

MISSISSIPPI BANKERS  
ASSOCIATION

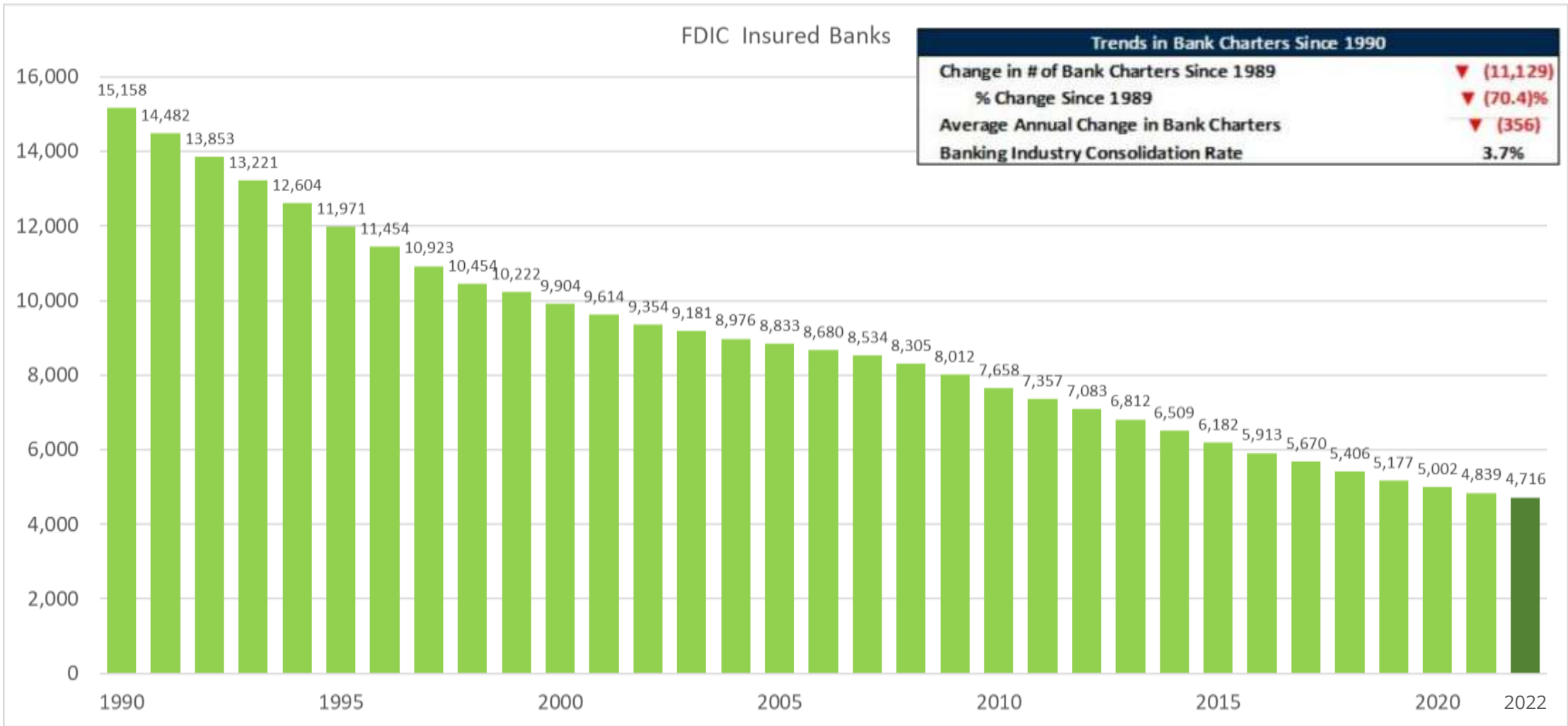


**HUB**



**TAYLOR**  
ADVISORS

The ALCO Challenge:  
Regulatory Appeasement or Profit Improvement?



# KEY HOW-TO... TAKEAWAYS FROM TODAY'S PRESENTATION

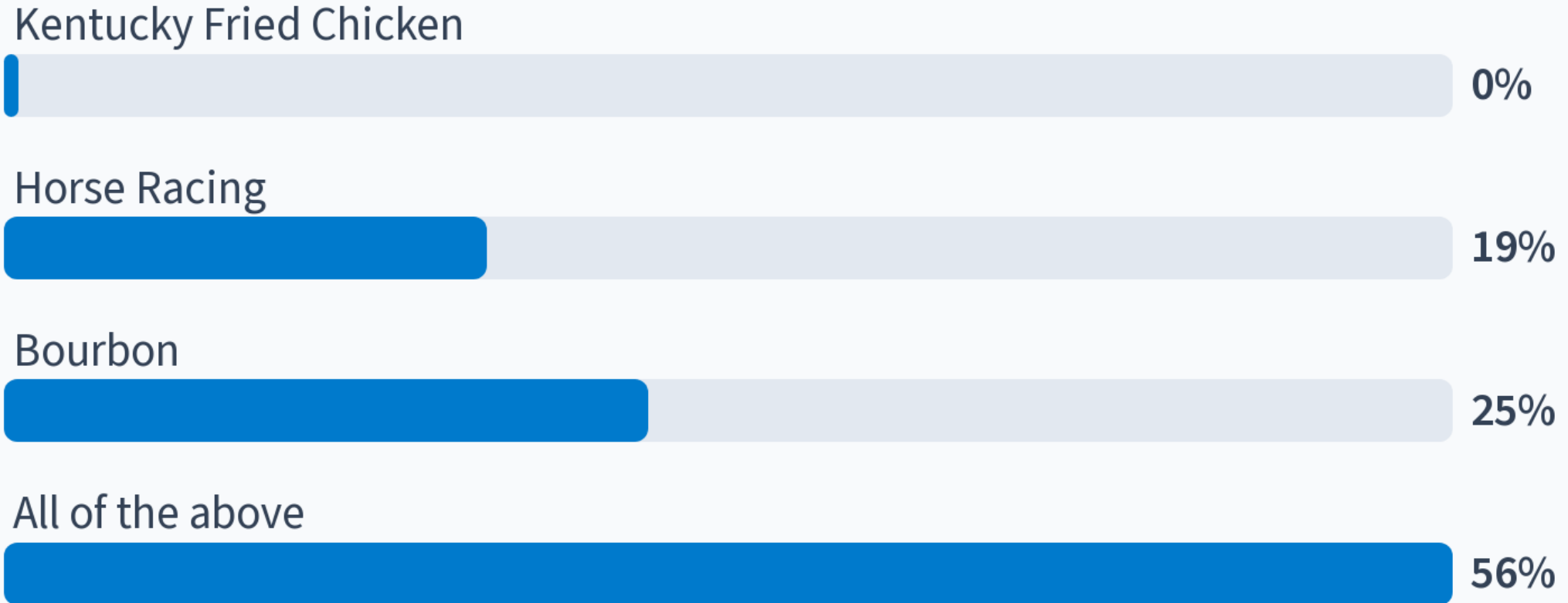
- Why ALCO/Balance Management is important to overall **profitability**
- Discuss why strategy formation is **not a one-size fits all** approach
- How can we **dissect our Net Interest Margin** and get better? See Performance SNAPSHOT
- How can we **Reimagine “Old School” ALCO** to drive better and/different strategies
- Receive: **Presentation with Polling Responses and Articles**



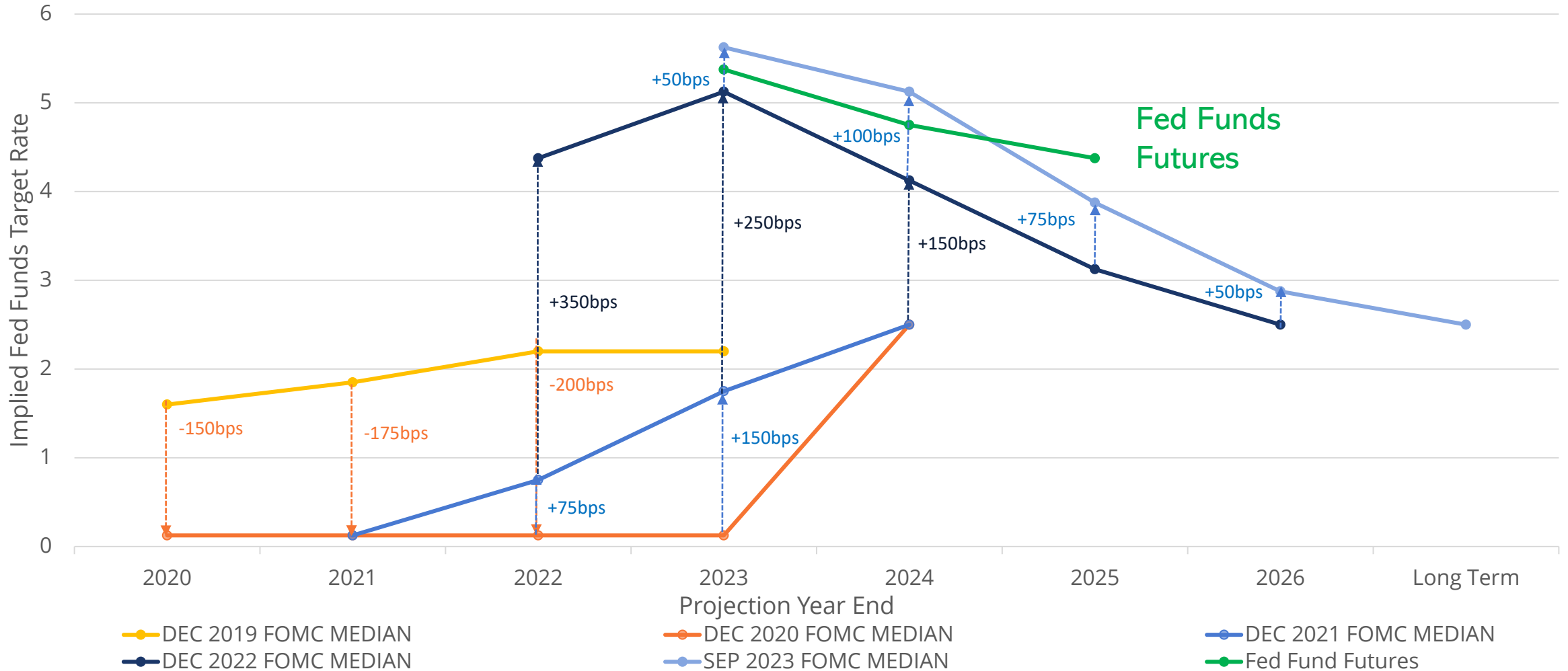
### Use your Phone to Scan our QR Code

- Don't download the app, stay in web
- Dismiss Cookies and Skip
- You'll see "Waiting for presentation to begin"
- Wait for first prompt to record responses

