



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

UTILIZING THE ALM ANALYSIS

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

(Webinar will begin on the hour)

LEARNING OBJECTIVE:

- Look at how balance sheet composition can affect IRR analysis
- Explore ways to better utilize the results of your IRR Analysis
- Review liquidity and potential impact as we recover from pandemic

DATA DETAILS

DATES: 3/31/2017 TO 6/30/2021

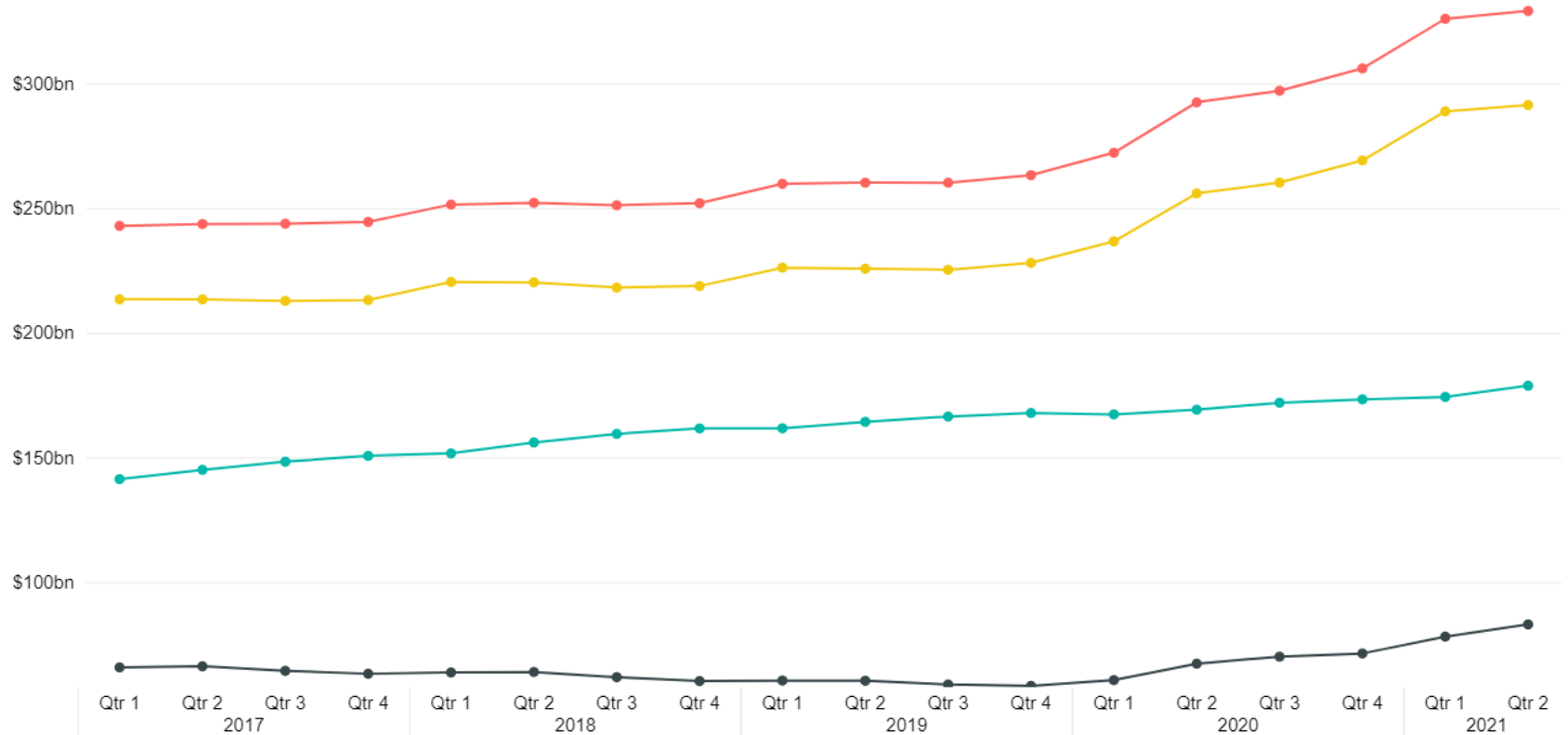
STATES: ALL

ASSET SIZE: \$25 MILLION TO \$500 MILLION

TOTAL BALANCES

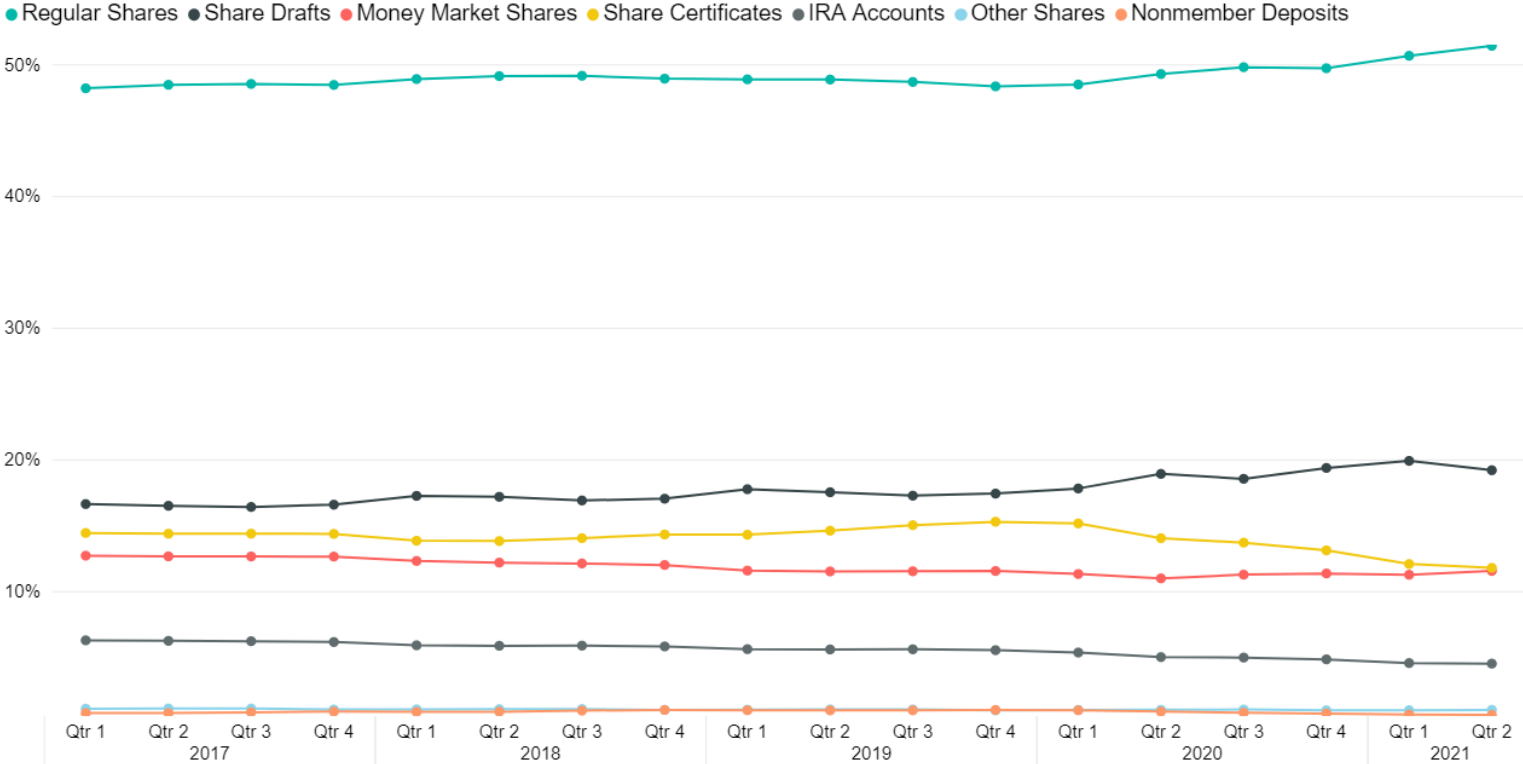
Total Balances

● Total Loans ● Total Investments ● Total Assets ● Total Deposits



