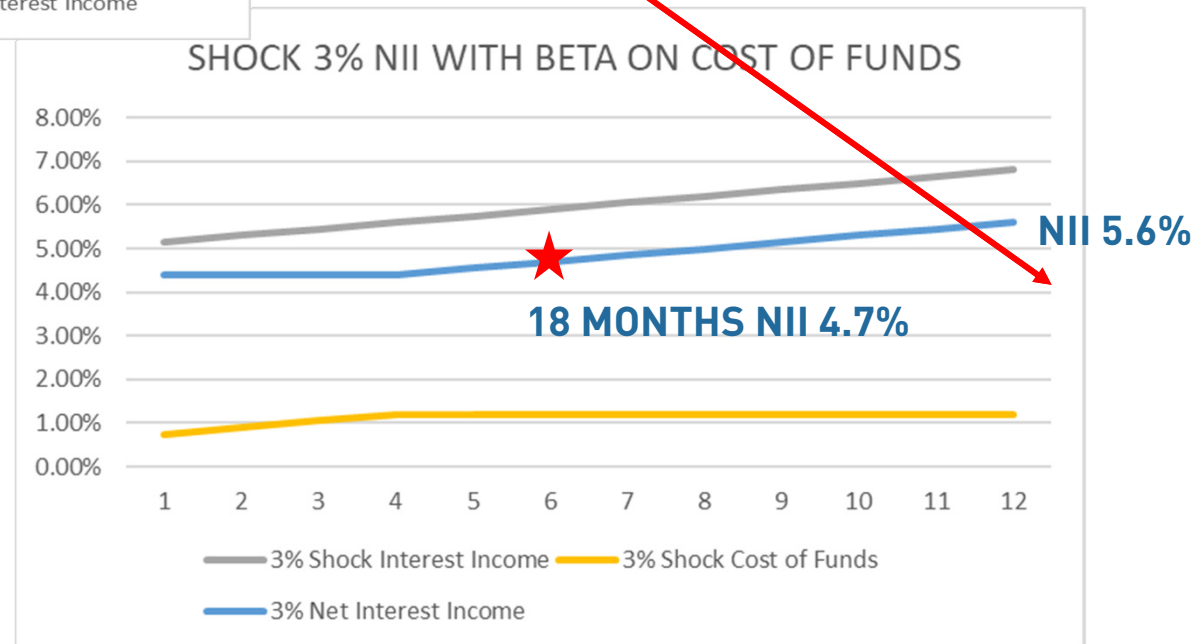


NII 4.7%

Loan yield 5%  
Cost of funds .30%  
NII 4.7%

LOAN YIELDS AND INVESTMENT YIELDS TAKE 60 MONTHS TO REPRICE

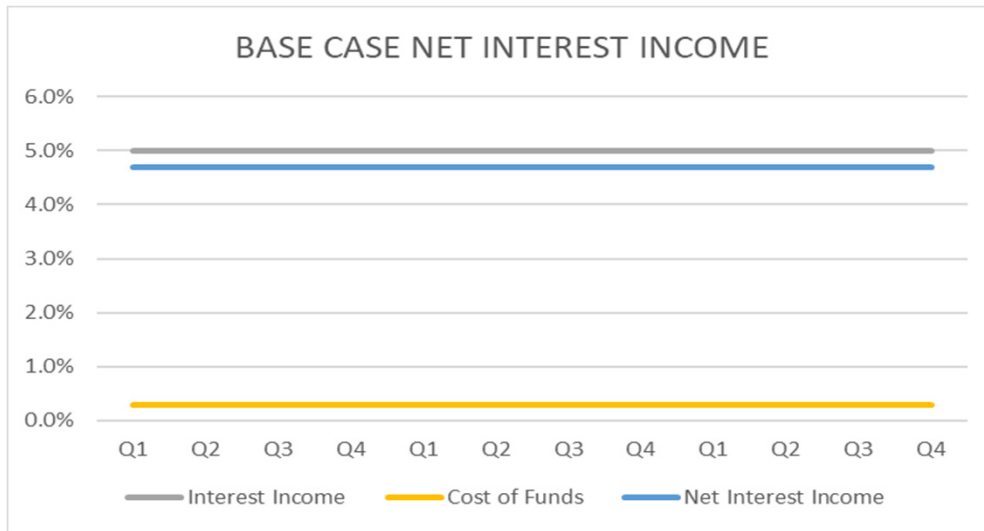
COST OF FUNDS WITH BETA OF .30% (3 X .30 + CURRENT COF) MOVES UP TO 1.20%



NII 5.6%

18 MONTHS NII 4.7%

# EXAMPLE -2% INSTANTENOUS AND PARALLEL DOWN SHOCK 18 MONTH REPRICING OF ASSETS

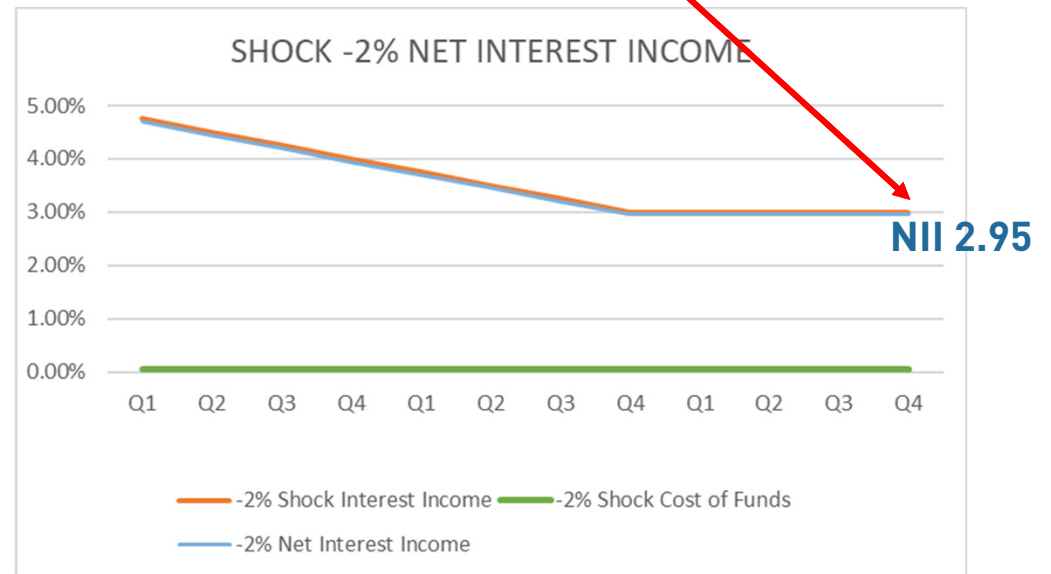


**NII 4.7**  
 Loan yield 5%  
 Cost of funds .30%  
 NII 4.7%

LOAN YIELDS AND INVESMENT YIELDS  
TAKE 24 MONTHS TO REPRICE