## What is Kentucky best known for?

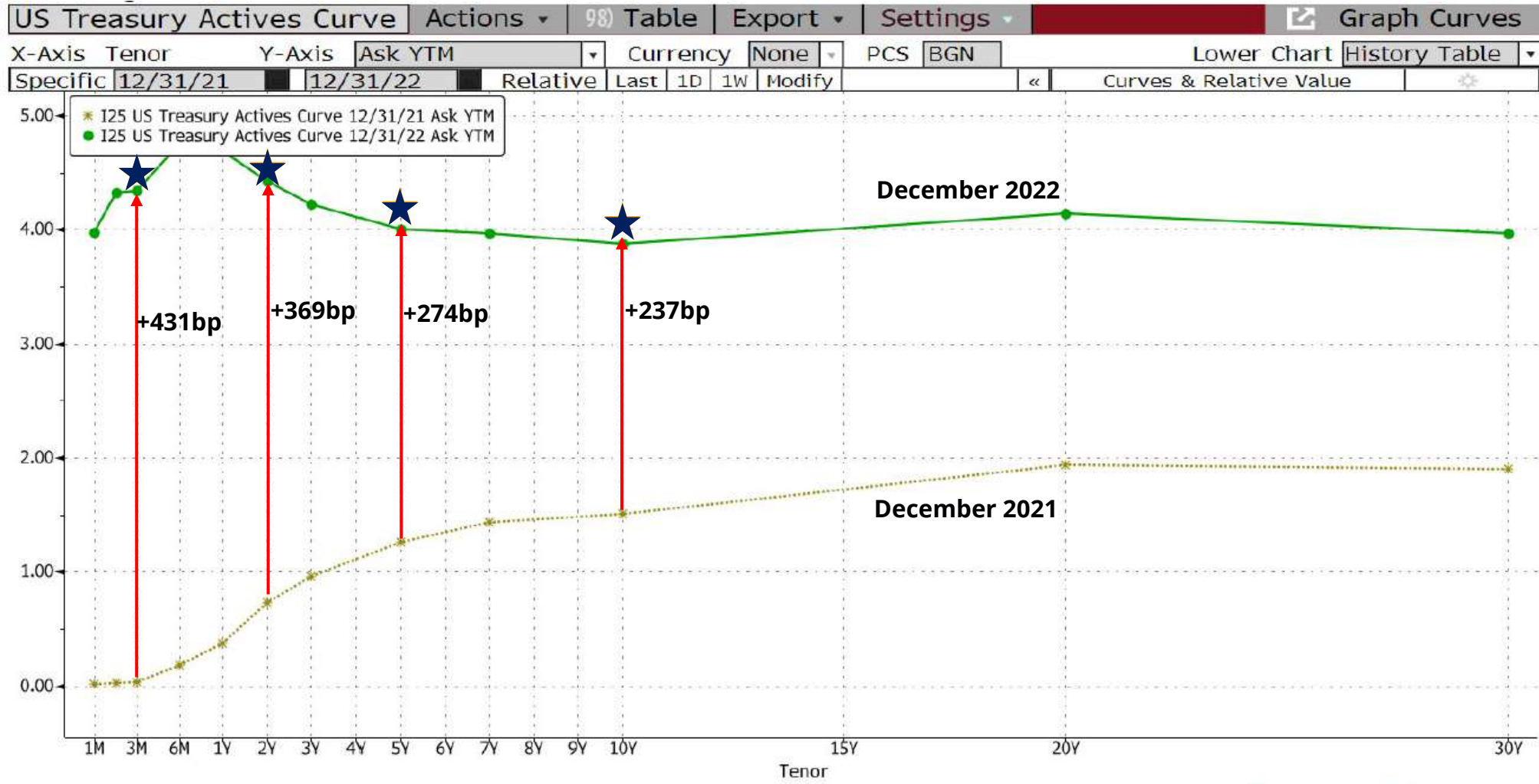


# FED DOT PLOT & IMPLIED FED FUNDS TARGET RATE



Source: Bloomberg

# TREASURY RATES



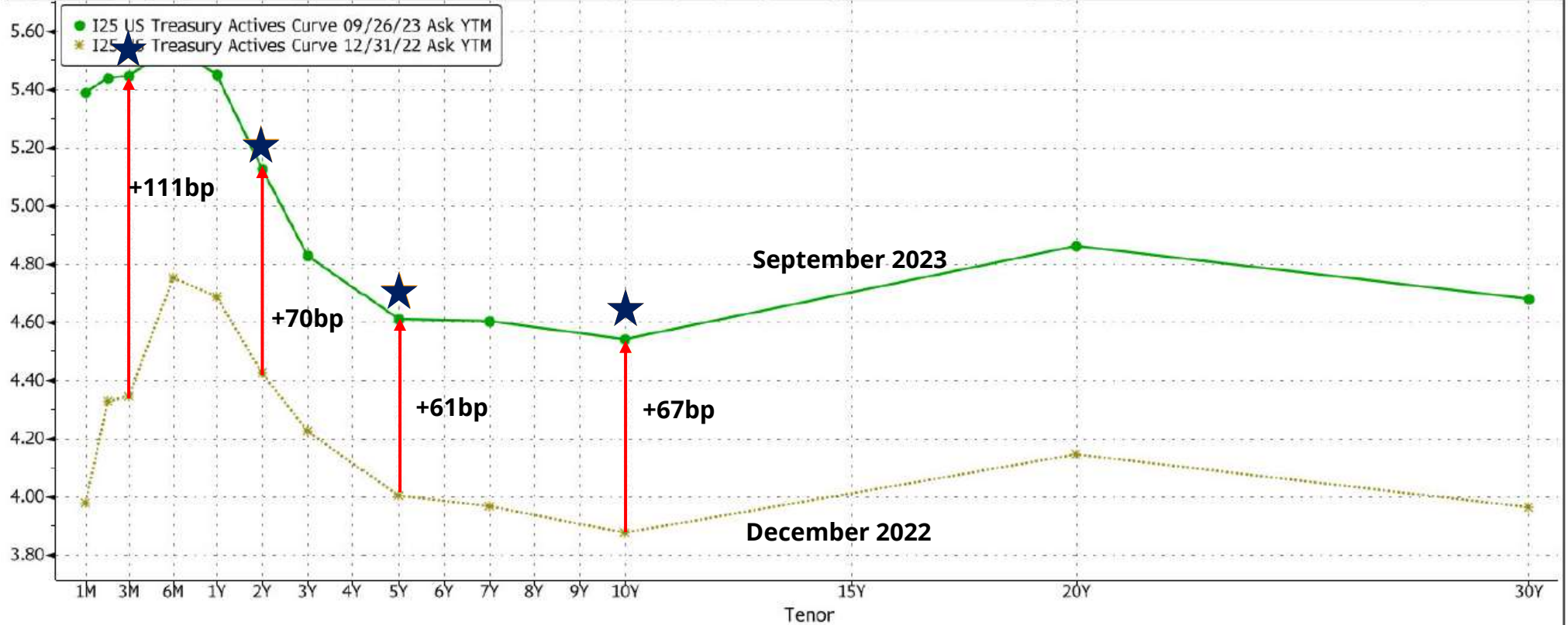
Curve Id	1M	3M	2Y	5Y	10Y	20Y	30Y
1) I25 12/31/22	3.976	4.343	4.426	4.004	3.875	4.144	3.963
2) I25 12/31/21	0.015	0.030	0.732	1.263	1.510	1.933	1.903
13) I25 (12/31/22-12/31/21)	396.1	431.2	369.4	274.1	236.5	221.0	206.0

# TREASURY RATES

US Treasury Actives Curve Actions 98) Table Export Settings Graph Curves

X-Axis Tenor Y-Axis Ask YTM Currency None PCS BGN Lower Chart History Table

Specific 12/31/22 09/26/23 Relative Last 1D 1W Modify Curves & Relative Value



○ All Tenors ● Key Tenors

Curve Id	1M	3M	2Y	5Y	10Y	20Y	30Y
1) I25 09/26/23	5.389	5.447	5.125	4.611	4.540	4.862	4.678
2) I25 12/31/22	3.976	4.343	4.426	4.004	3.875	4.144	3.963
3) I25 (09/26/23-12/31/22)	141.3	110.5	69.9	60.7	66.5	71.9	71.5



# BANK HEADLINES/HEAD WINDS



➤ Washington Trust Bancorp (WASH): Underweight  
- Lowering Our Rating to Underweight: 1Q23 Results **About 20% Below Expectations**



➤ Bank of Hawaii (BOH): Neutral  
- 1Q23 First Look: **EPS Fall Short on Margin Pressure; Deposits Decline Less than 1%**



➤ Chemung Financial Corporation (CHMG): Neutral  
- 1Q23 EPS Review - Beat with Solid Loan Growth, but **NIM Pressure is Mounting**



➤ National Bankshares Inc. (NKSH): Overweight  
- 1Q23 Earnings Review: Reducing Estimates on **Thinner NIM; Reit. OW**

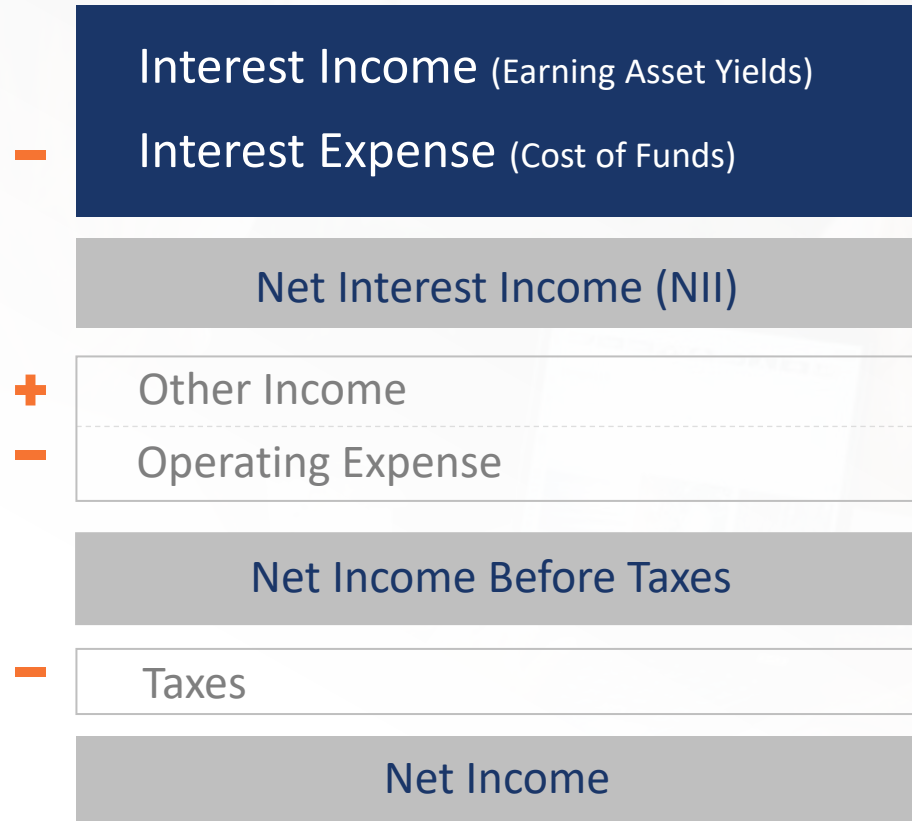


➤ KeyCorp (KEY): Neutral  
- KEY 1Q23 First Look: **Core EPS Misses; Lower NII to Pressure Expectations**



➤ OceanFirst Financial Corp. (OCFC): Neutral  
- 1Q23 First Look: **Earnings Miss on NII/NIM Shortfall**

# BASIC INCOME STATEMENT



**Balance Sheet Management: Primary Focus**

ROE vs. ROA Focus

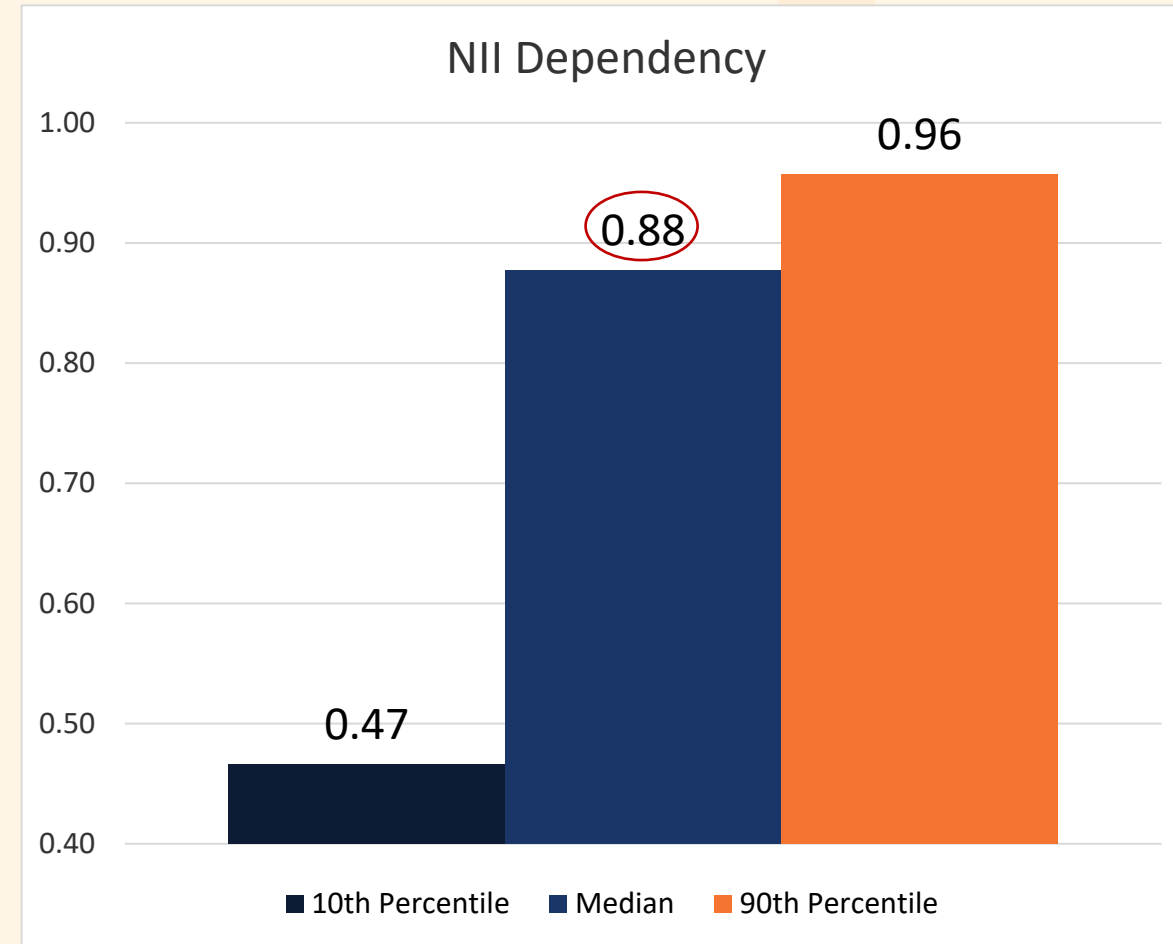
# NII DEPENDENCY AMONG ALL BANKS NATIONALLY

Net Interest  
Income (NII)