DEPOSIT COMPOSITION

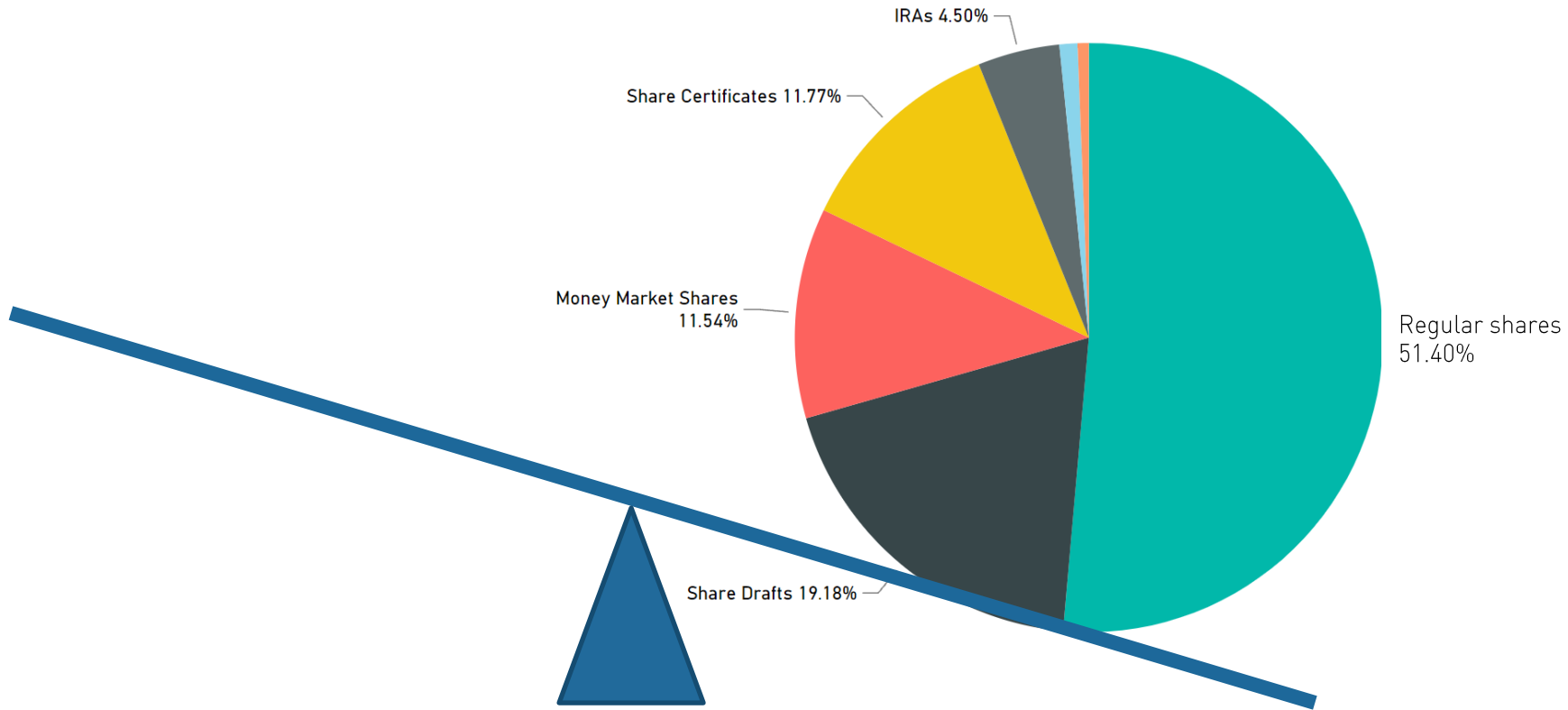
Deposit Composition



BALANCE SHEET

FUNDING/DEPOSITS/LIABILITIES

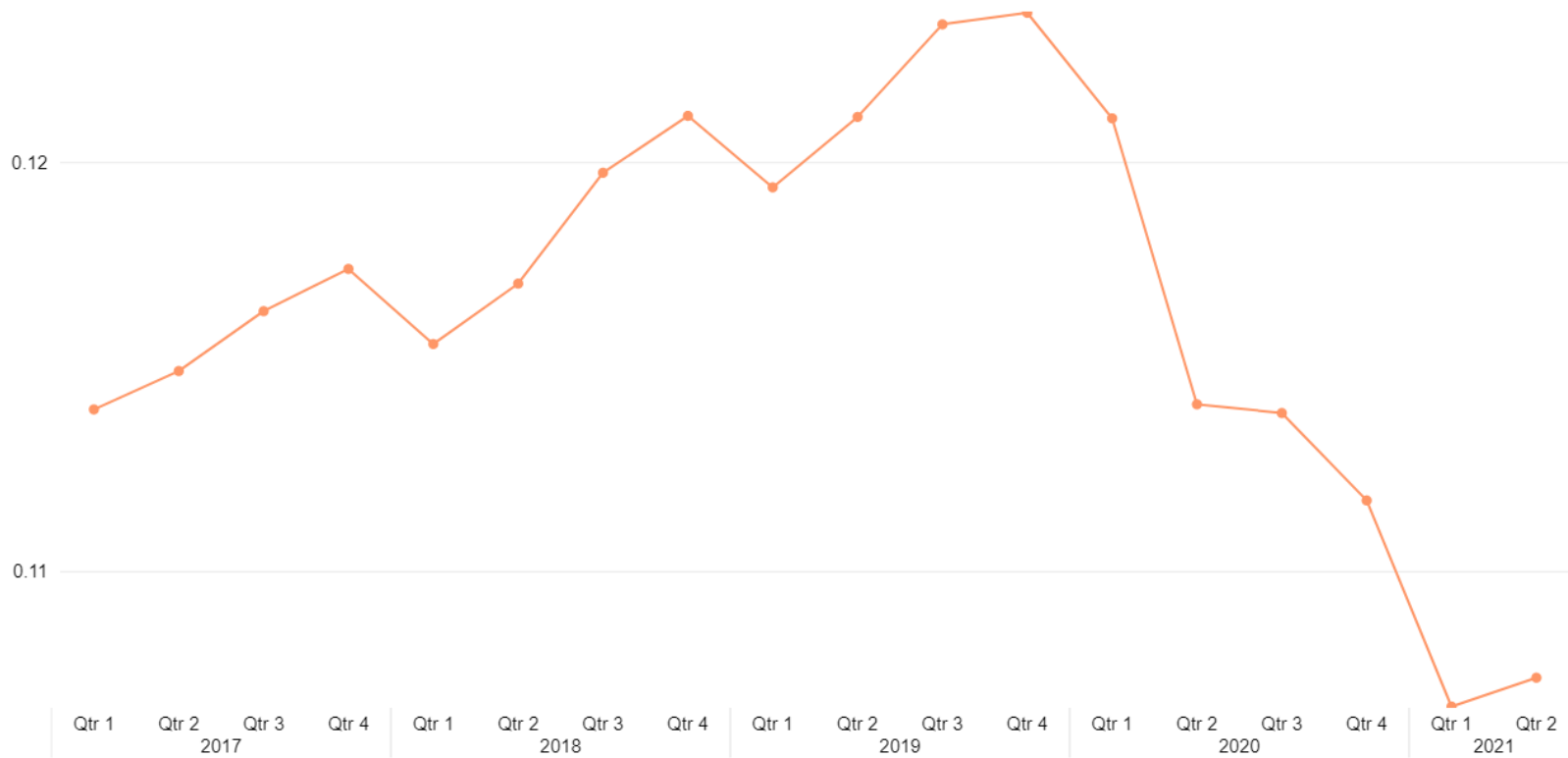
As of 6/30/2021



NET WORTH

Other Key Ratios

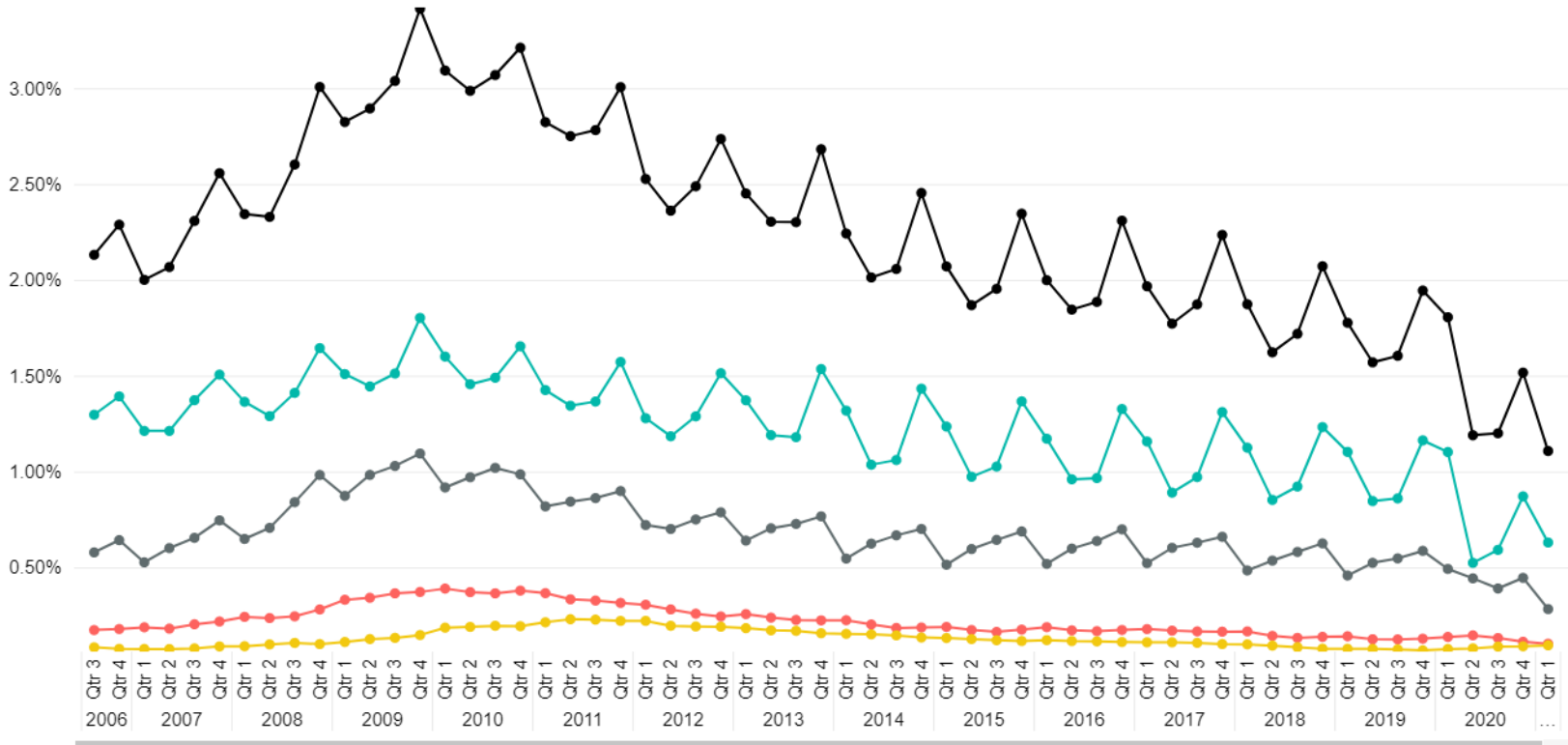
● Borrowing... ● Borrowing... ● Members/... ● Members/... ● Deposits ... ● Net Long-... ● Net Wort... ● Deposits/... ● Averag... ● Loans/As... ● Loans/... ● Cash + ...



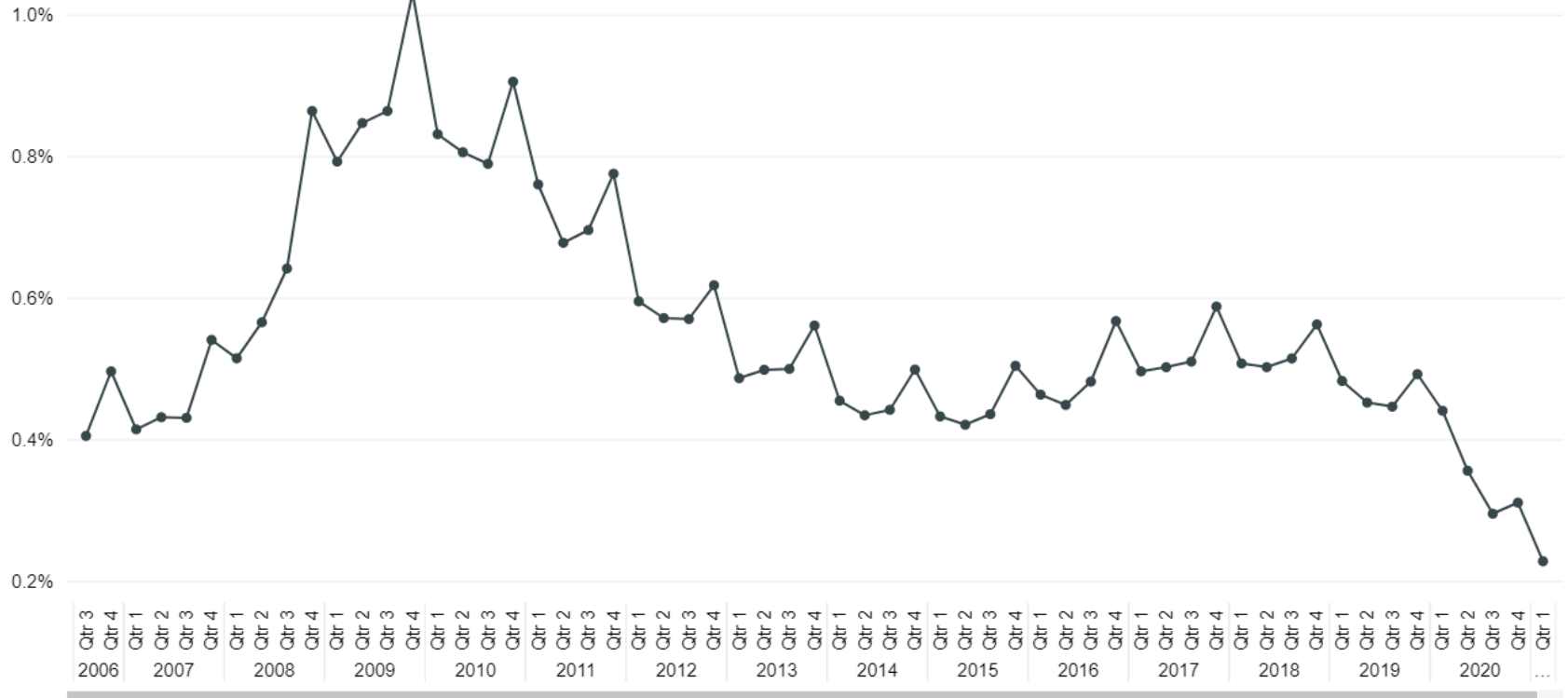
DELINQUENCY

Total Loan Delinquency Rates

Loans Delq 30-59 days ● Loans Delq 60-179 days ● Loans Delq 180-359 days ● Loans Delq > 360 days ● Total Loans Delq