LOAN FLOOR RATES WOULD PRESERVE  
SOME NII DECLINE

COST OF FUNDS GO DOWN IMMEDIATELY  
BUT LIMITED TO .05%





# SAMPLE CREDIT UNION IRR INCOME SIMULATION

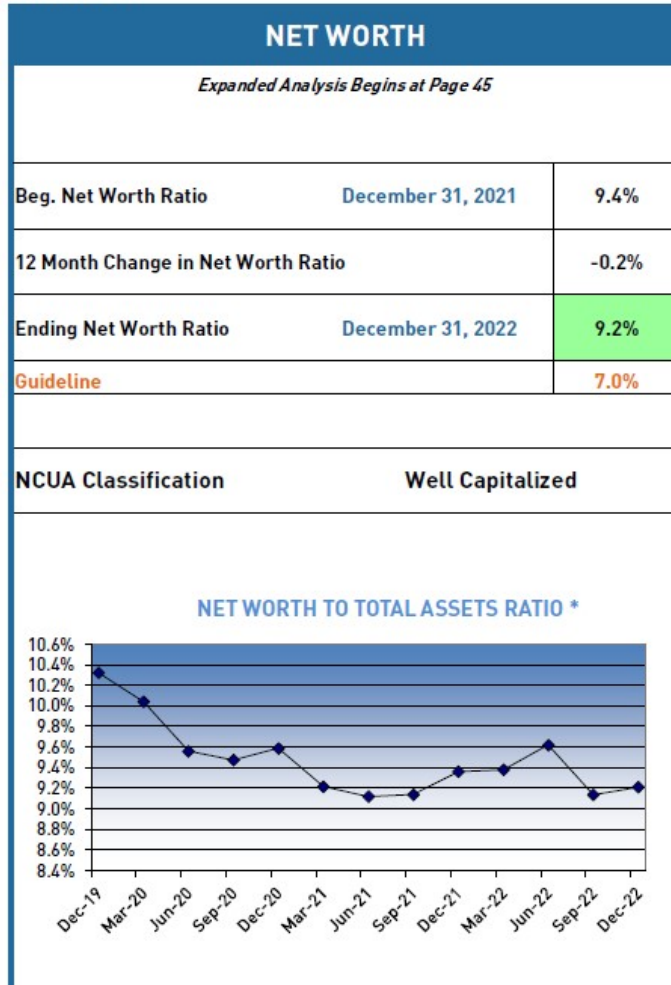
Why do the down rate shock scenarios look bad and exceed policy limits?

1. Consider floor rates on loans. Are they established and reasonable.
2. Consider repricing terms on loans and investments.
3. Consider current cost of funds. Average cost of funds less than .50%.
4. When down shock exceeds cost of funds the net interest margin is compressed more than likely realistic.