Net Interest  
Income (NII)

+

Non-Interest  
Income



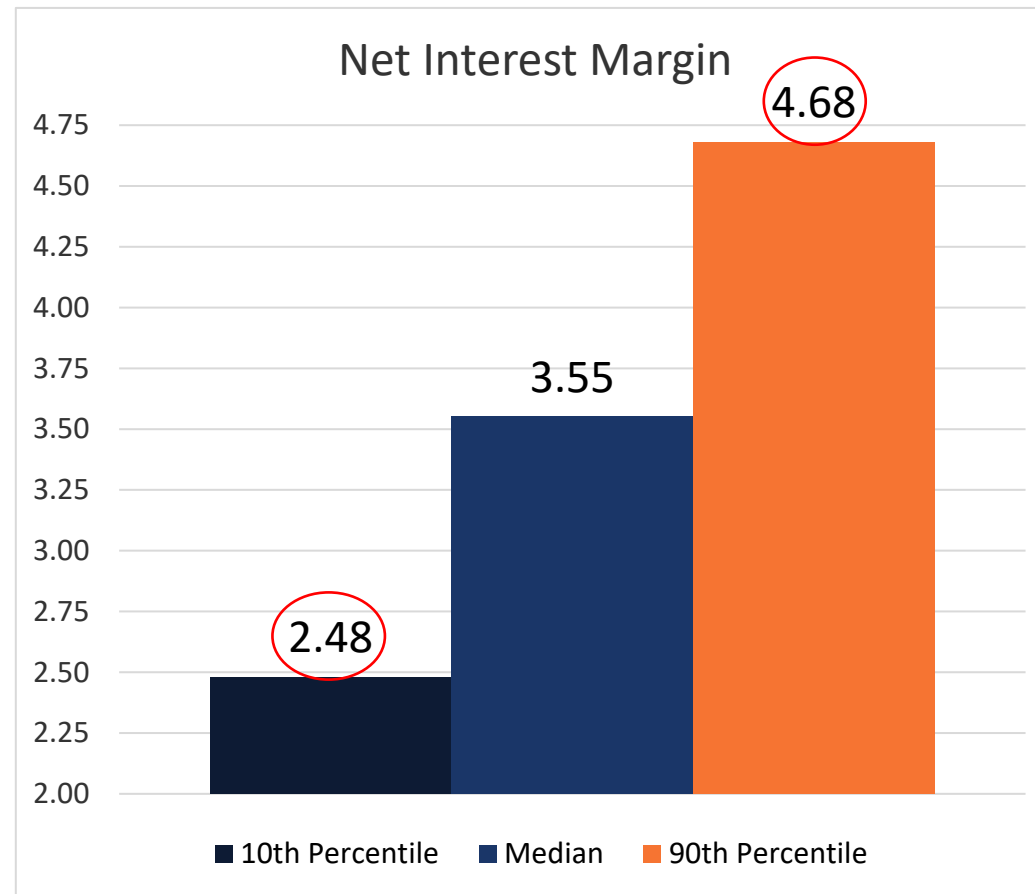
Source: S&P Global Market Intelligence,  
Data for all Banks Nationally <\$15B as of 6/30/23



The more net interest income  
dependent your institution, the more  
NIM will drive earnings



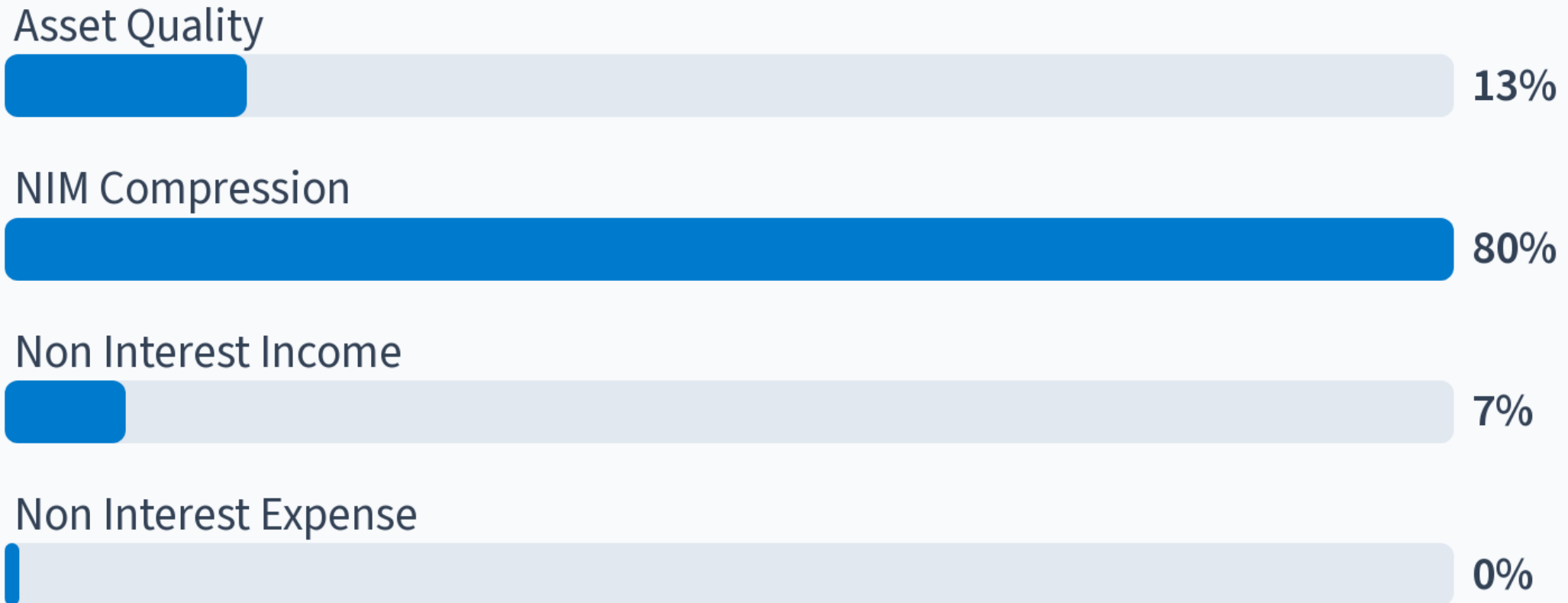
# NET INTEREST MARGIN AMONG ALL BANKS NATIONALLY



Source: S&P Global Market Intelligence,  
Data for all banks Nationally <\$15B as of 6/30/23

**The more net interest income dependent your institution, the more NIM will drive earnings**

## What is your biggest concern regarding your bank's profitability?



# SHESHUNOFF CEO PRE-MEETING SURVEY 4/4/23:

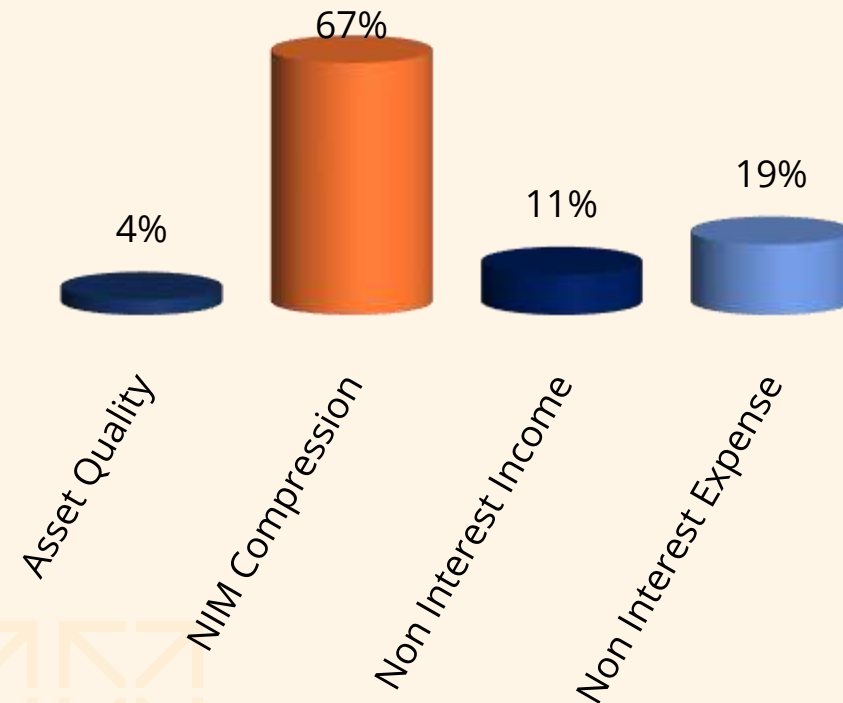
## WHAT IS YOUR BIGGEST CONCERN REGARDING YOUR BANK'S PROFITABILITY?

A. Asset Quality

B. NIM Compression

C. Non Interest Income

D. Non Interest Expense



# PERFORMANCE SNAPSHOT REQUEST

[Info.tayloradvisor.com/snapshot](http://Info.tayloradvisor.com/snapshot)

The Taylor Advisors Performance Snapshot is an in depth report on your institution's margin, yield, and costs in comparison to UBPR and State Peer Averages.

As you'll see, the graph on the top right shows performance data about the institution (red) and compares it to other institutions in its UBPR peer group and its home state (green).

The Net Interest Margin Dissection to the left shows the numbers that correspond to the graph and also ranks the institution versus its peer group, approximating the UBPR report. Below that is additional balance sheet information about the institution.

**Performance and Balance Sheet Snapshot - 2022Q4**  
**Sample Savings Bank (\$5B)**

**Performance Rankings**

Sample Savings Bank versus UBPR Peer Group				
	Metric	Sample Savings Bank	UBPR Peer Group Average	Percentile Rank
Net Interest Margin	Yield on Investments (FTE)	3.03	2.32	83%
	Yield on Total Loans	5.18	5.19	49%
Dissection	Earning Asset Yield	4.69	4.26	74%
	Interest Expense to Avg. Earning Assets	0.53	0.65	45%
	Net Interest Margin (FTE)	4.16	3.58	85%
	Net Interest Income Dependency Ratio	0.77	0.87	14%

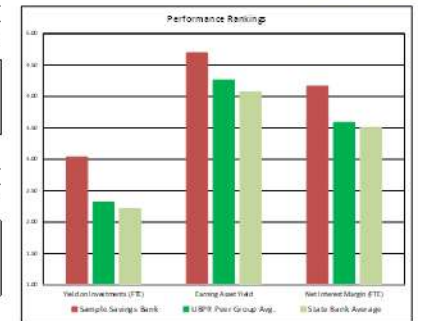
Sample Savings Bank versus State Banks				
	Metric	Sample Savings Bank	State Bank Average	Percentile Rank
Net Interest Margin	Yield on Investments (FTE)	3.03	2.21	84%
	Yield on Total Loans	5.18	4.84	72%
Dissection	Earning Asset Yield	4.69	4.07	84%
	Interest Expense to Avg. Earning Assets	0.53	0.56	54%
	Net Interest Margin (FTE)	4.16	3.50	86%
	Net Interest Income Dependency Ratio	0.77	0.88	12%

**Earning Asset Mix and Balance Sheet Positions**

Earning Asset Mix		
Asset Size (\$000)	3,533,305	
Net Loans (\$000)	2,518,839	71%
Security Portfolio (\$000)	613,553	17%
Cash and FFS (\$000)	41,099	1%

Investment Portfolio		
Municipals (% of Portfolio)	31,7248	52%
MBS (% of Portfolio)	234,666	38%
CMO (% of Portfolio)	2,459	0%
Agencies (% of Portfolio)	25,943	4%
Other Securities (% of Portfolio)	33,237	5%



Liquidity and Funding	
Pledged Securities (% of Portfolio)	35%
Liquidity Ratio	15%
FHIB Advances and Brokered CDs (\$000)	488,695
Cost of Funds (% of Average Liabilities)	0.48%

Capital	
Tier 1 Capital	337,866
Tier-1 Leverage Ratio (%)	10.30
Total Risk-Based Capital	366,377
Total Risk-Based Capital Ratio (%)	13.36
Municipals (% of Total RBC)	87%



WHAT IS YOUR INSTITUTION'S

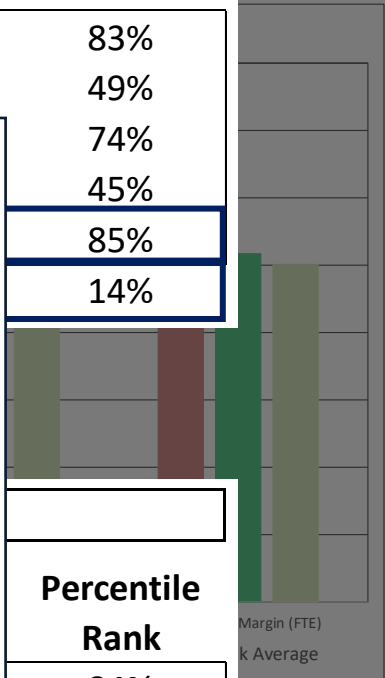
NET INTEREST INCOME  
DEPENDENCY?