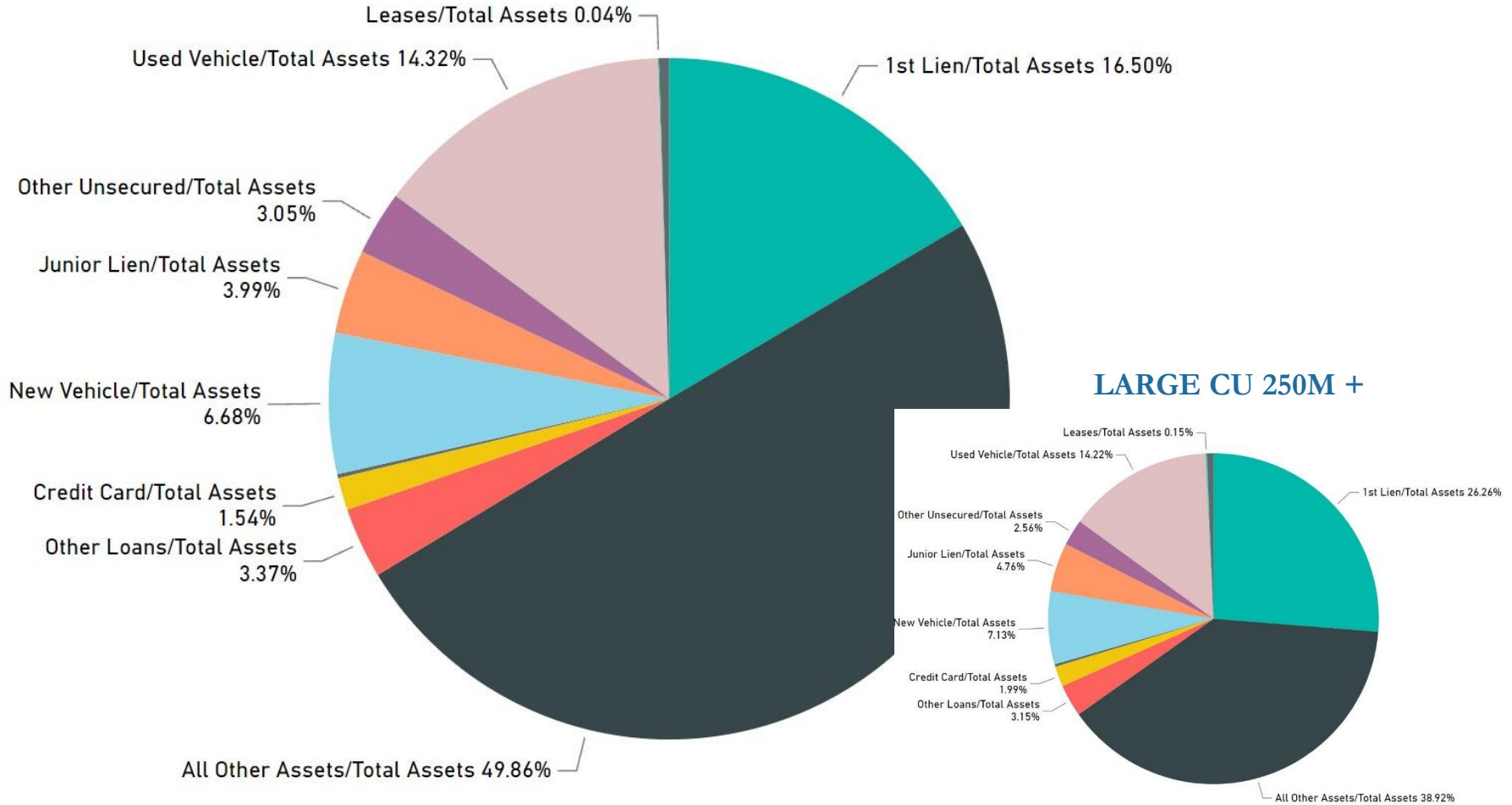


NET CHARGE OFF



POLL QUESTION #1

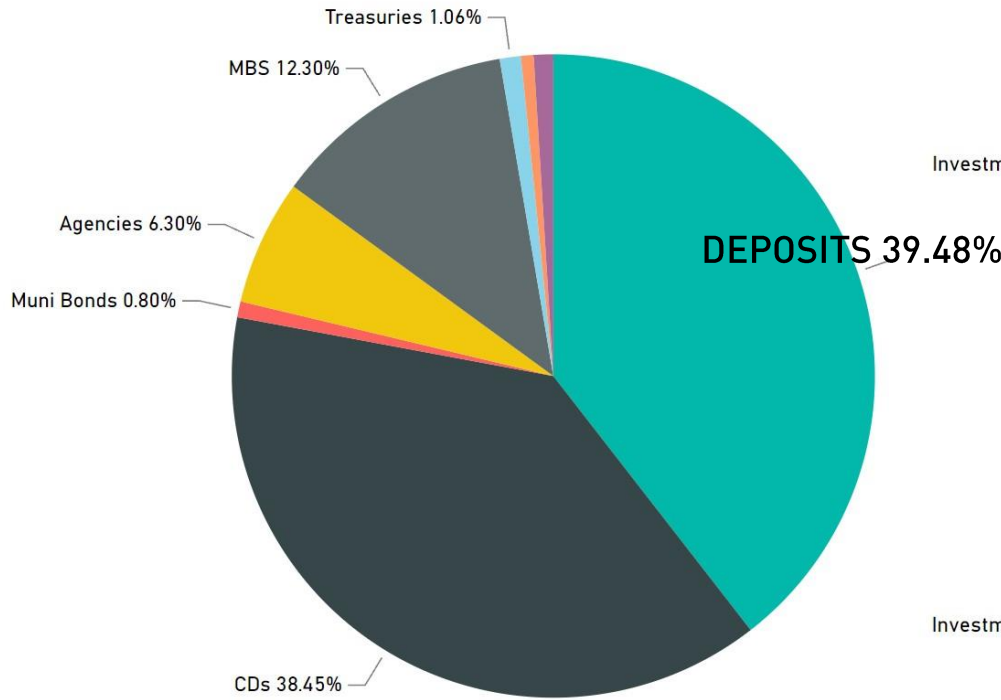
LOAN COMPOSITION TO TOTAL ASSETS



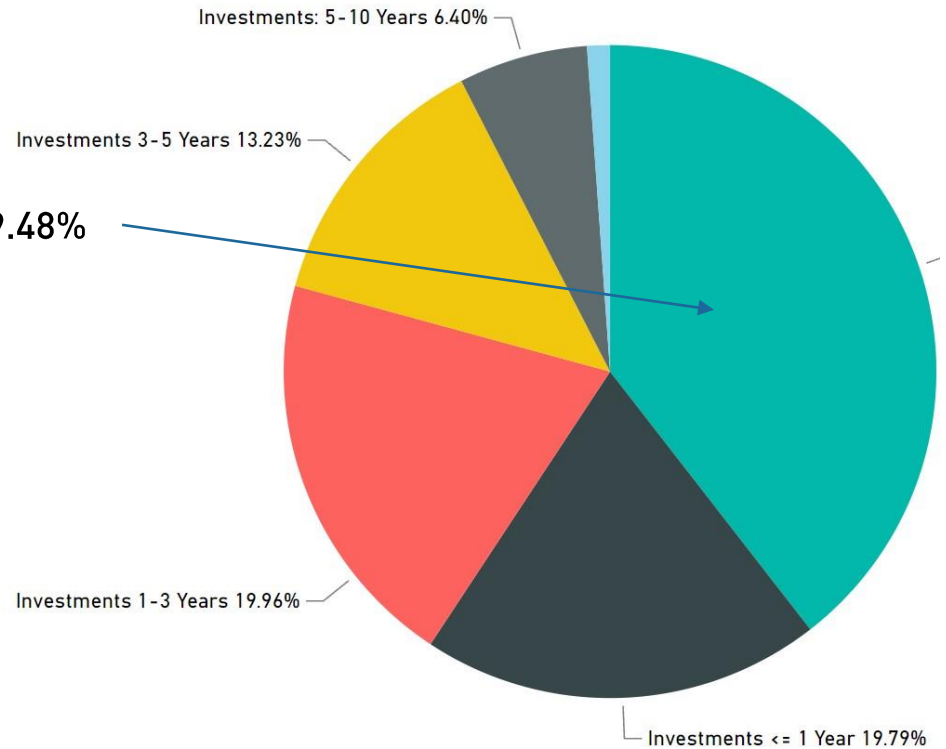
INVESTMENT COMPOSITION

Percentage of Total Investments

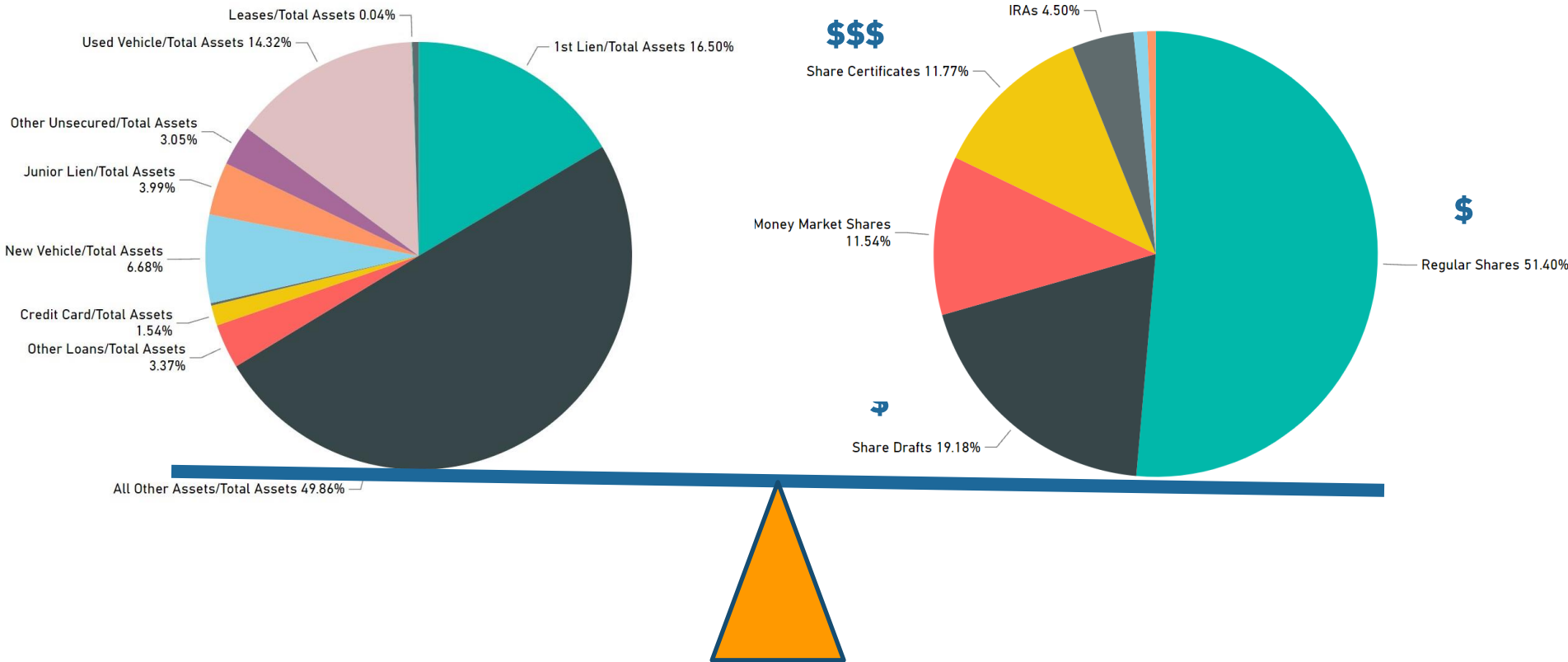
Type



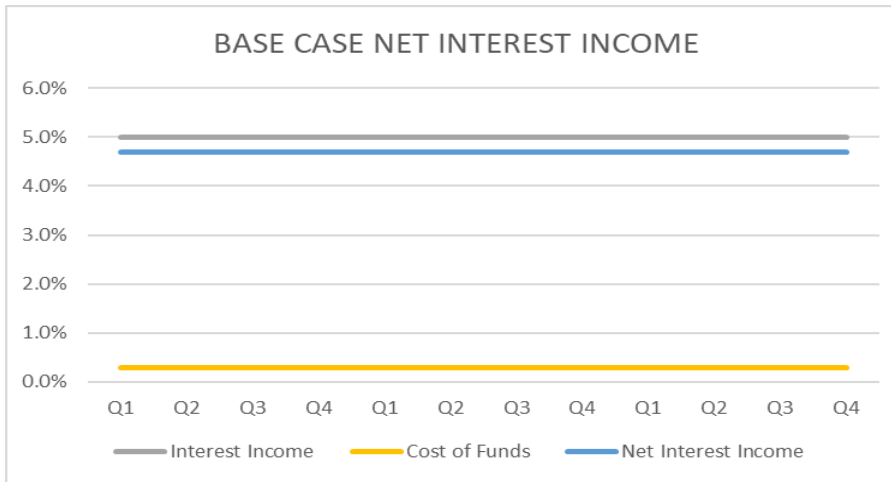
Term



BALANCE SHEET PRICE MATCH UP

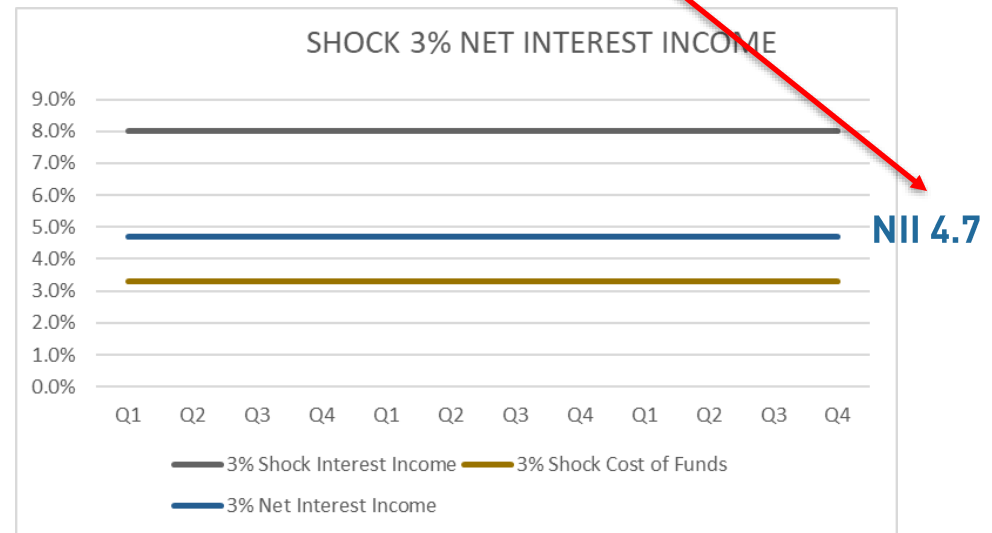


EXAMPLE 3% INSTANTENOUS AND PARALLEL UP SHOCK EVERYTHING REPRICES IMMEDIATELY



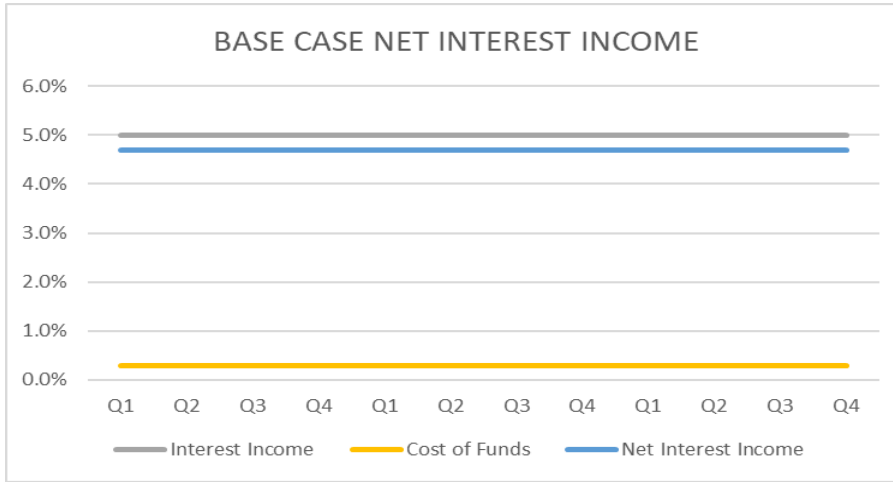