# POLL QUESTION #2

# BIG PICTURE - SAMPLE CREDIT UNION NET WORTH AND EARNINGS

PANEL 4

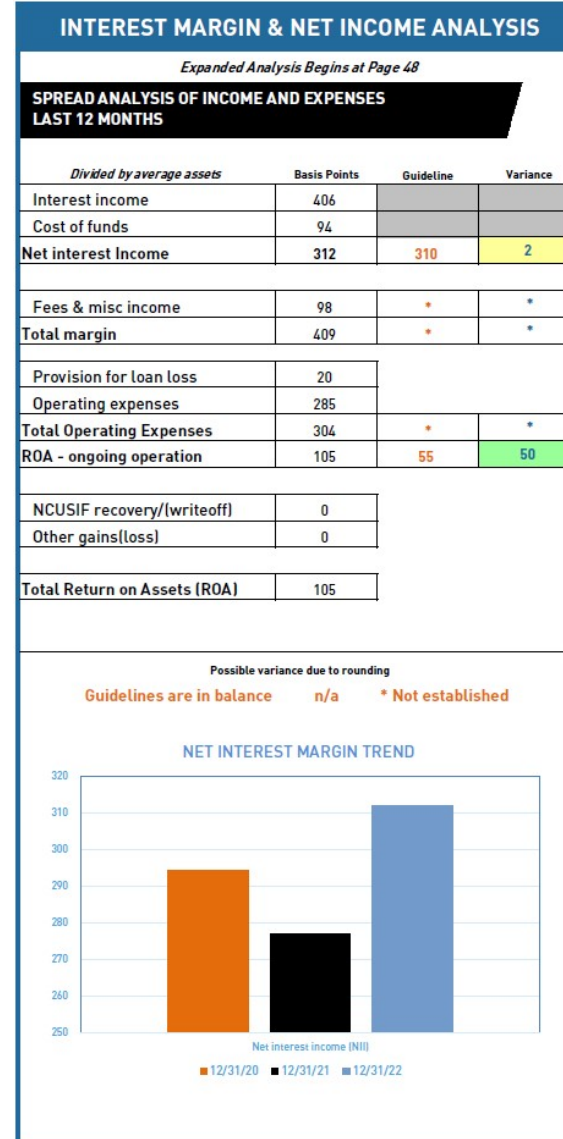


12/19 TO 12/20  
GROWTH 18.5%

12/20 TO 12/21  
GROWTH 15.6%

12/21 TO 12/22  
GROWTH 14.0%

PANEL 5



FEE INCOME  
ESSENTIAL

ROA 105

NII 12/20 294

NII 12/21 277

NII 12/22 312

# BIG PICTURE - SAMPLE CREDIT UNION DEPOSITS

Liability & Share Classification	Balance in Thousands	% to Total Assets	Current Yield	Shock Down -200 BP		Benchmark		Shock Up 300 BP	
				Beta	Lag	Beta	Lag	Beta	Lag
Notes payable	0	0.0%	0.00%	0.00%	1	0.00%	1	0.00%	1
Liabilities and OCI	(63)	-0.1%							
Shares \$0 to \$25,000	11,544	9.8%	0.10%	0.26%	1	0.26%	1	0.26%	1
Shares over \$25,000	24,142	20.5%	0.10%	0.26%	1	0.26%	1	0.26%	1
Share drafts	12,535	10.7%	0.10%	0.08%	1	0.08%	1	0.08%	1
IRA shares	1,923	1.6%	0.10%	0.42%	1	0.42%	1	0.42%	1
Member certificates	48,867	41.6%	3.15%	1.00%	1	1.00%	1	1.00%	1
Money markets \$1,000 to \$5,000	64	0.1%	0.10%	0.29%	1	0.29%	1	0.29%	1
Money markets \$5,000 to \$50,000	1,193	1.0%	0.30%	0.50%	1	0.50%	1	0.50%	1
Money markets \$50,000 to \$100,000	915	0.8%	0.70%	0.53%	1	0.53%	1	0.53%	1
Money markets \$100,000 to \$250,000	1,825	1.6%	0.90%	0.59%	1	0.59%	1	0.59%	1
Money markets \$250,000 and over	790	0.7%	1.00%	0.59%	1	0.59%	1	0.59%	1
Reward checking	3,029	2.6%	1.08%	0.50%	1	0.50%	1	0.50%	1
	0	0.0%	0.00%	0.00%	0	0.00%	0	0.00%	0
	0	0.0%	0.00%	0.00%	0	0.00%	0	0.00%	0
<b>Total Shares &amp; Deposits</b>	<b>106,827</b>	<b>90.8%</b>	<b>1.55%</b>						
Owner's Equity (Capital)	10,831	9.2%							
<b>Total Liabilities &amp; Capital</b>	<b>117,595</b>	<b>100.0%</b>							

\* Beta is defined as the change in rate paid from one interest rate scenario to the next (usually per 100 bp). Beta of .10% would equal 10 bp in a up 100 shock and 30 bp in up 300 shock.