NET INTEREST MARGIN?



**Sample Savings Bank versus UBPR Peer Group**

	Metric	Sample Savings Bank	UBPR Peer Group Average	Percentile Rank
<b>Net Interest Margin</b>	Yield on Investments (FTE)	3.03	2.32	83%
	Yield on Total Loans	5.18	5.19	49%
<b>Net Interest Margin Dissection</b>	Earning Asset Yield			74%
	Interest Expense to Avg. Earning Assets			45%
<b>Net Interest Margin Dissection</b>	Net Interest Margin (FTE)			85%
	Net Interest Income Dependency Ratio			14%
<p><b>What's the Range of Net Interest Margin?</b></p> <p>90<sup>th</sup> Percentile is 4.68%</p> <p>10<sup>th</sup> Percentile is 2.48%</p> <p>Range of 2.20%</p>				
<p><i>Source: S&amp;P Global Market Intelligence, Data for all Banks Nationally &lt;\$15B as of 6/30/23</i></p>				
<b>Net Interest Margin Dissection</b>	Yield on Investments (FTE)			84%
	Yield on Total Loans	5.18	4.84	72%
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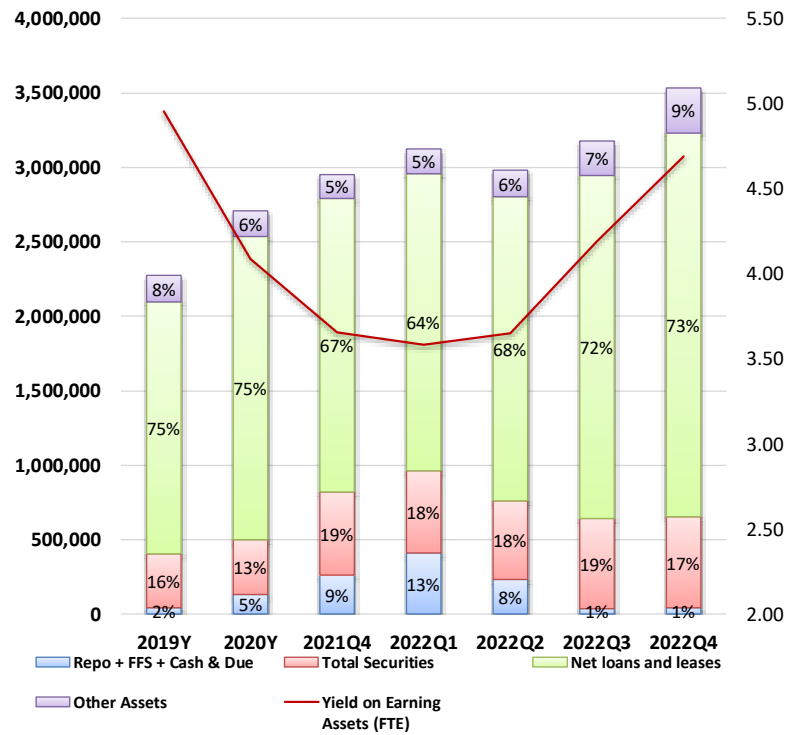


MBS (% of Portfolio)	234,666	38%	Tier-1 Leverage Ratio (%)	10.30
CMO (% of Portfolio)	2,459	0%	Total Risk Based Capital	366,377
Agencies (% of Portfolio)	25,943	4%	Total Risk-Based Capital Ratio (%)	13.36
Other Securities (% of Portfolio)	33,237	5%	Municipals (% of Total RBC)	87%