Loan yield 5%
 Cost of funds .30%
 NII 4.7%

NII 4.7



NII 4.7

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

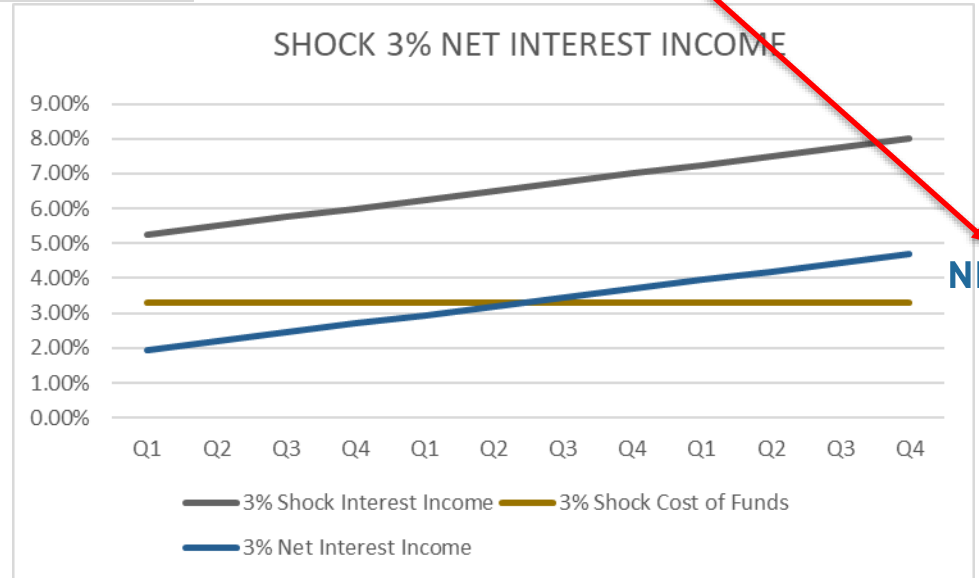


Loan yield 5%
Cost of funds .30%
NII 4.7%

NII 4.7

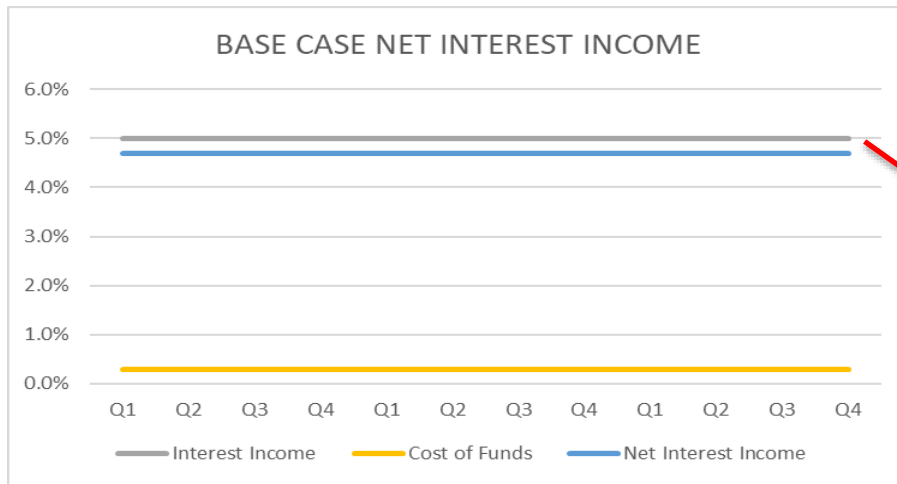
LOAN YIELDS AND INVESTMENT YIELDS TAKE 36 MONTHS TO REPRICE

COST OF FUNDS GO UP IMMEDIATELY



NII 4.7

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



NII 4.7%

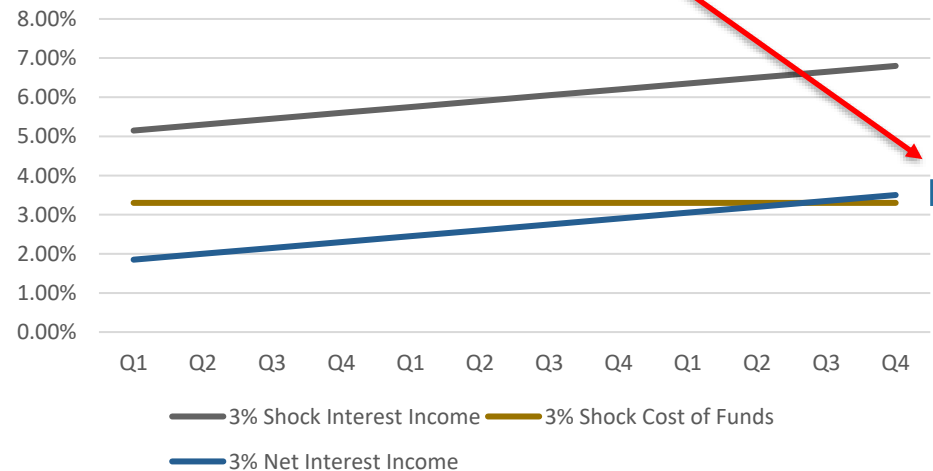
Loan yield 5%
Cost of funds .30%
NII 4.7%