Larger percentage in member CD's

# BIG PICTURE - SAMPLE CREDIT UNION LOANS

Maturity Term In Months

	Balance in Thousands	% of Total Assets	Current Yield	Market Yield for NEV*	Shock Down -200 BP	Bench mark	Shock Up 300 BP	Repricing Criteria
1st mtg fixed	8,820	7.5%	3.65%	6.10%	45	63	90	Up to 120 months fixed rate
1st mtg OE variable	62	0.1%	4.00%	5.64%	49	49	49	Variable rate - tied to prime
1st mtg balloon 10 year	16,106	13.7%	3.78%	6.85%	62	72	87	10 year balloon
2nd mtg fixed	560	0.5%	5.05%	6.57%	38	40	43	Up to 120 months fixed rate
2nd mtg OE variable	2,835	2.4%	4.46%	6.76%	42	42	42	Variable rate - tied to prime
MBL 1st mort fixed	2,158	1.8%	4.06%	6.60%	22	40	67	Up to 180 months fixed rate
MBL 2nd mort fixed	0	0.0%	0.00%	0.00%	70	72	75	Up to 120 months fixed rate
Commercial RE balloon greater than	276	0.2%	3.75%	8.00%	35	45	60	Balloons greater than 5 years
Shares/CD	217	0.2%	2.59%	2.89%	33	33	33	Fixed-rate share secured
Signature	797	0.7%	10.87%	11.16%	15	15	15	Fixed-rate consumer unsecured
Mobile homes	274	0.2%	8.28%	9.22%	51	51	51	Fixed-rate consumer collateral
New auto	7,732	6.6%	4.55%	5.49%	34	34	34	Fixed-rate consumer collateral
Overdraft	402	0.3%	11.52%	12.16%	12	12	12	Revolving credit
Recreation vehicles	9,512	8.1%	5.92%	6.99%	27	27	27	Fixed-rate consumer collateral
Used autos	52,218	44.4%	5.02%	6.43%	28	28	28	Fixed-rate consumer collateral
visa	1,220	1.0%	10.73%	11.16%	36	36	36	Revolving credit
Land loan	0	0.0%	0.00%	0.00%	38	40	43	15 years fixed rate
	0	0.0%	0.00%	0.00%	0	0	0	
Business title loans fixed	138	0.1%	6.68%	9.50%	48	48	48	Fixed-rate commercial collateral
Allowance for loan losses	(419)	-0.4%	0.00%	0.00%	0	0	0	
<b>Net Loans</b>	<b>102,910</b>	<b>87.5%</b>	<b>4.86%</b>		<b>36</b>	<b>39</b>	<b>44</b>	<b>Weighted Average</b>

\*SOURCE: S&P GLOBAL MARKET INTELLIGENCE CONTAINS COPYRIGHTED AND TRADE SECRET MATERIAL DISTRIBUTED UNDER LICENSE FROM S&P GLOBAL FOR RECIPIENT'S INTERNAL USE ONLY

**FIXED RATE OR BALLOON 10 YR+ ~ 20% OF TOTAL ASSETS**

# BIG PICTURE - SAMPLE CREDIT UNION INVESTMENTS

	Maturity Term In Months						
	Balance in Thousands	% of Total Assets	Current Yield	Market Yield for NEV*	Shock Down -200 BP	Bench mark	Shock Up 300 BP
Daily accounts	8,814	7.5%	4.27%	4.27%	1	1	1
	0	0.0%	0.00%	0.00%	0	0	0
Investment CDs non-callable	746	0.6%	0.86%	4.48%	27	27	27
Investment CDs callable	0	0.0%	0.00%	0.00%	0	0	0
Investment CDs step/callable	0	0.0%	0.00%	0.00%	0	0	0
Securities non-callable	0	0.0%	0.00%	0.00%	0	0	0
Securities callable	0	0.0%	0.00%	0.00%	0	0	0
Securities step/callable	0	0.0%	0.00%	0.00%	0	0	0
	0	0.0%	0.00%	0.00%	0	0	0
	0	0.0%	0.00%	0.00%	0	0	0
	0	0.0%	0.00%	0.00%	0	0	0
Membership shares	300	0.3%	2.90%	2.90%	1	1	1
<b>Total Investments</b>	<b>9,860</b>	<b>8.4%</b>	<b>3.97%</b>				

# SAMPLE CREDIT UNION IRR INCOME SIMULATION

## PANEL 1 INCOME SIMULATION

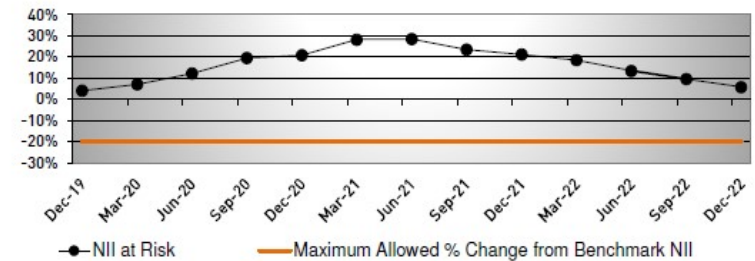
3-Year Cumulative (\$000)	SHOCK DOWN -300 BP	SHOCK DOWN -200 BP	SHOCK DOWN -100 BP	Benchmark	SHOCK UP 100 BP	SHOCK UP 200 BP	SHOCK UP 300 BP
Net Interest Income (NII)	\$11,253	\$12,460	\$13,577	\$14,670	\$14,840	\$15,190	\$15,510
\$ Change from benchmark NII	(3,416)	(2,210)	(1,093)		170	520	840
% Change from benchmark NII	-23.2%	-15.1%	-7.4%		1.2%	3.5%	5.7%
Maximum Allowed % Change from Benchmark NII	-20.0%	-20.0%	-20.0%		-20.0%	-20.0%	-20.0%
Net income:	\$4,038	\$5,244	\$6,361	\$7,454	\$7,624	\$7,974	\$8,294
ROA:	1.11%	1.45%	1.75%	2.05%	2.10%	2.20%	2.29%