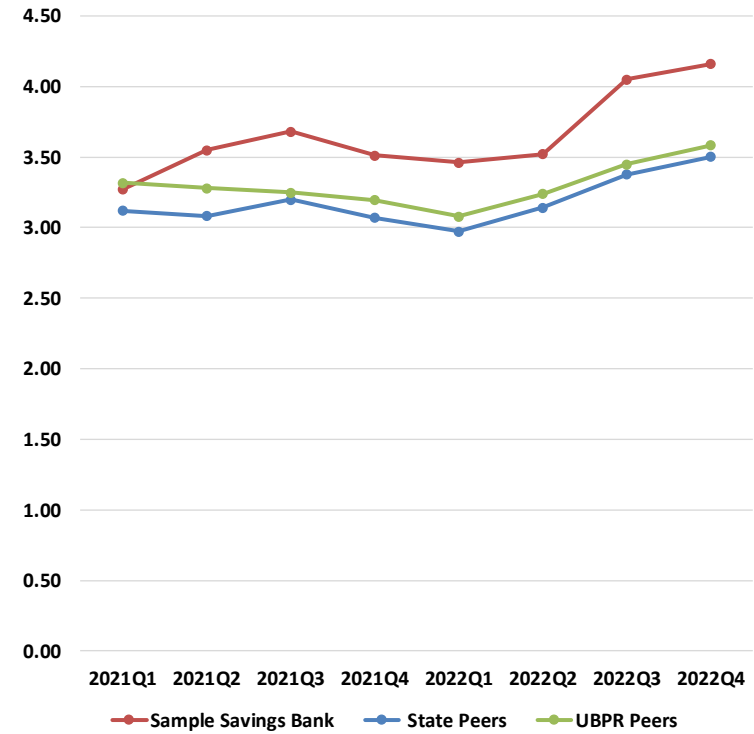
Historical Performance

Historical Performance

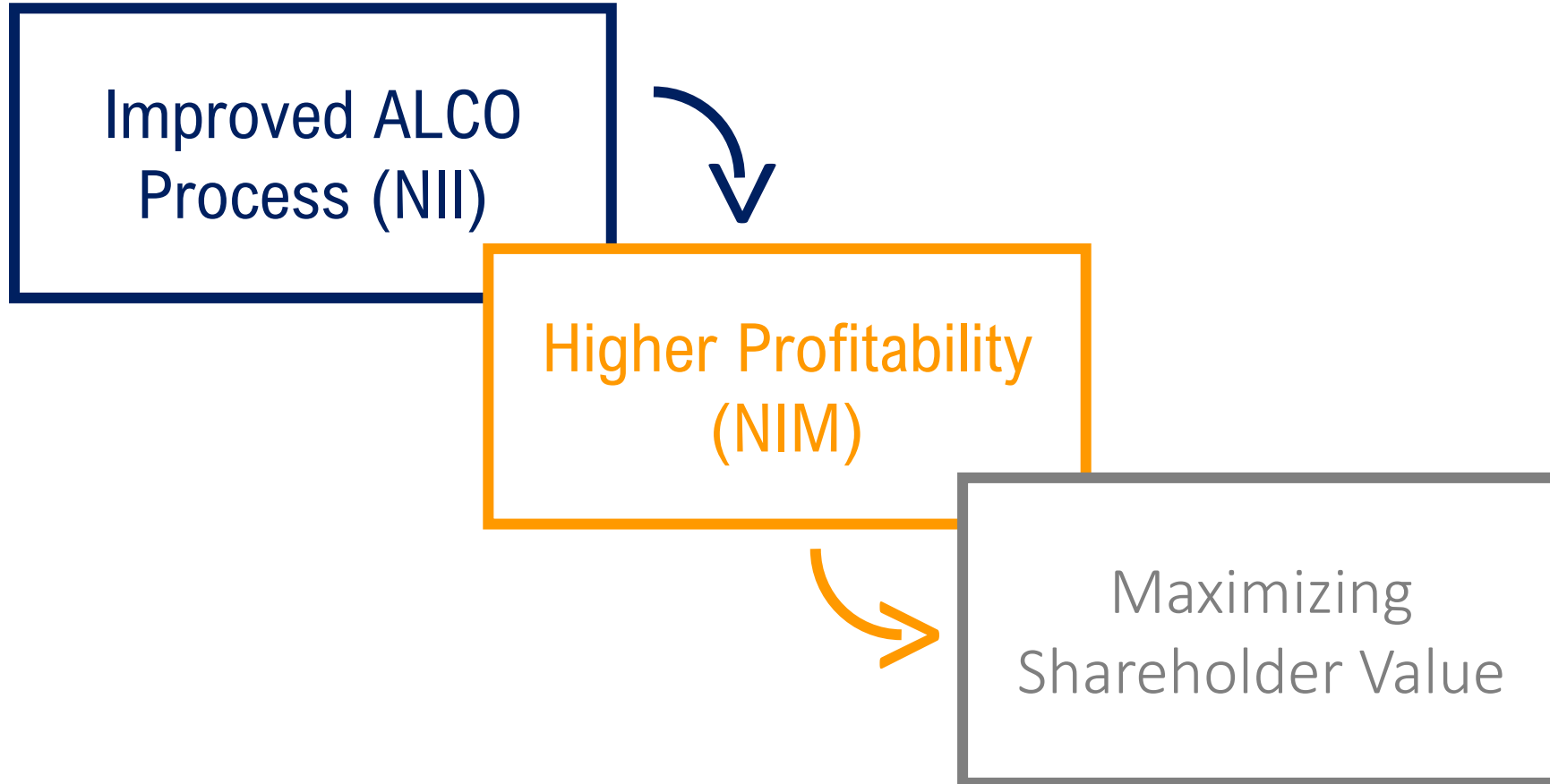
Balance Sheet Trend



Net Interest Margin - FTE



# BENEFITS OF A STRONG ALCO PROCESS



1970's	1980's	1990's	1990's-2000	2000's	COVID Era	Current & Future
<p>1<sup>st</sup> IRR Model Created 1977</p> <p>Rate Sensitive Assets To Rate Sensitive Liabilities (GAP Analysis)</p> <p>Earning At Risk</p> <p><b>Interest Rate Risk</b></p>	<p>1<sup>st</sup> CMO Created 1983</p> <p>Rate Sensitive Assets To Rate Sensitive Liabilities (GAP Analysis)</p> <p>Earning At Risk</p> <p><b>Interest Rate Risk</b></p>	<p>S&amp;L Banking Crisis 1986-1995</p> <p>Rate Sensitive Assets To Rate Sensitive Liabilities (GAP Analysis)</p> <p>Earning At Risk</p> <p>Economic Value Of Equity</p>	<p>Dot-Com Bubble &amp; Collapse 1997-2000</p> <p>Less Focus On GAP Analysis</p> <p>Earning At Risk</p> <p>Interest Income Stress Testing Economic Value Of Equity</p> <p>Industry Default Loan &amp; Deposit Assumptions</p>	<p>Subprime Mortgage Crisis 2007-2009</p> <p>Less Focus On GAP Analysis</p> <p>Earning At Risk</p> <p>Interest Income Stress Testing Economic Value Of Equity</p> <p>Bank Specific Loan &amp; Deposit Assumptions</p>	<p>COVID-19 2020 - 2022</p> <p>GAP Analysis Dropped</p> <p>Earning At Risk</p> <p>Interest Income Stress Testing Economic Value Of Equity</p> <p>Bank Specific Loan &amp; Deposit Assumptions</p> <p>Bank Specific Loan &amp; Deposit Assumptions</p> <p>Asset Sensitive Industry</p>	<p>POST COVID-19 2022 - Present</p> <p>GAP Analysis Dropped</p> <p>Earning At Risk</p> <p>Interest Income Stress Testing Economic Value Of Equity</p> <p>Bank Specific Loan &amp; Deposit Assumptions</p> <p>Bank Specific Loan &amp; Deposit Assumptions</p> <p>Stressed ALM Assumptions</p>
	<p>Investments</p> <p><b>Investments</b></p>	<p>Investments</p> <p>Market Value Shocks</p>	<p>Investments</p> <p>Market Value Shocks</p> <p>Cash Flow Shocks</p>	<p>Investments</p> <p>Market Value Shocks</p> <p>Cash Flow Shocks</p> <p>Ind. Muni. Credit Analysis</p>	<p>Investments</p> <p>Market Value Shocks</p> <p>Cash Flow Shocks</p> <p>Ind. Muni Credit Analysis</p> <p>Investment Strategies</p>	<p>Investments</p> <p>Market Value Shocks</p> <p>Cash Flow Shocks</p> <p>Ind. Muni Credit Analysis</p> <p>HTM/AFS Discussion</p>
		<p>Liquidity Assessment</p> <p><b>Liquidity</b></p>	<p>Liquidity Assessment</p> <p>Liquidity Stress Testing</p>	<p>Liquidity Assessment</p> <p>Liquidity Stress Testing</p> <p>Contingency Funding Plans</p>	<p>Liquidity Assessment</p> <p>Liquidity Stress Testing</p> <p>Contingency Funding Plans</p>	<p>Liquidity Assessment</p> <p><b>Liquidity Stress Testing Pt. 2</b></p> <p>Contingency Funding Plans</p>
			<p>Capital Adequacy Assessment</p> <p><b>Capital</b></p>	<p>Capital Adequacy Assessment</p> <p>Asset Quality Trends</p> <p>Capital Plan</p>	<p>Capital Adequacy Assessment</p> <p>Asset Quality Trends</p> <p>Capital Plan</p> <p>Capital Stress Testing</p>	<p>Capital Adequacy Assessment</p> <p>Asset Quality Trends</p> <p>Capital Plan</p> <p>Capital Stress Testing Pt. 2</p>

## What is the primary objective of your ALCO meeting?

Regulatory Appeasement



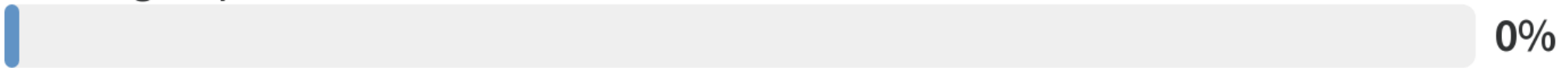
0%

Profit Improvement



62%

Setting Deposit Rates



0%

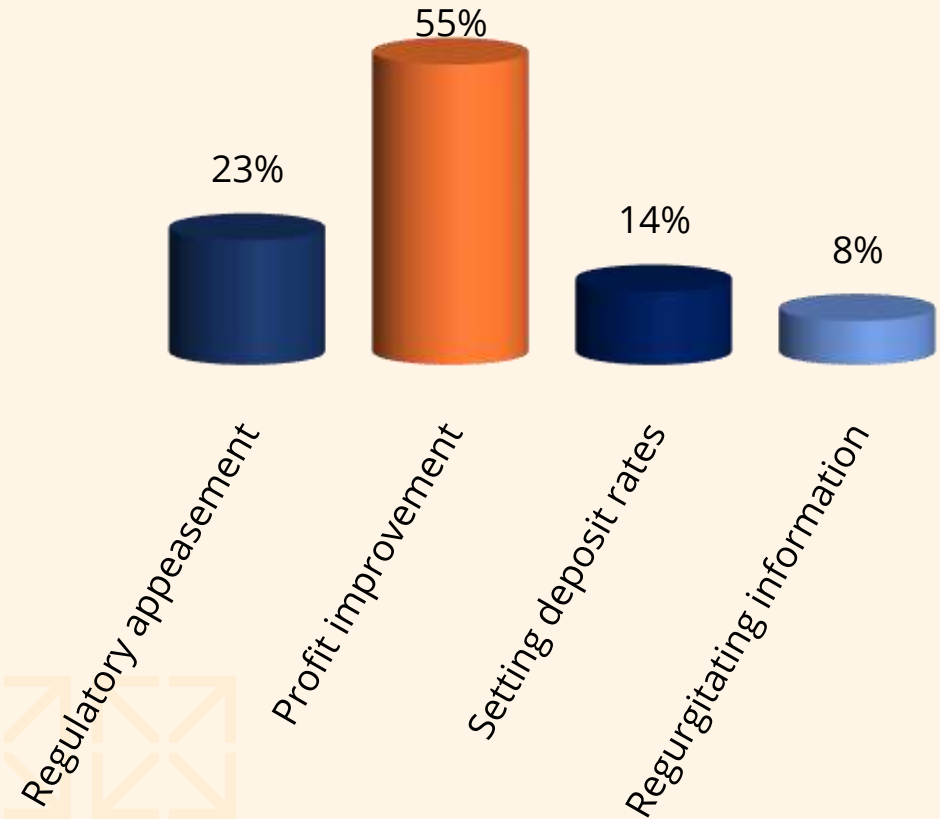
Regurgitating Information



38%

# SHESHUNOFF CEO PRE-MEETING SURVEY 4/4/23: WHAT IS THE PRIMARY OBJECTIVE OF YOUR ALCO MEETING?

- A. Regulatory Appeasement
- B. Profit Improvement
- C. Setting Deposit Rates
- D. Regurgitating Information