LOAN YIELDS AND INVESTMENT YIELDS TAKE 60 MONTHS TO REPRICE

COST OF FUNDS GO UP IMMEDIATELY

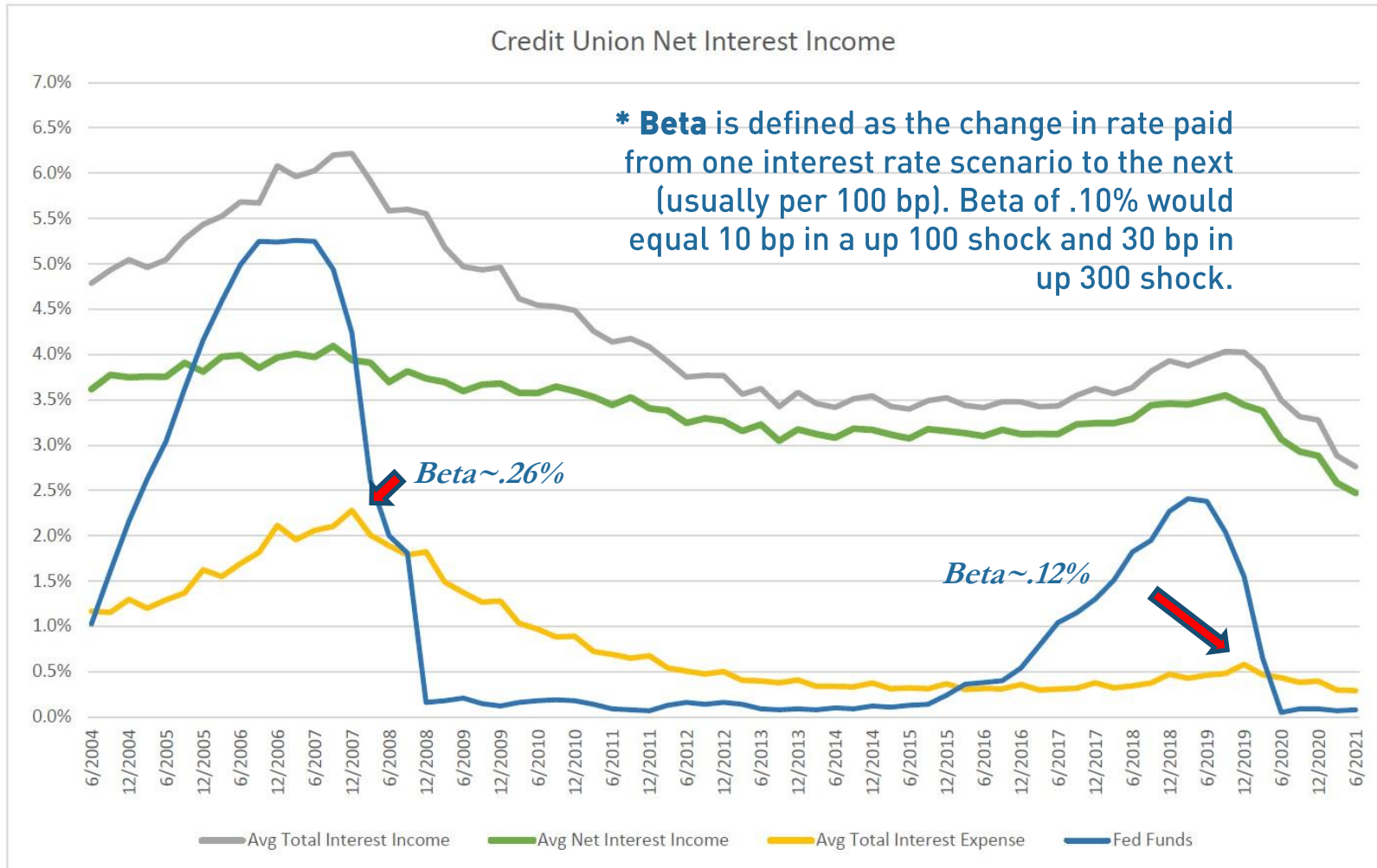
NII OF 4.7% NOT REALIZED

SHOCK 3% NET INTEREST INCOME

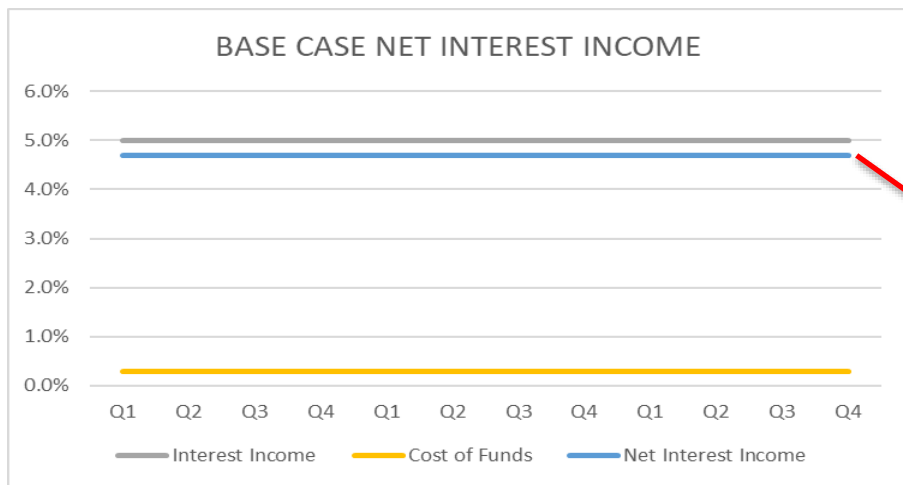


NII 3.5%

CREDIT UNION NII AND FED FUNDS



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

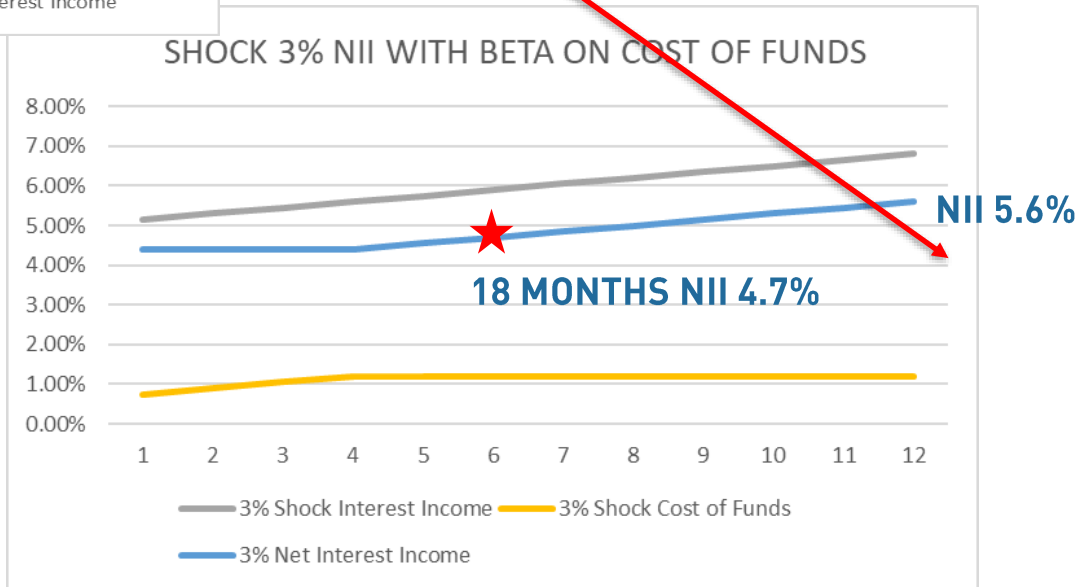


NII 4.7%

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

LOAN YIELDS AND INVESTMENT YIELDS TAKE 60 MONTHS TO REPRICE

COST OF FUNDS WITH BETA OF .30%



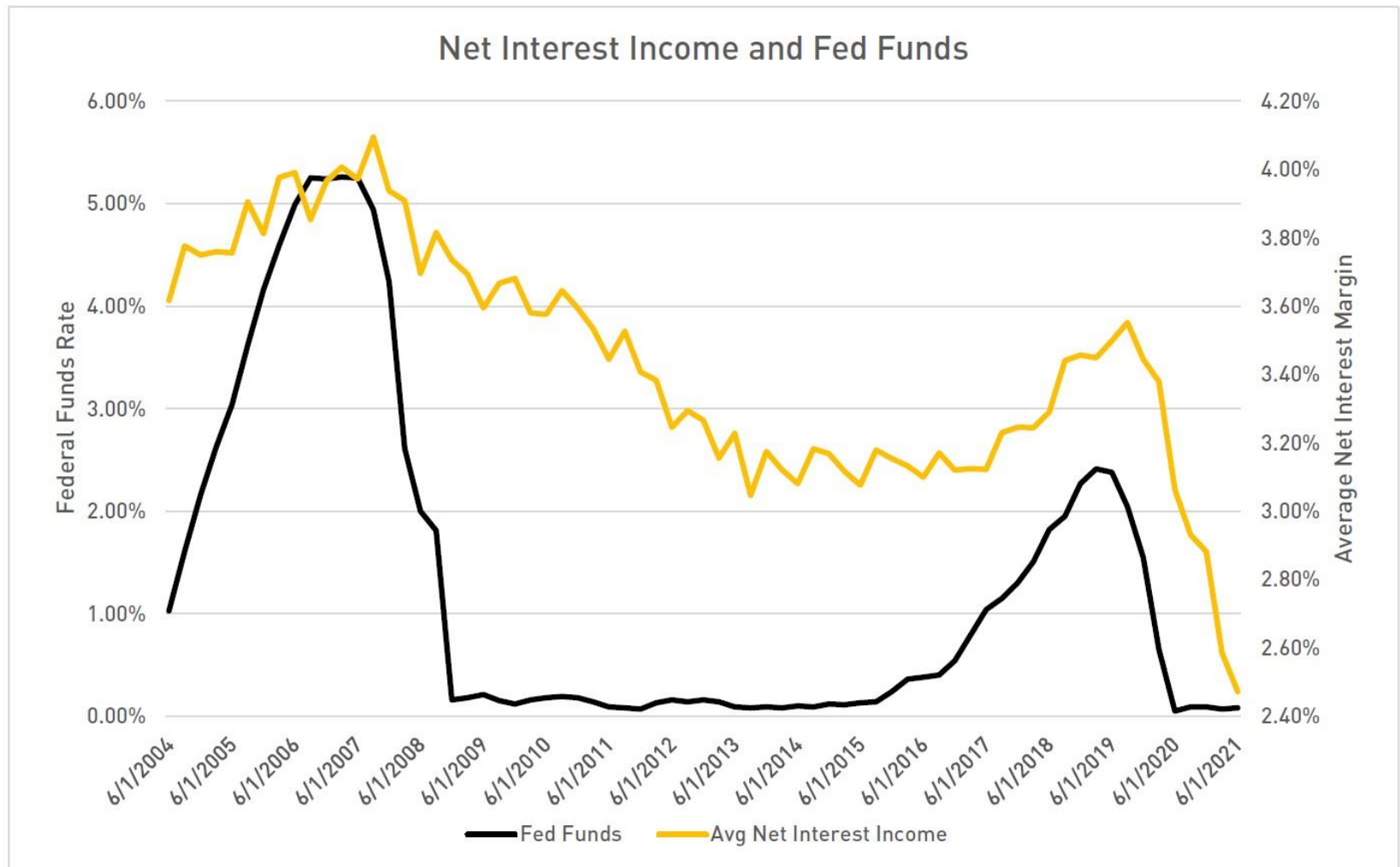
NII 5.6%

18 MONTHS NII 4.7%

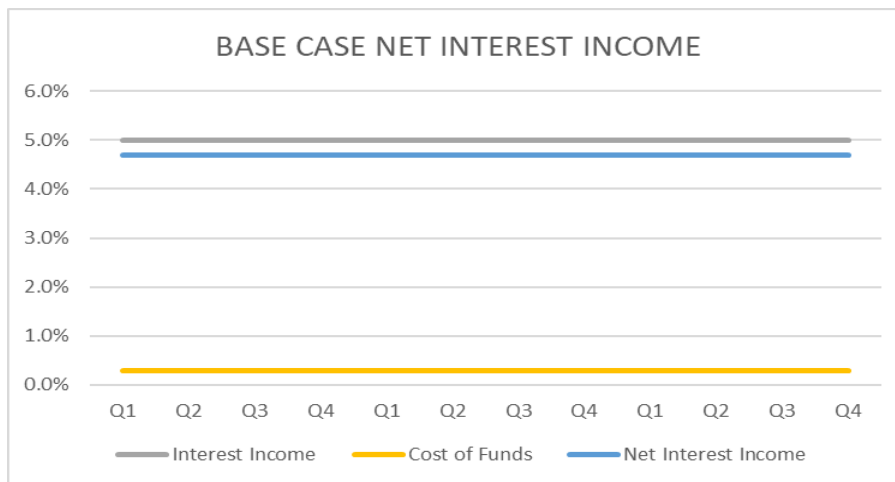


Mark H. Smith
INCORPORATED

CREDIT UNION AVG NII AND FED FUNDS



EXAMPLE -1% INSTANTENOUS AND PARALLEL DOWN SHOCK 18 MONTH REPRICING OF ASSETS

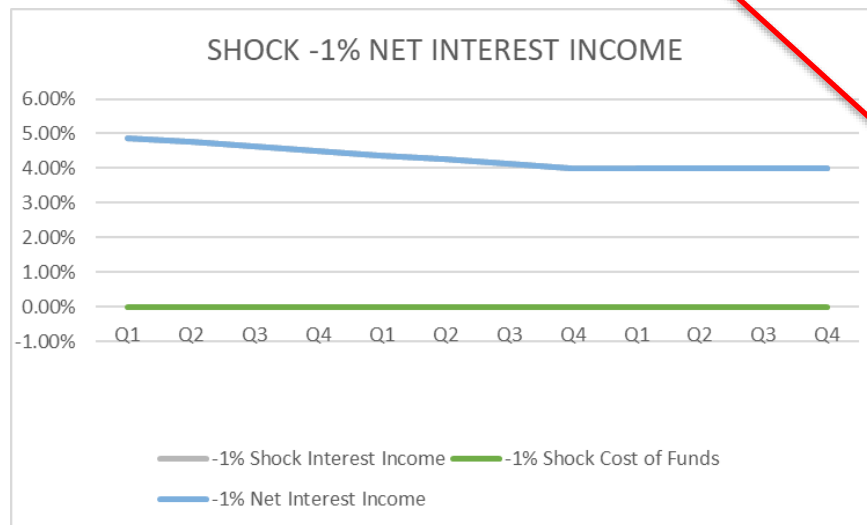


NII 4.7

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

LOAN YIELDS AND INVESTMENT YIELDS
TAKE 18 MONTHS TO REPRICE

COST OF FUNDS GO DOWN IMMEDIATELY
BUT LIMITED TO .10%

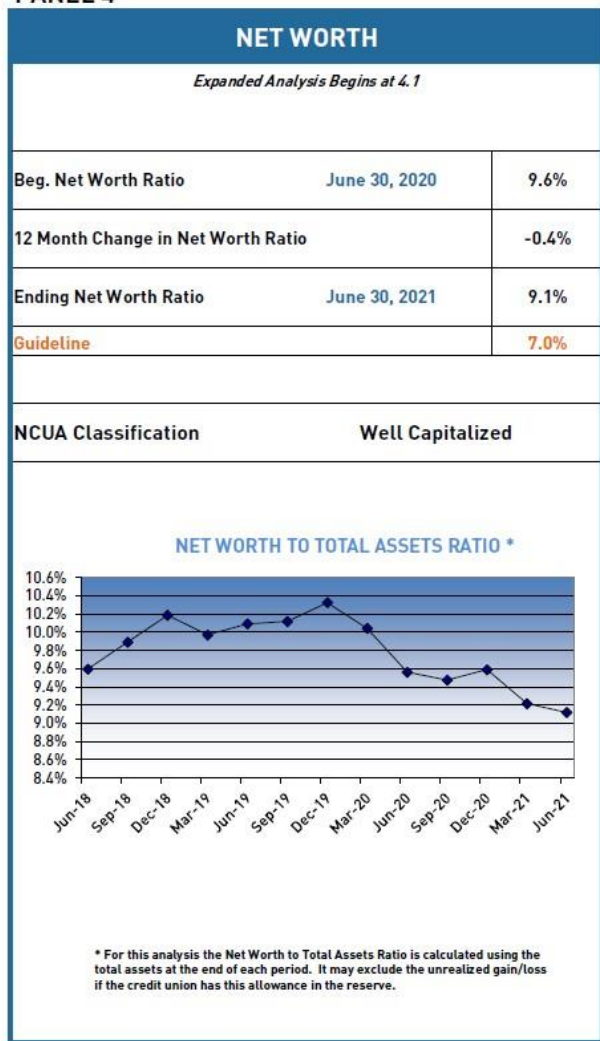


NII 3.9

POLL QUESTION #2

BIG PICTURE - SAMPLE CREDIT UNION NET WORTH AND EARNINGS

PANEL 4



6/2019 TO 6/2020
GROWTH 16.5%

6/2020 TO 6/2021
GROWTH 15.8%

PANEL 5



FEE INCOME
ESSENTIAL

NII 6/2019 335

NII 6/2020 314

NII 6/2021 273

DECREASE OF 62
bps



BIG PICTURE - SAMPLE CREDIT UNION DEPOSITS

Liability & Share Classification	Balance in Thousands	% to Total Assets	Current Yield	Shock Down -100 BP		Benchmark		Shock Up 300 BP	
				Beta	Lag	Beta	Lag	Beta	Lag
				Notes payable	0	0.0%	0.00%	0.00%	1
Liabilities	522	0.5%							
Shares \$0 to \$25,000	11,877	12.0%	0.10%	0.05%	1	0.25%	1	0.25%	1
Shares over \$25,000	24,600	24.9%	0.10%	0.05%	1	0.25%	1	0.25%	1
Share drafts	9,622	9.7%	0.10%	0.05%	1	0.08%	1	0.08%	1
IRA shares	2,210	2.2%	0.10%	0.05%	1	0.42%	1	0.42%	1
Member certificates	33,490	33.9%	2.35%	1.00%	1	1.00%	1	1.00%	1
Money markets \$1,000 to \$5,000	75	0.1%	0.10%	0.05%	1	0.29%	1	0.29%	1
Money markets \$5,000 to \$50,000	972	1.0%	0.20%	0.15%	1	0.49%	1	0.49%	1
Money markets \$50,000 to \$100,000	780	0.8%	0.25%	0.20%	1	0.53%	1	0.53%	1
Money markets \$100,000 to \$250,000	2,015	2.0%	0.30%	0.25%	1	0.59%	1	0.59%	1
Money markets \$250,000 and over	1,447	1.5%	0.30%	0.25%	1	0.59%	1	0.59%	1
Reward checking	2,479	2.5%	1.24%	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
Total Shares & Deposits	89,567	90.7%	0.98%						
Owner's Equity (Capital)	8,626	8.7%							
Total Liabilities & Capital	98,715	100.0%							

* Beta is defined as the change in rate paid from one int (usually per 100 bp). Beta of .10% would equal 10 bp in shock.

Larger percentage in member CD's

BIG PICTURE - SAMPLE CREDIT UNION LOANS

	Maturity Term In Months							Repricing Criteria