### INCOME SIMULATION ANALYSIS - PANEL 1

The results are presented in a 3 year cumulative format. This analysis simulates interest income and interest expense (dividends) in benchmark and shock scenarios. It is designed as a stress test to evaluate sensitivity interest rate changes. In order to keep the impact of variables under control, many elements of the simulation remain static. Growth, asset and share mix, operating expenses, and fee income fall in this category. For this reason the benchmark simulation should not be considered a likely scenario; nor should it be used to forecast likely results for the coming year. **DETAIL OF ANALYSIS IN SECTION 1**



INCOME SIMULATION CHANGE IN NII  
HISTORICAL TREND RATES-UP SHOCK 300 BPS



## POLICY LIMITS CAN CHANGE AS NIM CHANGES

# SAMPLE CREDIT UNION IRR INCOME SIMULATION

Why do the down rate shocks look bad and exceed policy limits?

1. Consider floor rates on loans.
2. Consider repricing terms on loans and investments.
3. Consider current cost of funds (currently at .94) .
4. Many credit unions have much lower cost of funds.
5. When down shock exceeds cost of funds the net interest margin is compressed and may give unrealistic results.



# PAST INCOME SIMULATION REPORTS UP RATE SHOCK

As of December 31, 2021

## INCOME SIMULATION COMPARATIVE ANALYSIS OF RATES-UP SHOCK TO BENCHMARK

In Thousands of Dollars

Shock Criteria: Instantaneous and Parallel	BENCHMARK		UP RATE 3%			
	FORECASTED INCOME	FORECASTED INCOME	Change	% Chng from Benchmark	Maximum Allowed % Change from Benchmark NII	Variance
Assumptions: See pages 10 and 11						

YEAR 1						
	BENCHMARK	UP RATE 3%	Change	% Chng from Benchmark	Maximum Allowed % Change from Benchmark NII	Variance
Loan Interest Income	4,029	4,604	575	14.3%		
Investment Interest Income	29	414	385	1343.7%		
Total Interest Income	4,058	5,018	960	23.7%		
Dividends & Interest Paid	742	1,571	829	111.6%		
<b>Net Interest Income</b>	<b>3,316</b>	<b>3,448</b>	<b>132</b>	<b>4.0%</b>		
Total Fees & Misc. Income	1,031	1,031				
Operating Expenses	2,710	2,710				
Forecasted Net Income Year 1	1,637	1,769	132	8.1%		

2022 Loan interest income actual \$4,500

2022 Investment income actual \$30

2022 Cost of Funds Actual \$1,052

2022 NII Actual \$ Actual \$3,478

# SAMPLE CREDIT UNION IRR NET ECONOMIC VALUE DETAIL

## PAGE 28 OF ALMPRO REPORT

	Rates-Up Shock																		
	Current Balance Sheet	Benchmark Current Economic Value	\$ Amount Change from Book	% Change from Book	Post Shock Economic Value	\$ Change in EV from Benchmark	% Change in EV from Benchmark	Maximum Allowed % Change in EV Ratio*	Variance	Post Shock Economic Value	\$ Change in EV from Benchmark	% Change in EV from Benchmark	Maximum Allowed % Change in EV Ratio*	Variance	Post Shock Economic Value	\$ Change in EV from Benchmark	% Change in EV from Benchmark	Maximum Allowed % Change in EV Ratio*	Variance
					1.0%					2.0%					3.0%				
Net Loans	102,910	99,631	(3,278)	-3.2%	97,840	(1,791)	-1.8%			96,000	(3,632)	-3.6%			94,127	(5,504)	-5.5%		
Total Investments	9,860	9,800	(60)	-0.6%	9,784	(15)	-0.2%			9,769	(30)	-0.3%			9,755	(44)	-0.5%		
All other assets	4,825	4,825	0	0.0%	4,825	0	0.0%			4,825	0	0.0%			4,825	0	0.0%		
<b>Total Assets</b>	<b>117,595</b>	<b>114,256</b>	<b>(3,339)</b>	<b>-2.8%</b>	<b>112,450</b>	<b>(1,807)</b>	<b>-1.6%</b>			<b>110,594</b>	<b>(3,662)</b>	<b>-3.2%</b>			<b>108,707</b>	<b>(5,549)</b>	<b>-4.9%</b>		
Borrowed funds	0	0	0	0.0%	0	(0)	-0.2%			0	(0)	-0.5%			0	(0)	-0.7%		
All other liabilities	-63	-63			(63)					(63)					(63)				
Total Deposits	106,827	96,193	(10,634)	-10.0%	93,544	(2,649)	-2.8%			91,618	(4,575)	-4.8%			89,853	(6,340)	-6.6%		
<b>NET WORTH</b>	<b>10,831</b>	<b>18,126</b>	<b>7,295</b>	<b>67.4%</b>	<b>18,968</b>	<b>842</b>	<b>4.6%</b>	<b>-30.0%</b>	<b>34.6%</b>	<b>19,039</b>	<b>913</b>	<b>5.0%</b>	<b>-30.0%</b>	<b>35.0%</b>	<b>18,917</b>	<b>791</b>	<b>4.4%</b>	<b>-30.0%</b>	<b>34.4%</b>
Total Liab & Net Worth	117,595	114,256	(3,339)	-2.8%	112,450	(1,807)	-1.6%			110,594	(3,662)	-3.2%			108,707	(5,549)	-4.9%		