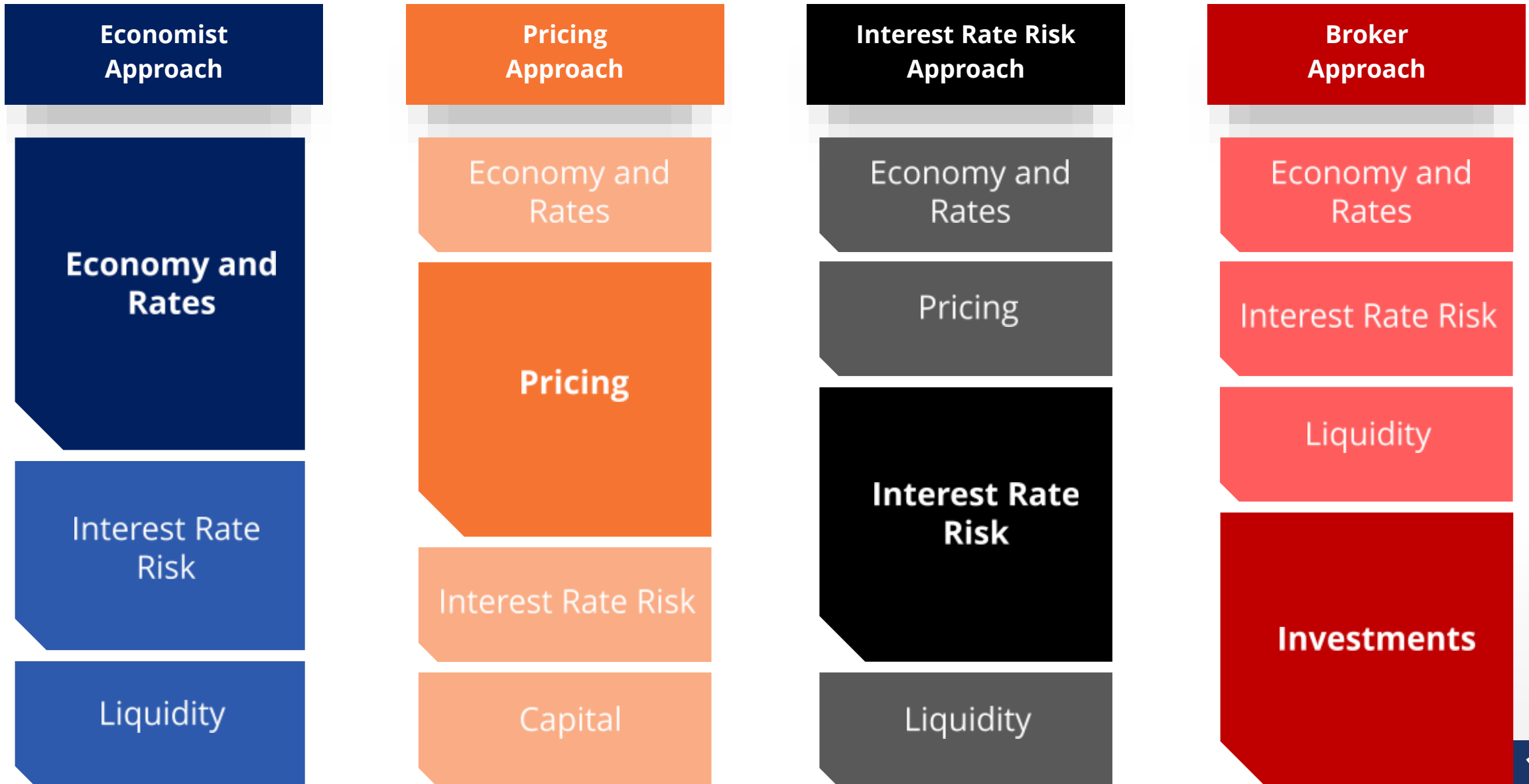


# WHAT ARE COMMON APPROACHES TO THE ALCO PROCESS?

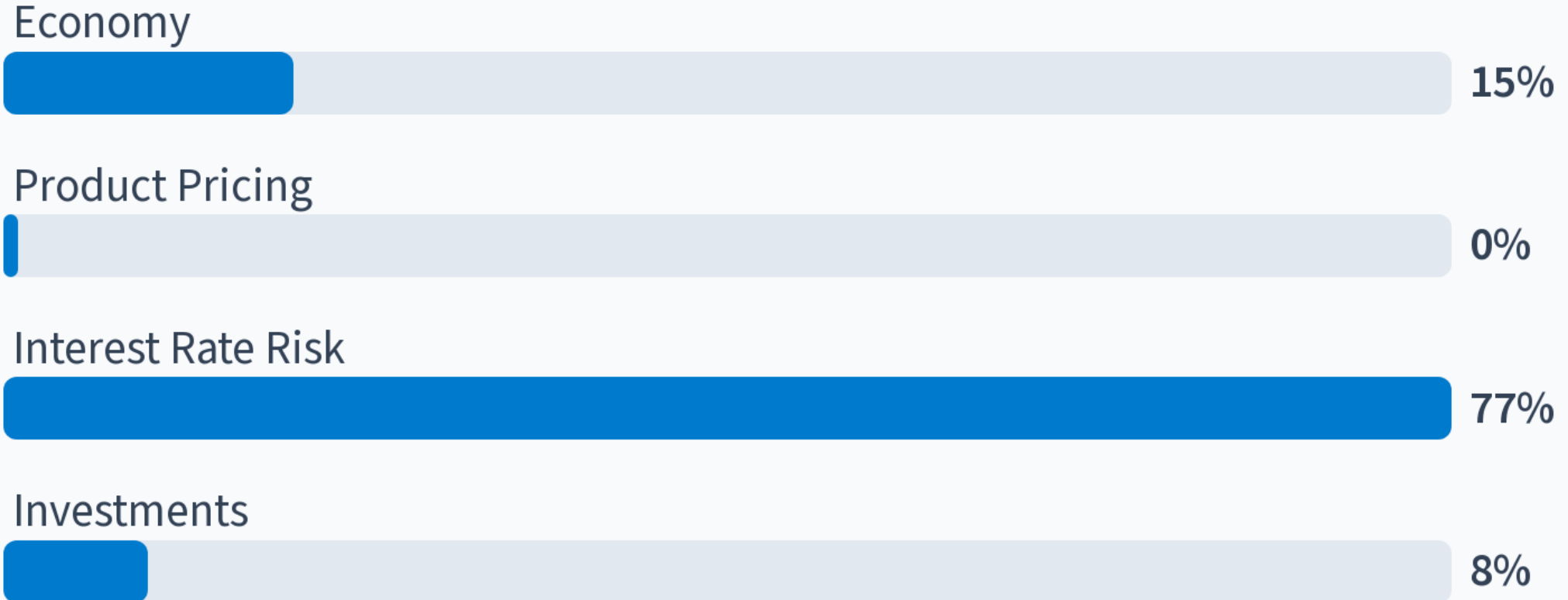




# APPROACHES TO ALCO

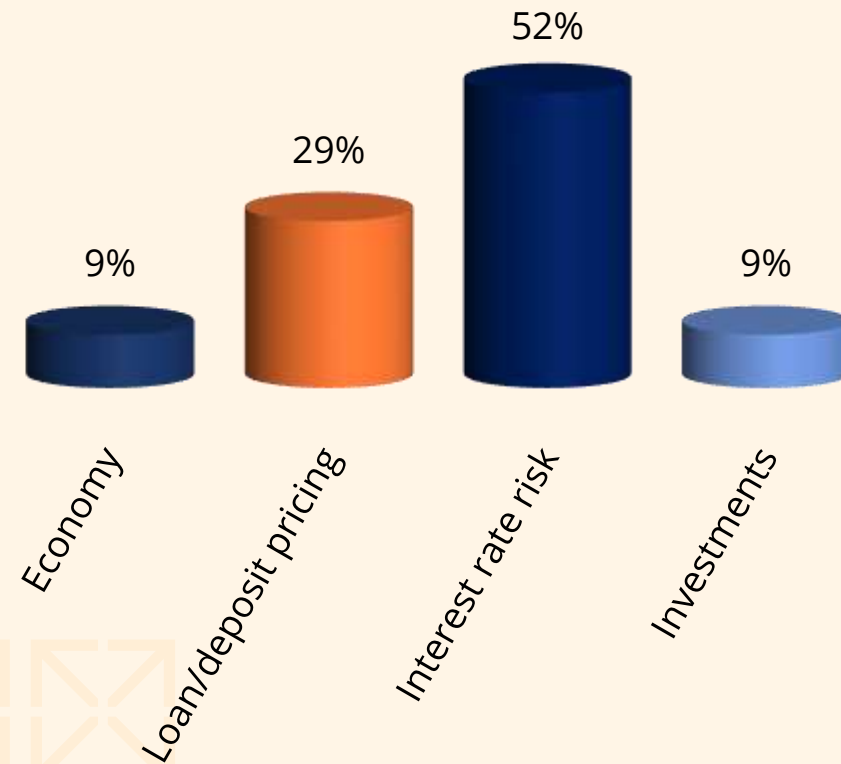


## Which area in your ALCO meetings do you overweight?



# SHESHUNOFF CEO PRE-MEETING SURVEY 4/4/23: WHICH AREA IN YOUR ALCO MEETINGS DO YOU OVERWEIGHT?

- A. Economy
- B. Loan/Deposit Pricing
- C. Interest Rate Risk
- D. Investments

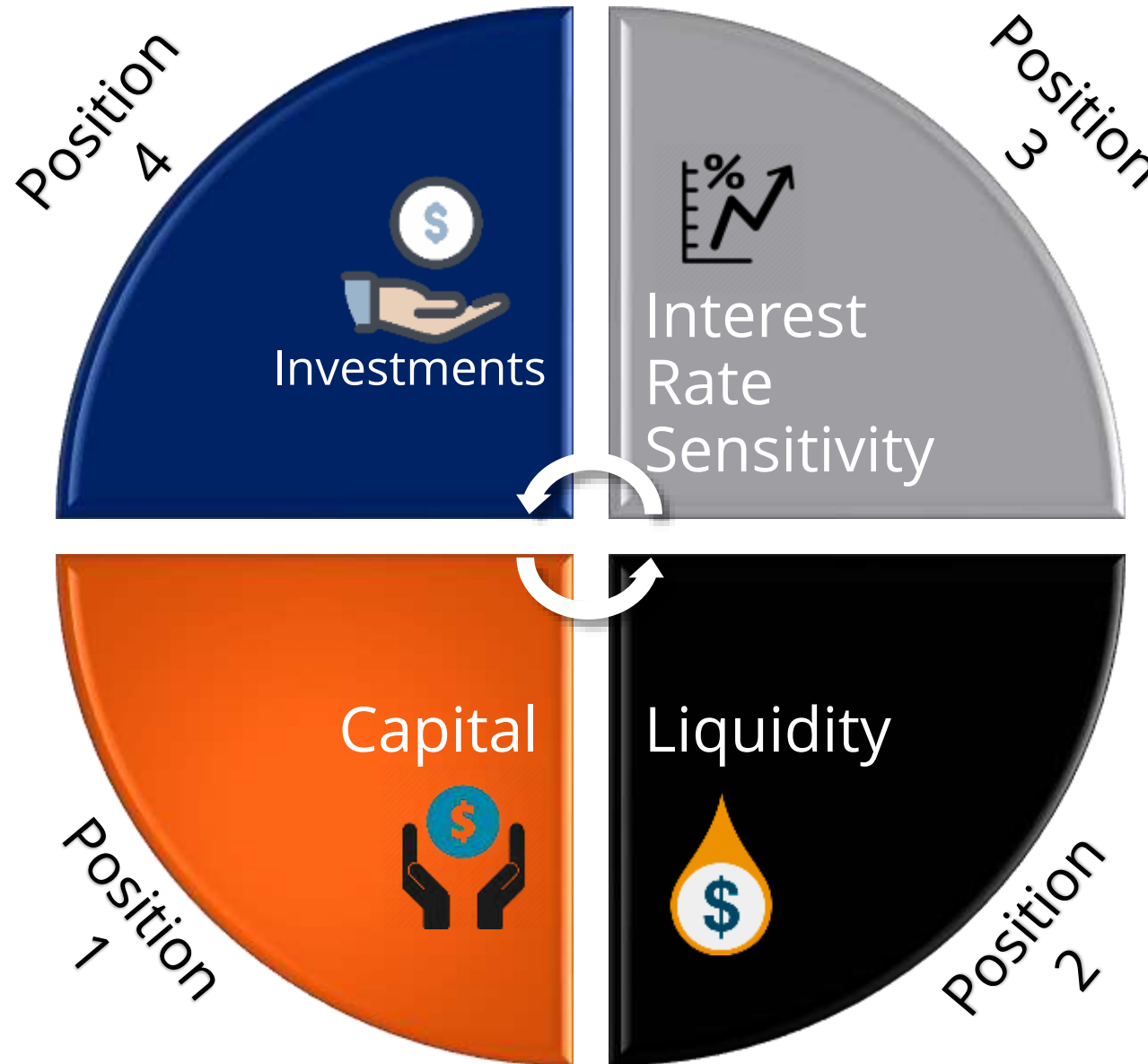


# WHAT SHOULD AN ALCO PROCESS AND PACKET LOOK LIKE?



# Position Assessment

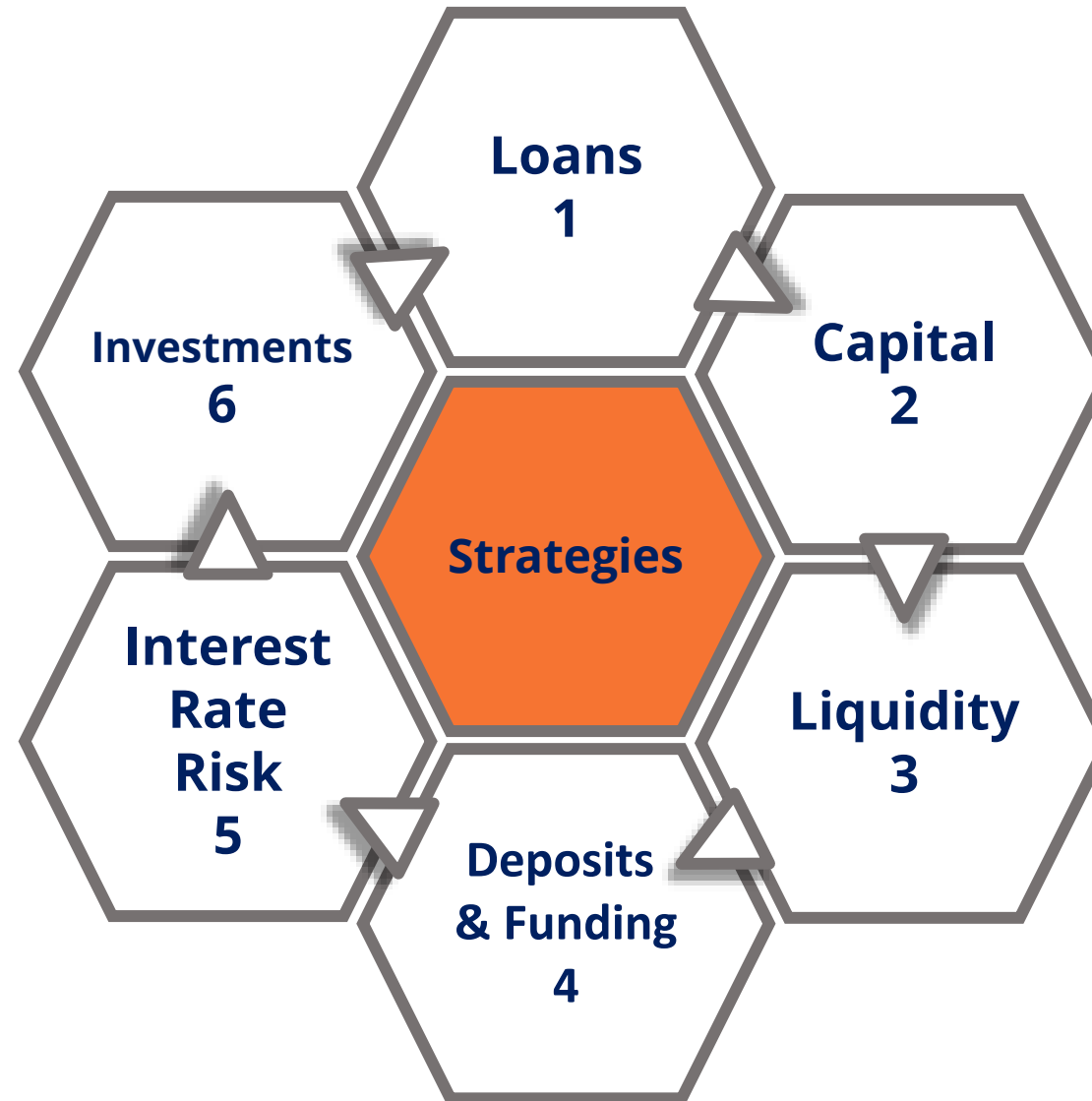
# ALCO BEST PRACTICES



# HOW ARE FINANCIAL INSTITUTIONS DIFFERENT?

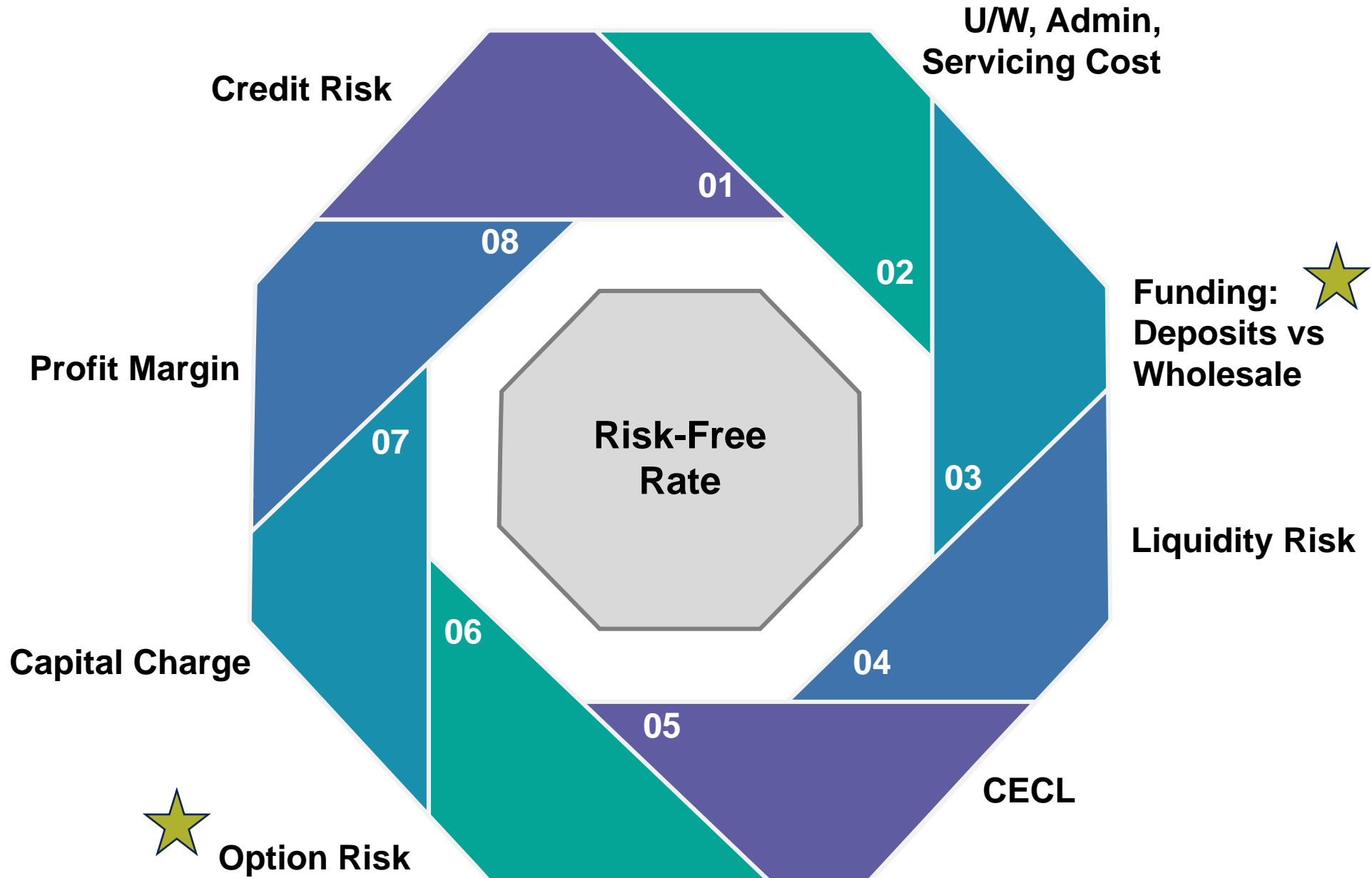
	Institution 1	Institution 2	Institution 3
<b>Balance Sheet Mix</b>			
Cash	10%	5%	0%
Investments	30%	50%	20%
Loans	60%	45%	80%
<b>Loan Mix</b>			
1-4 Family	80%	20%	35%
Commercial	10%	40%	45%
Consumer	10%	40%	20%
Fixed	90%	20%	50%
Float	10%	80%	50%
Loan Marketplace	Flat	Flat	Strong Growth
<b>Liquidity Position</b>			
FHLB Borrowing Capacity	High	Moderate	None
Core Deposit Stability	Stable	Stable	Volatile
Pledging Requirements	High	None	None
<b>Interest Rate Risk Position</b>			
Asset/Liability Sensitivity	Liability	Asset	Neutral

# OBJECTIVES AND STRATEGIES





# WHAT GOES IN TO PRICING A LOAN!



# IMPORTANT LOAN PRICING CONSIDERATIONS

**Prepayment Penalties:** Value Of Call Protection in Non-Consumer Loans, a Quantification in the Bond Market

Call Option @ Year 1

Date	Issuer/Headline	Coupon	Maturity	Spread	Curr	Outst	Book Mgr	Note
114) 9/6	FED HOME LN BANK	6.000	09/28/28		USD	15	JOINT LEADS	5-NC6MO BERM
115) 9/6	FED HOME LN BANK	5.700	09/18/28		USD	15	DW,UMB	5-NC1 BERM
116) 9/6	FED HOME LN BANK	5.800	09/18/28		USD	100	NOM-sole	5-NC1 BERM
117) 9/6	FARMER MAC	4.520	09/11/28		USD	35	STFL-sole	5-NC
118) 9/6	FED HOME LN BANK	5.750	09/12/28		USD	25	JOINT LEADS	5-NC1 BERM
119) 9/6	FREDDIE MAC	6.125	09/28/28		USD	30	FHN,MS	5-NC3MO BERM

Non-Call Bullet Structure

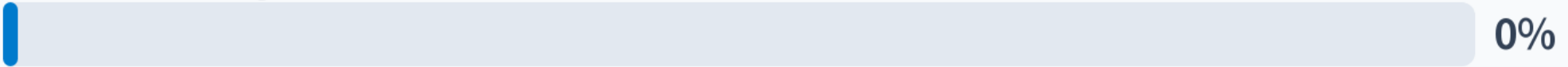