	Balance in Thousands	% of Total Assets	Current Yield	Market Yield for NEV*	Shock Down -100 BP	Bench mark	Shock Up 300 BP	
1st mtg fixed	5,183	5.3%	4.16%	3.34%	54	63	90	Up to 120 months fixed rate
1st mtg OE variable	48	0.0%	4.00%	3.93%	49	49	49	Variable rate - tied to prime
1st mtg balloon 10 year	10,470	10.6%	3.76%	3.59%	67	72	87	10 year balloon
2nd mtg fixed	925	0.9%	5.14%	4.89%	39	40	43	Up to 120 months fixed rate
2nd mtg OE variable	325	0.3%	4.00%	4.06%	42	42	42	Variable rate - tied to prime
MBL 1st mort fixed	2,593	2.6%	4.07%	4.09%	31	40	67	Up to 180 months fixed rate
MBL 2nd mort fixed	42	0.0%	5.50%	4.15%	71	72	75	Up to 120 months fixed rate
Commercial RE balloon greater than	322	0.3%	3.75%	3.75%	40	45	60	Balloons greater than 5 years
Shares/CD	281	0.3%	2.65%	3.09%	33	33	33	Fixed-rate share secured
Signature	590	0.6%	10.79%	10.69%	15	15	15	Fixed-rate consumer unsecured
Mobile homes	481	0.5%	8.39%	8.18%	51	51	51	Fixed-rate consumer collateral
New auto	4,875	4.9%	3.73%	3.62%	34	34	34	Fixed-rate consumer collateral
Overdraft	333	0.3%	12.62%	12.69%	12	12	12	Revolving credit
Recreation vehicles	7,596	7.7%	5.66%	5.70%	27	27	27	Fixed-rate consumer collateral
Used autos	38,744	39.2%	4.73%	4.53%	28	28	28	Fixed-rate consumer collateral
Visa	984	1.0%	11.62%	11.47%	36	36	36	Revolving credit
Land loan	0	0.0%	0.00%	0.00%	39	40	43	15 years fixed rate
	0	0.0%	0.00%	0.00%	0	0	0	
Business title loans fixed	145	0.1%	6.35%	5.25%	48	48	48	Fixed-rate commercial collateral
Allowance for loan losses	(298)	-0.3%	0.00%	0.00%	0	0	0	
Net Loans	73,640	74.6%	4.75%		36	38	43	Weighted Average

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

BIG PICTURE - SAMPLE CREDIT UNION INVESTMENTS

	Balance in Thousands	% of Total Assets	Current Yield	Market Yield for NEV*	Shock Down -100 BP	Bench mark	Shock Up 300 BP
Daily accounts	17,929	18.2%	0.08%	0.08%	1	1	1
	0	0.0%	0.00%	0.00%	0	0	0
Investment CDs - non callable	2,245	2.3%	0.78%	0.16%	12	12	12
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	204	0.2%	2.00%	2.00%	1	1	1
Total Investments	20,377	20.6%	0.18%				

SAMPLE CREDIT UNION IRR INCOME SIMULATION

PANEL 1 INCOME SIMULATION

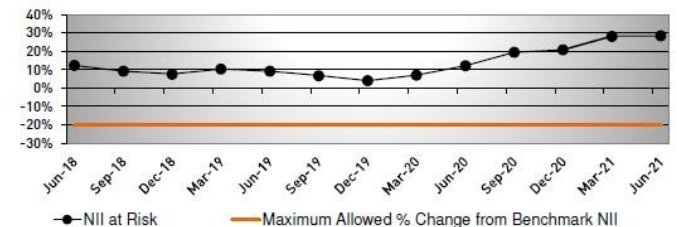
3-Year Cumulative (\$000)	SHOCK DOWN -300 BP	SHOCK DOWN -200 BP	SHOCK DOWN -100 BP	Benchmark	SHOCK UP 100 BP	SHOCK UP 200 BP	SHOCK UP 300 BP
Net Interest Income (NII)	\$5,715	\$6,709	\$7,686	\$8,468	\$9,627	\$10,252	\$10,865
\$ Change from benchmark NII			(783)		1,159	1,784	2,397
% Change from benchmark NII			-9.2%		13.7%	21.1%	28.3%
Maximum Allowed % Change from Benchmark NII			-20.0%		-20.0%	-20.0%	-20.0%
Net income:	\$454	\$1,449	\$2,425	\$3,208	\$4,367	\$4,992	\$5,605
ROA:	0.15%	0.48%	0.81%	1.07%	1.45%	1.66%	1.86%

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



ARE YOUR POLICY LIMITS STILL RELEVANT?