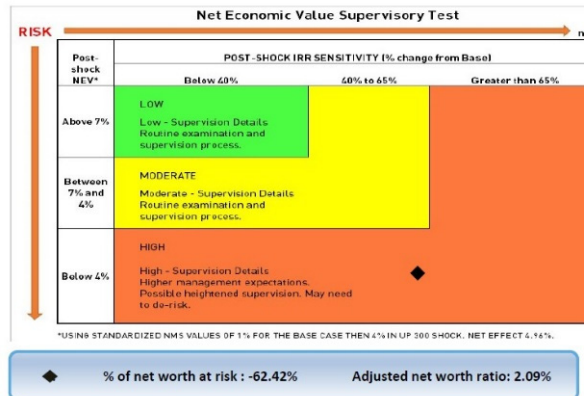
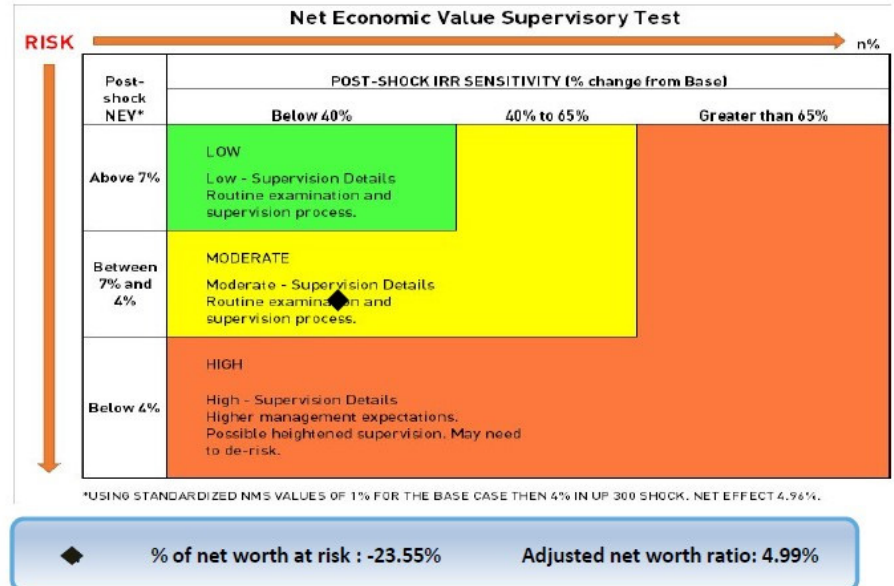
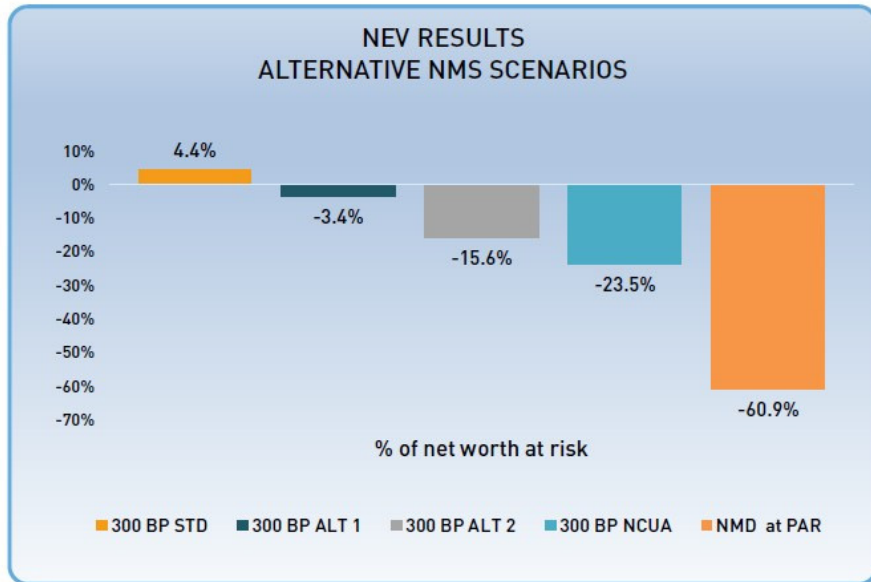
### NET WORTH ANALYSIS UP RATE SHOCK

Book NW Ratio	Net Economic Value Ratio
9.2%	15.9%

1.0% Rate Shock			2.0% Rate Shock			3.0% Rate Shock		
Post Shock Net Economic Value Ratio	Minimum Post Shock NEV Ratio	Variance	Post Shock Net Economic Value Ratio	Minimum Post Shock NEV Ratio	Variance	Post Shock Net Economic Value Ratio	Minimum Post Shock NEV Ratio	Variance
16.9%	7%	9.9%	17.2%	7%	10.2%	17.4%	7%	10.4%