~100bp Yield Differential for Bullet vs. Callable, both 5 Year Maturities

# DEPOSIT VALUE QUANTIFICATION... A SIMPLISTIC EXERCISE

Annual Value of Deposit Relationship Matrix					
		% Avg Deposit Bal to Loan Size			
		5.0%	10.0%	15.0%	20.0%
Deposit Spread Below Wholesale Rates	0.5%	0.03%	0.05%	0.08%	0.10%
	1.0%	0.05%	0.10%	0.15%	0.20%
	1.5%	0.08%	0.15%	0.23%	0.30%
	2.0%	0.10%	0.20%	0.30%	0.40%
	2.5%	0.13%	0.25%	0.38%	0.50%
	3.0%	0.15%	0.30%	0.45%	0.60%
	3.5%	0.18%	0.35%	0.53%	0.70%
	4.0%	0.20%	0.40%	0.60%	0.80%

## How would you rate your ALCO process when it comes to driving profitability and strategies?

Above Average



Average



Below Average



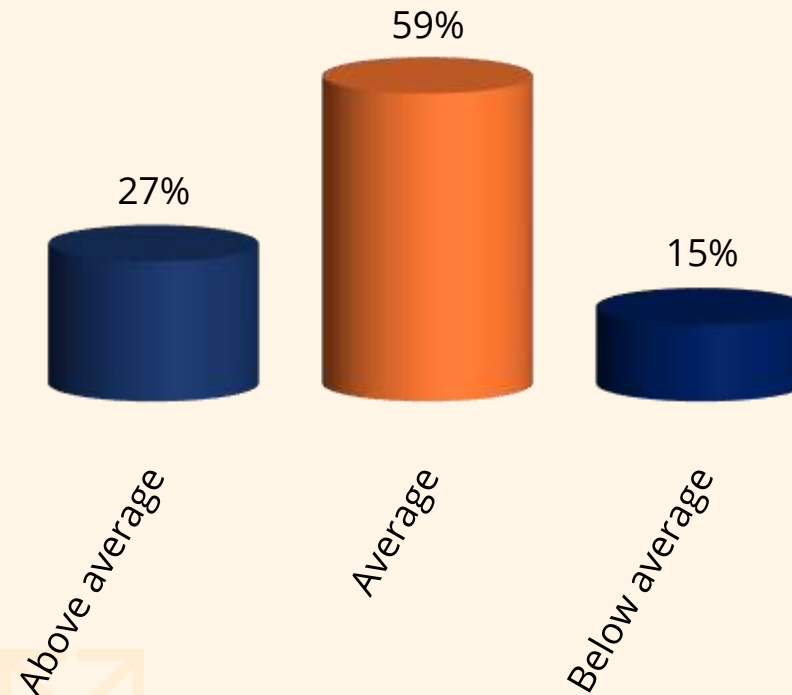
# SHESHUNOFF CEO PRE-MEETING SURVEY 4/4/23:

## HOW WOULD YOU RATE YOUR ALCO PROCESS WHEN IT COMES TO DRIVING PROFITABILITY AND STRATEGIES?

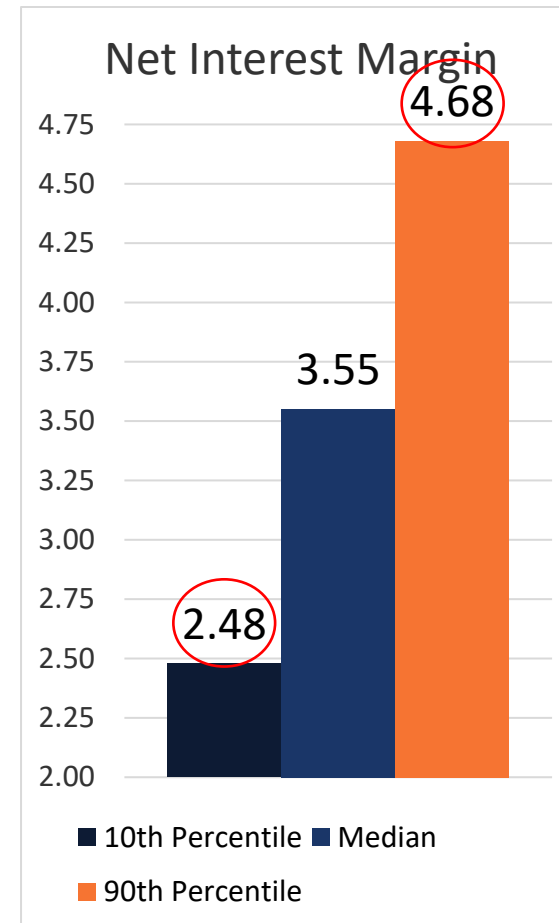
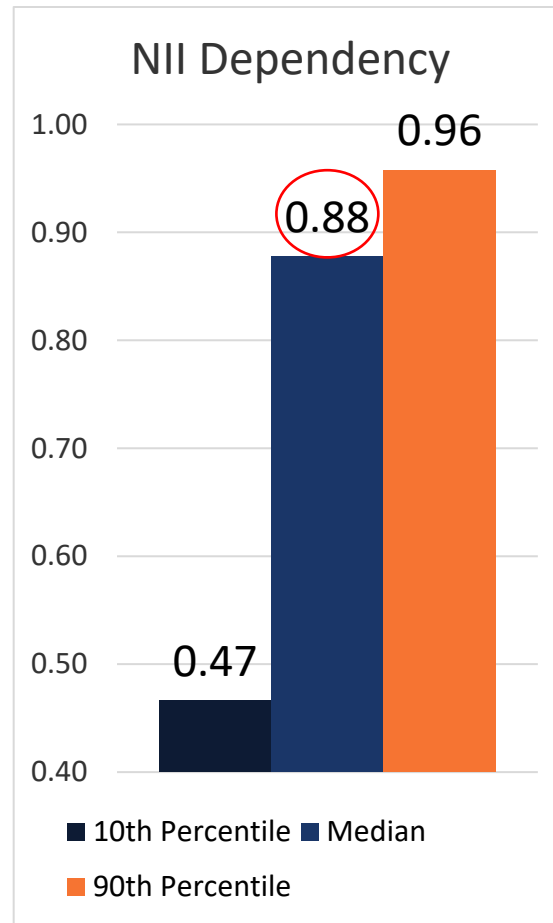
A. Above Average

B. Average

C. Below Average



# NII DEPENDENCY AND NIM AMONG ALL BANKS NATIONALLY



Source: S&P Global Market Intelligence,  
Data for all banks Nationally <\$15B as of 6/30/23

The more net interest income dependent your institution, the more NIM will drive earnings

# ONE YEAR NIM DOLLAR IMPACT

Earning Asset Size (in \$000)	Net Interest Income Change in thousands of dollars (due to Yield change in basis points)					
	5	10	15	20	25	30
25,000	13	25	38	50	63	75
50,000	25	50	75	100	125	150
100,000	50	100	150	200	250	300
250,000	125	250	375	500	625	750
500,000	250	500	750	1,000	1,250	1,500
1,000,000	500	1,000	1,500	2,000	2,500	3,000

# ALCO BEST PRACTICES

- Study the Past
- Monitor the Present
- Prepare for the Future





# STUDY THE PAST



**BLAST**  
**FROM**  
**THE PAST**

- Where were we?
  - Trend Analysis
  - Historical Ratios
  - Peer Comparison
  - Balance Sheet Mix
  - Rate Movements
  - Spread Changes
- Reflect
  - What did we do right?
  - What did we do wrong?
  - Were our strategies effective?
  - How did environment change?