FORECASTED LOAN & INVESTMENT BENCHMARK RATES

	Rate Change 0.00%				Effective Rate												
	Balance 06/30/21	Current Yield	Reprice Rate	Beta	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Qtr 5	Qtr 6	Qtr 7	Qtr 8	Qtr 9	Qtr 10	Qtr 11	Qtr 12	
1st mtg fixed	5,183	4.16%	3.28%	1.00%	4.12%	4.08%	4.04%	3.99%	3.95%	3.91%	3.87%	3.83%	3.78%	3.74%	3.70%	3.66%	
1st mtg OE variable	48	4.00%	4.00%	1.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
1st mtg balloon 10 year	10,470	3.76%	3.25%	1.00%	3.74%	3.72%	3.70%	3.68%	3.65%	3.63%	3.61%	3.59%	3.57%	3.55%	3.53%	3.51%	
2nd mtg fixed	925	5.14%	4.25%	1.00%	5.07%	5.01%	4.94%	4.87%	4.81%	4.74%	4.67%	4.61%	4.54%	4.47%	4.41%	4.34%	
2nd mtg OE variable	325	4.00%	4.00%	1.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	4.00%	
MBL 1st mort fixed	2,593	4.07%	4.07%	1.00%	4.07%	4.07%	4.07%	4.07%	4.07%	4.07%	4.07%	4.07%	4.07%	4.07%	4.07%	4.07%	
MBL 2nd mort fixed	42	5.50%	5.50%	1.00%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	5.50%	
Commercial RE balloon greater than 5 yrs	322	3.75%	3.75%	1.00%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	3.75%	
Shares/CD	281	2.65%	1.99%	1.00%	2.59%	2.53%	2.47%	2.41%	2.35%	2.29%	2.23%	2.17%	2.11%	2.05%	1.99%	1.99%	
Signature	590	10.79%	9.79%	1.00%	10.59%	10.39%	10.19%	9.99%	9.79%	9.79%	9.79%	9.79%	9.79%	9.79%	9.79%	9.79%	
Mobile homes	481	8.39%	8.39%	1.00%	8.39%	8.39%	8.39%	8.39%	8.39%	8.39%	8.39%	8.39%	8.39%	8.39%	8.39%	8.39%	
New auto	4,875	3.73%	2.94%	1.00%	3.66%	3.59%	3.52%	3.45%	3.38%	3.31%	3.24%	3.17%	3.10%	3.03%	2.96%	2.94%	
Overdraft	333	12.62%	12.62%	1.00%	12.62%	12.62%	12.62%	12.62%	12.62%	12.62%	12.62%	12.62%	12.62%	12.62%	12.62%	12.62%	
Recreation vehicles	7,596	5.66%	6.04%	1.00%	5.70%	5.74%	5.79%	5.83%	5.87%	5.91%	5.96%	6.00%	6.04%	6.04%	6.04%	6.04%	
Used autos	38,744	4.73%	4.64%	1.00%	4.72%	4.71%	4.70%	4.69%	4.68%	4.67%	4.66%	4.65%	4.64%	4.64%	4.64%	4.64%	
Visa	984	11.62%	11.62%	1.00%	11.62%	11.62%	11.62%	11.62%	11.62%	11.62%	11.62%	11.62%	11.62%	11.62%	11.62%	11.62%	
Land loan	0	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
	0	0.00%	0.00%	1.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Business title loans fixed	145	6.35%	6.35%	1.00%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	6.35%	
Allowance for loan losses	-298	0.00%			0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	
Yield on Loans *	73,640	4.75%			4.74%	4.72%	4.71%	4.70%	4.68%	4.67%	4.66%	4.64%	4.63%	4.62%	4.61%	4.60%	
Daily accounts	17,929	0.08%	0.08%	★	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	0.08%	
	0	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Investment CDs - non callable	2,245	0.78%	0.16%		0.71%	0.44%	0.37%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%	0.23%
Investment CDs - callable	0	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Investment CDs - step/callable	0	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Securities - non callable	0	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Securities - callable	0	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Securities - step/callable	0	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	0	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	0	0.00%	0.00%		0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Membership shares	204	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	
Yield on Investments *	20,377	0.18%			0.17%	0.14%	0.13%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	0.11%	

FORECASTED DEPOSITS RATES BENCHMARK

Notes payable	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Liabilities	522	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Shares \$0 to \$25,000	11,877	0.10%	0.05%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Shares over \$25,000	24,600	0.10%	0.05%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Share drafts	9,622	0.10%	0.05%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
IRA shares	2,210	0.10%	0.05%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Member certificates	33,490	2.35%	1.00%	2.23%	2.12%	1.98%	1.85%	1.82%	1.76%	1.67%	1.50%	1.40%	1.33%	1.23%	1.15%
Money markets \$1,000 to \$5,000	75	0.10%	0.05%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%	0.10%
Money markets \$5,000 to \$50,000	972	0.20%	0.15%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%	0.20%
Money markets \$50,000 to \$100,000	780	0.25%	0.20%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%	0.25%
Money markets \$100,000 to \$250,000	2,015	0.30%	0.25%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%
Money markets \$250,000 and over	1,447	0.30%	0.25%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%	0.30%
Reward checking	2,479	1.24%	0.50%	1.24%	1.24%	1.24%	1.24%	1.24%	1.24%	1.24%	1.24%	1.24%	1.24%	1.24%	1.24%
	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
	0	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%
Owner's Equity (Capital)	8,626														
Cost of Funds *	98,715	0.98%	0.94%	0.90%	0.84%	0.80%	0.78%	0.76%	0.73%	0.67%	0.63%	0.60%	0.56%	0.53%	

Certificates new money rate .84%

INCOME SIMULATION RESULTS

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 index pages 2 and 3						

Watch year 1 – This is where most the risk will typically show



YEAR 1

Loan Interest Income	3,487	3,989	502	14.4%		
Investment Interest Income	29	624	596	2081.5%		
Total Interest Income	3,516	4,613	1,097	31.2%		
Dividends & Interest Paid	778	1,569	791	101.6%		
Net Interest Income	2,738	3,045	307	11.2%		
Total Fees & Misc. Income	972	972				
Operating Expenses	2,674	2,674				
Forecasted Net Income Year 1	1,037	1,343	307	29.6%		

YEAR 2

Loan Interest Income	3,448	4,723	1,275	37.0%		
Investment Interest Income	25	689	664	2682.3%		
Total Interest Income	3,473	5,412	1,939	55.8%		
Dividends & Interest Paid	659	1,768	1,110	168.4%		
Net Interest Income	2,814	3,644	830	29.5%		
Total Fees & Misc. Income	1,002	1,002				
Operating Expenses	2,755	2,755				
Forecasted Net Income Year 2	1,061	1,891	830	78.2%		

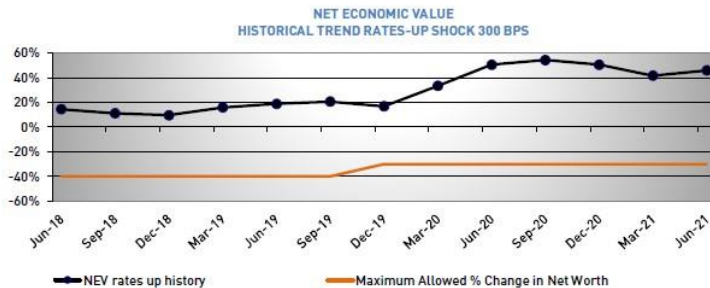
YEAR 3

Loan Interest Income	3,412	5,252	1,839	53.9%		
Investment Interest Income	26	754	728	2840.4%		
Total Interest Income	3,438	6,006	2,568	74.7%		
Dividends & Interest Paid	521	1,829	1,308	250.8%		
Net Interest Income	2,916	4,177	1,260	43.2%		
Total Fees & Misc. Income	1,032	1,032				
Operating Expenses	2,838	2,838				
Forecasted Net Income Year 3	1,110	2,370	1,260	113.5%		

SAMPLE CREDIT UNION IRR NET ECONOMIC VALUE

PANEL 2 NET ECONOMIC VALUE (EV)

	SHOCK DOWN -300 BP	SHOCK DOWN -200 BP	SHOCK DOWN -100 BP	CURRENT NET WORTH	SHOCK UP 100 BP	SHOCK UP 200 BP	SHOCK UP 300 BP
Book Net Worth (\$000)				\$9,004			
EV of Net Worth (\$000) - Benchmark	\$6,176	\$5,611	\$7,208	\$9,457	\$11,665	\$12,852	\$13,786
\$ Change EV of Net Worth from Benchmark (\$000)			(\$2,249)	\$453	\$2,207	\$3,395	\$4,329
% Change in EV of Net Worth from Benchmark			-23.8%		23.3%	35.9%	45.8%
Maximum Allowed % Change in EV of Net Worth			-30.0%		-30.0%	-30.0%	-30.0%
Book Net Worth Ratio				9.1%			
Post Shock Net Economic Value Ratio	6.1%	5.6%	7.2%	9.6%	11.9%	13.3%	14.5%
Minimum Post Shock Net Economic Value Ratio	7.0%	7.0%	7.0%		7.0%	7.0%	7.0%



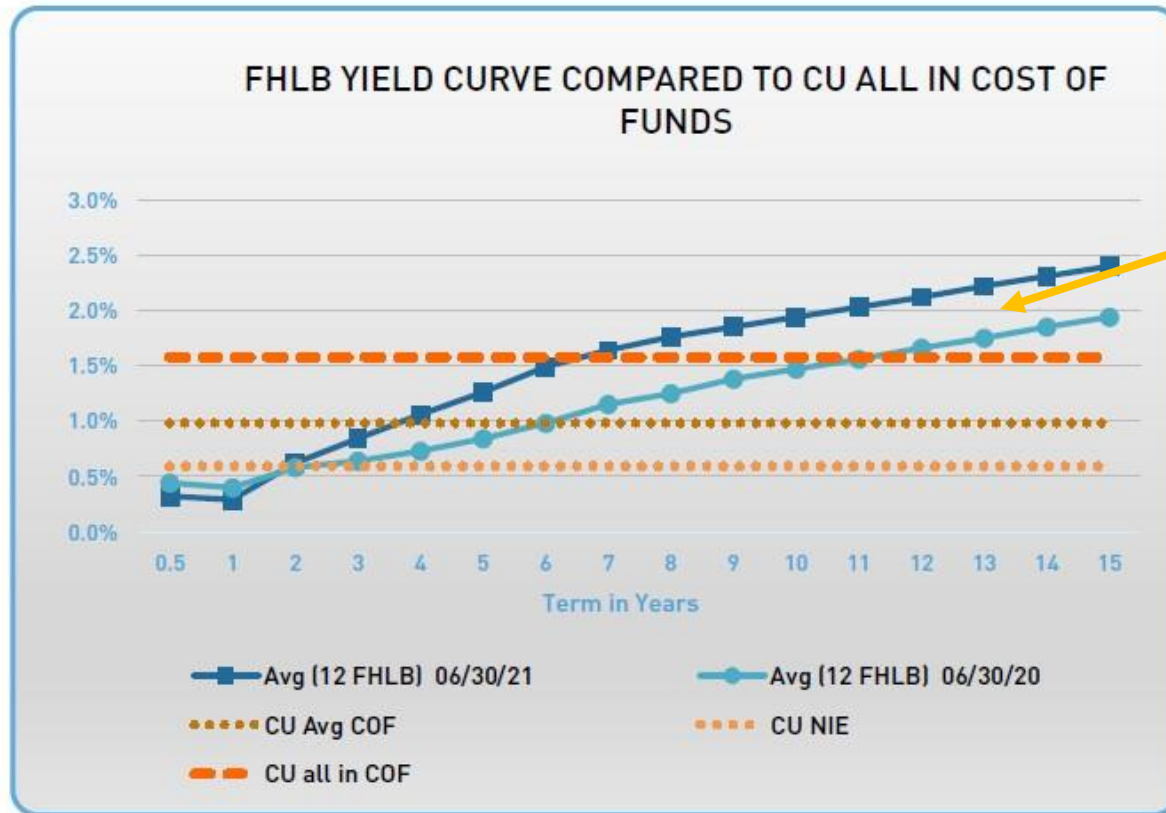
NET ECONOMIC VALUE - PANEL 2

This analysis estimates the impact of Market Risk on the Credit Unions Net Worth (capital)* as of the above date. The Net Worth remaining after the impact of Market Risk is applied is referred to as the CU's Net Economic Value (NEV) DETAIL OF NEV ANALYSIS IN SECTION 2