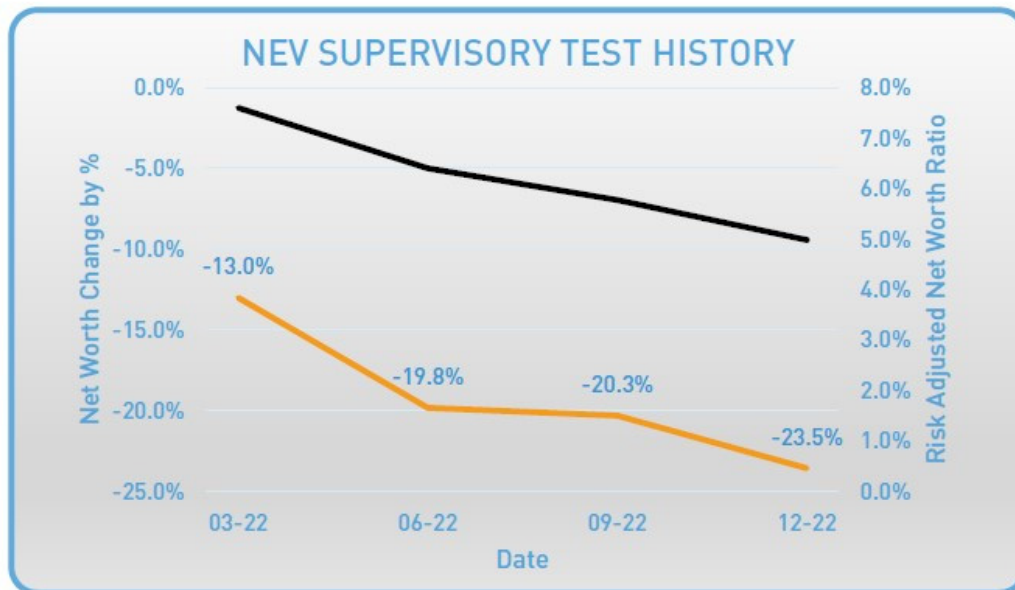
# NEV RESULTS WITH DIFFERENT NON-MATURITY DEPOSIT ASSUMPTIONS INCLUDING NCUA SUPERVISORY TEST

## PAGE 8 ALMPRO REPORT



# NON MATURITY DEPOSITS & IRR RESULTS

## PAGE 31 ALMPRO REPORT



----- ANTICIPATED NCUA RISK RATING -----

**MODERATE**

### WHY THE SUPERVISORY TEST IS NOT WORKING

1. Balance sheets grew during the pandemic
2. Net worth ratios declined
3. CU's took on more long-term assets trying to improve income
4. Interest rates increased dramatically
5. NMS premium values did not adjust in the base case. The premiums were 1% before rates increased and 1% after rates increased
6. Asset values decline in the base case and decline further in the up 300 rate shock

# POLL QUESTION #3

# LIQUIDITY FORECASTING 2021



## LIKELY SCENARIO

## MODERATE SCENARIO

## SEVERE SCENARIO

## SYSTEMIC SCENARIO

	12-month cash flow totals (000)	Average growth factor	12-month cash flow totals (000)	Average Growth Factor	12-month cash flow totals (000)	Average Growth Factor	12-month cash flow totals (000)	Average Growth Factor
Cash flow from loans	(\$6,190)	8.4%	(\$3,697)	5.0%	(\$7,394)	10.0%	\$0	0.0%
Cash flow from deposits and borrowings	\$11,741	13.1%	(\$4,478)	-5.0%	(\$8,957)	-10.0%	(\$8,957)	-10.0%
Off balance sheet source (uses)	\$0		\$0		\$0		\$0	
<b>Net cash flow from loans, deposits, borrowings and off-balance sheet</b>	<b>\$5,551</b>		<b>(\$8,175)</b>		<b>(\$16,350)</b>		<b>(\$8,957)</b>	
Investment Maturities	\$1,995		\$1,995		\$1,995		\$1,995	
Net Income	\$1,331		\$1,295		\$1,389		\$1,232	
Available cash and overnight investments	\$18,694		\$18,694		\$18,694		\$18,694	
<b>Net Cumulative Cash Flow</b>	<b>\$27,571</b>		<b>\$13,809</b>		<b>\$5,728</b>		<b>\$12,965</b>	

Other stress considerations:  
 Unfunded LOC draws  
 Capital expenditures

# LIQUIDITY FORECASTING NOW



	LIKELY SCENARIO		MODERATE SCENARIO		SEVERE SCENARIO		SYSTEMIC SCENARIO	
	12-month cash flow totals (000)	Average growth factor	12-month cash flow totals (000)	Average Growth Factor	12-month cash flow totals (000)	Average Growth Factor	12-month cash flow totals (000)	Average Growth Factor
Cash flow from loans	(\$17,902)	17.3%	(\$5,166)	5.0%	(\$10,333)	10.0%	\$0	0.0%
Cash flow from deposits and borrowings	\$10,713	10.0%	(\$5,341)	-5.0%	(\$10,683)	-10.0%	(\$10,683)	-10.0%
Off balance sheet source (uses)	\$0		\$0		\$0		\$0	
<b>Net cash flow from loans, deposits, borrowings and off-balance sheet</b>	<b>(\$7,189)</b>		<b>(\$10,508)</b>		<b>(\$21,016)</b>		<b>(\$10,683)</b>	
Investment Maturities	\$248		\$248		\$248		\$248	
Net Income	\$2,248		\$2,080		\$2,043		\$1,986	
Available cash and overnight investments	\$9,258		\$9,258		\$9,258		\$9,258	
<b>Net Cumulative Cash Flow</b>	<b>\$4,564</b>		<b>\$1,078</b>		<b>(\$9,467)</b>		<b>\$809</b>	
<b>Operational Guidelines (000)</b>	<b>\$5,880</b>		<b>(\$3,000)</b>		<b>(\$3,500)</b>		<b>\$0</b>	
<b>Variance (000)</b>	<b>(\$1,315)</b>		<b>\$4,078</b>		<b>(\$5,967)</b>		<b>\$809</b>	