*Formerly Operational Guidelines

ARE YOUR POLICY LIMITS STILL RELEVANT?

NON MATURITY DEPOSITS AND HOW THEY EFFECT IRR RESULTS

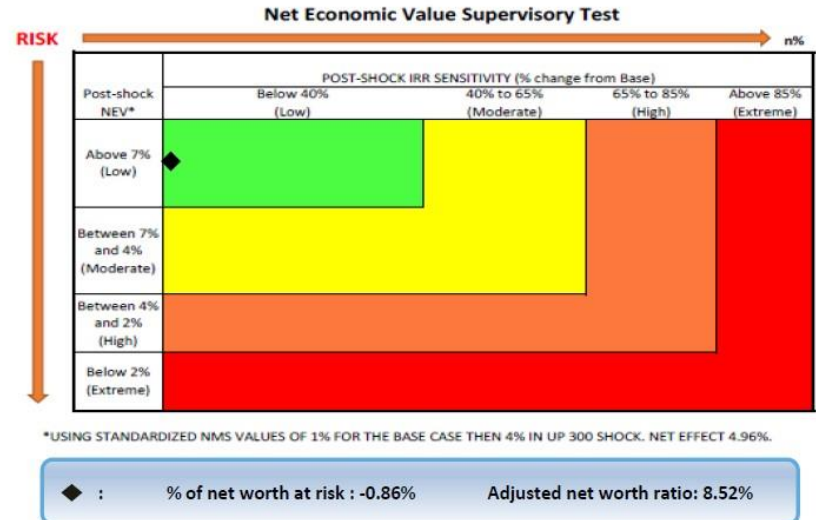
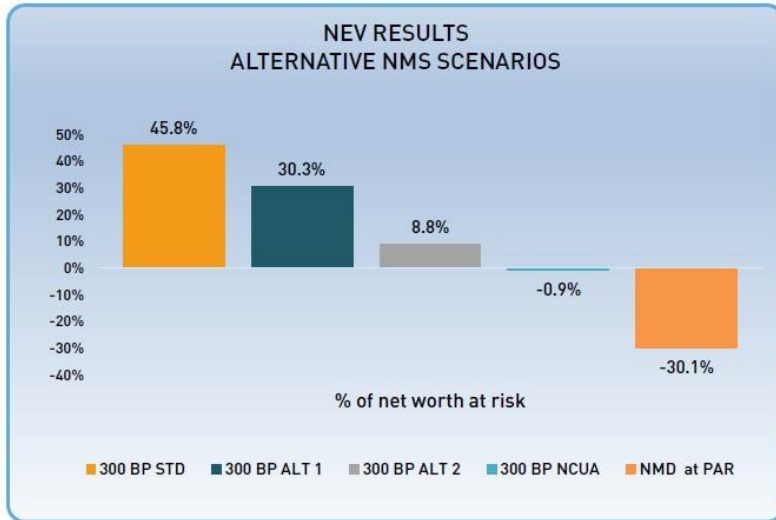


ECONOMIC VALUE

COF - Cost of Funds

NIE - Non Interest Expense

NON MATURITY DEPOSITS & IRR RESULTS



WHAT IF ADD \$15 MILLION FIXED REAL ESTATE AT 3.25% FUND FROM OVERNIGHT AND MOVE \$12 MILLION FROM RS TO MM

PANEL 1 INCOME SIMULATION

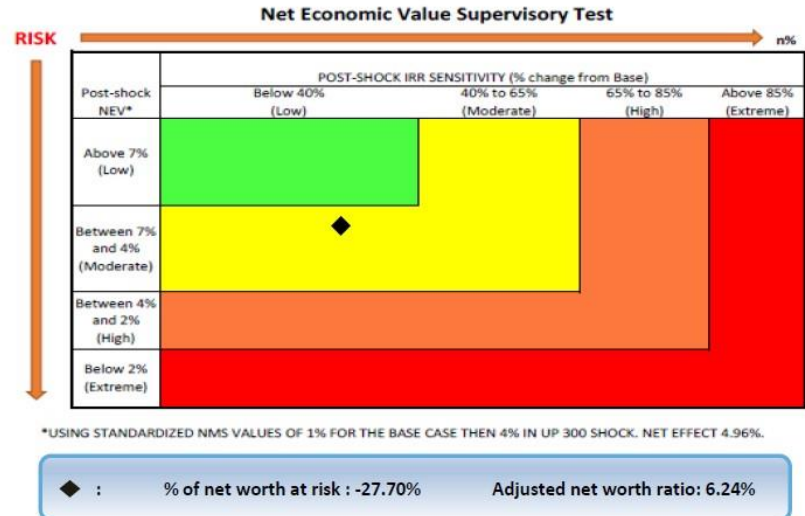
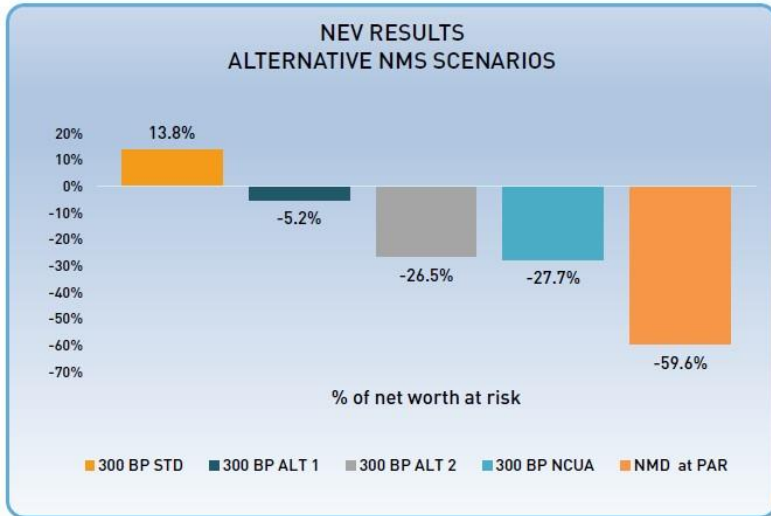
3-Year Cumulative (\$000)	SHOCK DOWN -300 BP	SHOCK DOWN -200 BP	SHOCK DOWN -100 BP	Benchmark	SHOCK UP 100 BP	SHOCK UP 200 BP	SHOCK UP 300 BP
Net Interest Income (NII)	\$6,932	\$7,949	\$8,940	\$9,749	\$10,443	\$10,573	\$10,664
\$ Change from benchmark NII	(2,817)	(1,800)	(809)		694	824	915
% Change from benchmark NII	-28.9%	-18.5%	-8.3%		7.1%	8.5%	9.4%
Maximum Allowed % Change from Benchmark NII	-20.0%	-20.0%	-20.0%		-20.0%	-20.0%	-20.0%
Net income:	\$1,672	\$2,688	\$3,679	\$4,488	\$5,183	\$5,313	\$5,403
ROA:	0.55%	0.89%	1.22%	1.48%	1.71%	1.75%	1.78%

■ All at Risk
 ■ Maximum Allowed % Change from Benchmark NII

PANEL 2 NET ECONOMIC VALUE (EV)

	SHOCK DOWN -300 BP	SHOCK DOWN -200 BP	SHOCK DOWN -100 BP	CURRENT NET WORTH	SHOCK UP 100 BP	SHOCK UP 200 BP	SHOCK UP 300 BP
Book Net Worth (\$000)				\$9,004			
EV of Net Worth (\$000) - Benchmark	\$6,634	\$6,091	\$7,125	\$8,586	\$9,787	\$9,919	\$9,770
\$ Change EV of Net Worth from Benchmark (\$000)	(\$1,952)	(\$2,495)	(\$1,461)	(\$418)	\$1,200	\$1,332	\$1,184
% Change in EV of Net Worth from Benchmark	-22.7%	-29.1%	-17.0%		14.0%	15.5%	13.8%
Maximum Allowed % Change in EV of Net Worth	-30.0%	-30.0%	-30.0%		-30.0%	-30.0%	-30.0%
Book Net Worth Ratio				9.1%			
Post Shock Net Economic Value Ratio	6.5%	6.0%	7.1%	8.7%	10.1%	10.5%	10.5%
Minimum Post Shock Net Economic Value Ratio	7.0%	7.0%	7.0%		7.0%	7.0%	7.0%

WHAT IF ADD \$15 MILLION FIXED REAL ESTATE AT 3.25% FUND FROM OVERNIGHT AND MATURING INVESTMENT CD'S



POLL QUESTION #3

LIQUIDITY FORECASTING



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	
Net cash flow from loans, deposits, borrowings and off-balance sheet	\$5,551		(\$8,175)		(\$16,350)		(\$8,957)	
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	
Net Cumulative Cash Flow	\$27,571		\$13,809		\$5,728		\$12,965	

Other stress considerations:
 Unfunded LOC draws
 Capital expenditures

STRATEGIES AS RATES INCREASE AND LIQUIDITY FLUCTUATES

- Slow and low cost funds increases to maintain NII (if possible)
- Do not overpay for deposits you cannot utilize
- Increase loan yields as quickly as possible
- Manage for liquidity for potential deposit runoff
- Anticipate draws on unfunded LOC
- Preserve funds for lending programs planned or developed for the current environment

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 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.

OUTSOURCE BENEFITS TO YOU AND YOUR CREDIT UNION

Easy

Save time

Delegate to the experts

Extensive experience

Regulator responses

Reliable

Reputable





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

EASY AND AFFORDABLE CECL SOLUTION

**SPECIAL OFFER: ONE-TIME MHSI CECL
REPORT FOR A SMALL FEE AND A CURRENT
AIRES LOAN FILE TO TRY IT OUT**

**A CREDIT WILL BE GIVE FOR THE FEE WITH
AGREEMENT PRIOR TO 12/31/2022**



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

**PLEASE VISIT OUR WEBSITE
MARKHSMITH.COM**

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