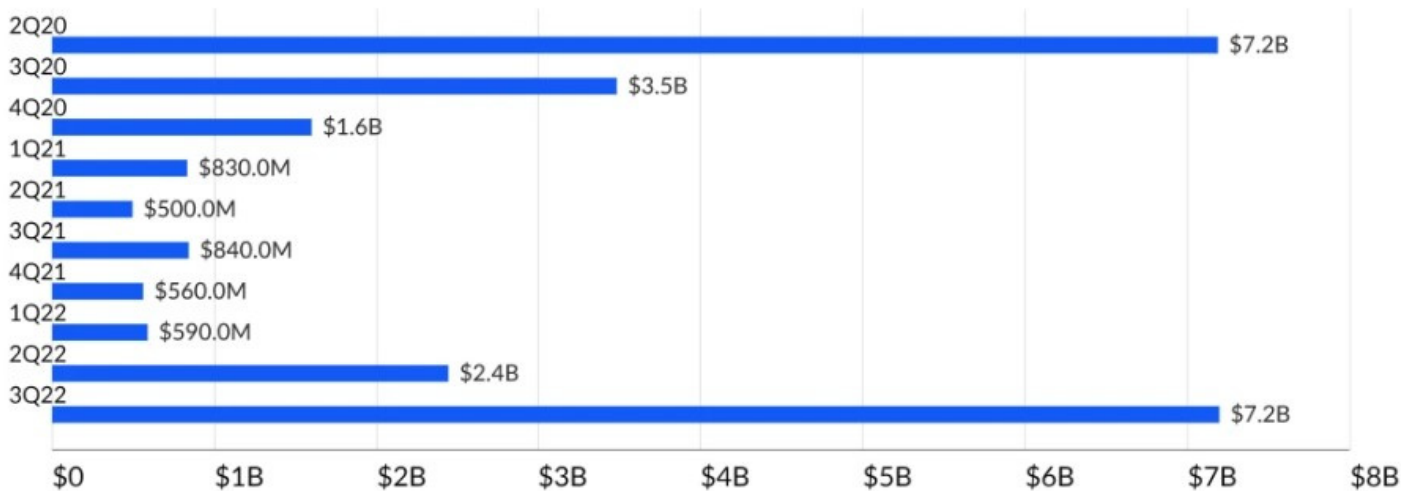
Other stress considerations:  
 Unfunded LOC draws  
 Capital expenditures

# LIQUIDITY FORECASTING NOW

Banks with assets of \$3 billion or less drove that increase. Such banks borrowed via the discount window an average of four days in 2022, compared with an average of two days for banks in larger asset classes, according to the Fed data.

## Renewed source of liquidity

Borrowing by banks from the Federal Reserve's discount window rose in the third quarter of 2022 to its highest level since the early stages of the pandemic



Source: Fed



# STRATEGIES AS RATES INCREASE AND LIQUIDITY FLUCTUATES

Increase	Slow	Do not	Strategy	Manage	Anticipate	Preserve
<p>Increase loan yields as quickly as possible.</p> <p>Manage loan production with rates</p>	<p>Increase cost of funds slowly and keep as low as possible to maintain NII</p> <p>It appears the lag is ending</p>	<p>Do not overpay for deposits you cannot utilize</p>	<p>Have a strategy <u>in place to</u> increase rates on rate sensitive deposits you don't want to lose.</p> <p>(more than a rate match when the member asks)</p>	<p>Prepare cash flow analysis in multiple scenarios.</p> <p>Good contingency plan.</p> <p>Prepare for potential deposit runoff</p>	<p>Anticipate draws on unfunded LOC or other cash needs. (inflation pressures)</p>	<p>Preserve funds for projects or programs planned or developed for the current environment</p>

# PLAN TO MANAGE COST OF FUNDS

- Don't follow-the-leader
- Complete product offerings
- Develop effective segmentation
- Identify saving motivations
- Make decisions based on fact not emotion
- Model or test options
- Don't pay for or attract undesirable funding

# LAST BUT NOT LEAST IRR AND RELATED POLICY

## Does my IRR Policy have all the right elements?

### Key elements:

- Consistent with credit union's business strategies.
- Consistent with credit union's financial condition.
- Not too restrictive or too liberal.
- Adequately reflect board's risk tolerance.
- Establish framework for effective IRR program.
- Include limits and controls.

# PROGRAM EFFECTIVENESS AND USE IN DECISION-MAKING

- Utilize the analysis for new products, strategies, and other “what if” scenarios.
- Utilize the analysis to make decisions
- Assist in improving or maintaining profitability
- Control exposure to changing interest rates.
- Help to better manage the credit union.
- Develop response to negative trends.
- Document the process.

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