# MONITOR THE PRESENT



- Where are we?
  - Position Assessment
  - Net Interest Margin Dissection
  - Competition Analysis
  - Word-Problem Approach
  - Re-focus on Objectives
  
- Reflect
  - Loan Demand vs. Deposit Growth
  - Rate Climate
  - Current Profitability (or not!)
  - Resources: Loan/Deposit Officers

# PREPARE FOR THE FUTURE



- Where *could we go*?
  - Accountability
    - Review Minutes: Action Items, Strategies
  - Tactical Forecasting
    - Loans vs. Deposit Projection
    - Liquidity Flows
  - Stress Testing
    - Capital: Credit Deterioration
    - Interest Rate Risk: Higher/Different Betas
    - Liquidity: Reduced Access to Funding
    - Securities: Cash Flow Volatility, Duration
  - Strategic Forecasting

# BALANCE SHEET MANAGEMENT - CAPITAL



- Formation
- Adequacy
- Planning
- Stress Testing
- Contingency Plan

# STUDY THE PAST

Loan Sector	Loans Concentration Expressed as a % of Total Capital														
	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Construction & Land	103%	88%	62%	55%	40%	38%	42%	36%	45%	53%	51%	54%	63%	69%	50%
Mortgages															
1st Lien	153%	144%	140%	137%	121%	137%	129%	124%	110%	119%	124%	128%	140%	154%	152%
2nd Lien	9%	9%	9%	7%	7%	7%	7%	6%	5%	4%	6%	7%	8%	8%	8%
Home Equity	15%	14%	12%	13%	12%	12%	11%	13%	15%	23%	14%	18%	15%	24%	23%
Multi Family	17%	17%	19%	16%	15%	18%	19%	8%	13%	21%	18%	19%	21%	20%	21%
Commercial Real Estate															
Owner Occupied	99%	99%	102%	102%	94%	109%	92%	87%	83%	96%	99%	102%	107%	115%	110%
Non-owner Occupied	75%	78%	67%	86%	117%	117%	104%	112%	113%	144%	159%	164%	175%	181%	180%
Commercial & Industrial	82%	79%	42%	44%	44%	52%	52%	72%	67%	73%	69%	71%	67%	73%	70%
Farm Land	20%	26%	21%	21%	18%	17%	16%	15%	15%	21%	19%	18%	24%	21%	20%
Agriculture Production	4%	3%	2%	2%	2%	3%	2%	4%	4%	3%	2%	3%	4%	4%	5%
Consumer	30%	28%	26%	25%	22%	22%	21%	22%	20%	20%	21%	21%	20%	21%	21%
Total Loans	621%	600%	515%	523%	508%	545%	511%	521%	517%	603%	608%	618%	643%	655%	651%

**Performance and Balance Sheet Snapshot - 2022Q4**  
**Sample Savings Bank (SSB)**

**Performance Rankings**

Sample

	Metric
Net Interest Margin Dissection	Yield on Investments (FTE)
	Yield on Total Loans
	Earning Asset Yield
	Interest Expense to Avg. Earning
	Net Interest Margin (FTE)

Net Interest Income Dep

**Metric**

Net Interest Margin Dissection	Yield on Investments (FTE)
	Yield on Total Loans
	Earning Asset Yield
	Interest Expense to Avg.
	Net Interest Margin (FTE)

Net Interest Income Dep

**Earning Asset Mix and**

Asset Size (\$000)
Net Loans (\$000)
Security Portfolio (\$000)
Cash and FFS (\$000)

Investment Portfolio		
Municipals (% of Portfolio)	317,248	52%
MBS (% of Portfolio)	234,666	38%
CMO (% of Portfolio)	2,459	0%
Agencies (% of Portfolio)	25,943	4%
Other Securities (% of Portfolio)	33,237	5%

**Capital**

Tier 1 Capital	337,866
Tier-1 Leverage Ratio (%)	10.30
Total Risk Based Capital	366,377
Total Risk-Based Capital Ratio (%)	13.36
Municipals (% of Total RBC)	87%

What's the Range of Capital Ratios?

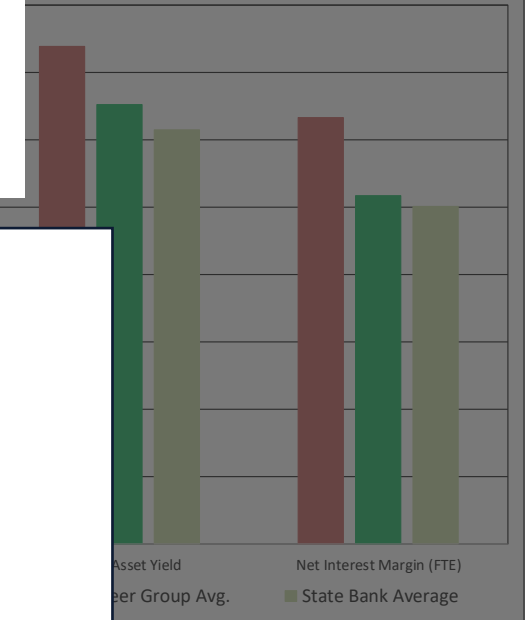
90<sup>th</sup> Percentile is 16.2%

10<sup>th</sup> Percentile is 8.5%

Range of 7.7%

*Source: S&P Global Market Intelligence,  
Data for all Banks Nationally <\$15B as of 6/30/23*

**Performance Rankings**



**Capital**

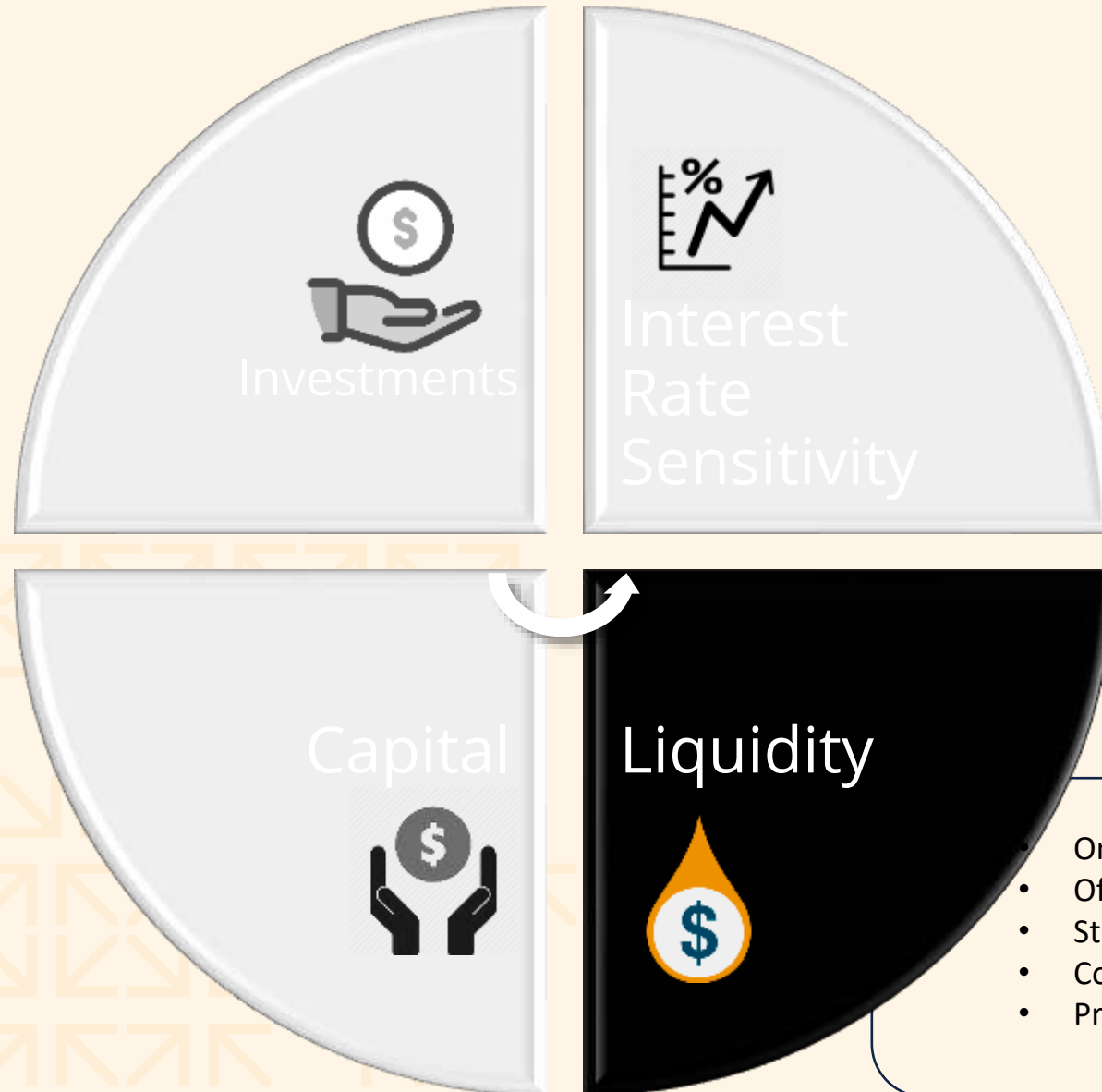
Tier 1 Capital	337,866
Tier-1 Leverage Ratio (%)	10.30
Total Risk Based Capital	366,377
Total Risk-Based Capital Ratio (%)	13.36
Municipals (% of Total RBC)	87%

# PREPARE FOR THE FUTURE

# CAPITAL STRESS TEST

- **How would your institution react if...**
  - Loan concentrations in high risk sectors exceed guidelines
  - Asset quality deteriorates to historically stressful levels
  - Charge-offs increase
  - Dividends become restricted
  - Retained earnings fall (or become negative!)
  - Capital levels decline, leading to regulatory criticism
  
- **What tools do you have at your institution?**
  - Quantify and discuss capital adequacy
  - Growth Stress Testing
  - Credit Stress Testing
    - Comparison versus a historically stressful period (and higher)
    - Measuring the impact of credit loss on capital
    - Scenario Analysis – mild and major recession

# BALANCE SHEET MANAGEMENT - LIQUIDITY



- On Balance Sheet
- Off Balance Sheet
- Stressed Liquidity
- Contingency Funding
- Profit Center



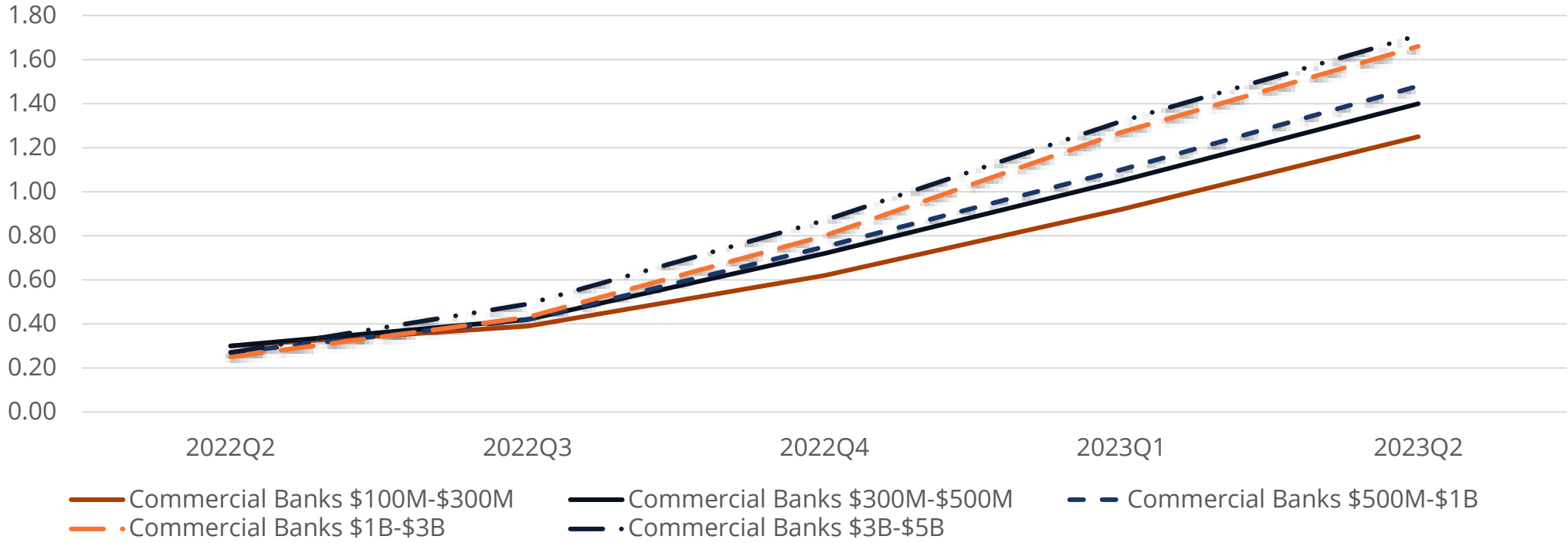
# STUDY THE PAST ASSET MIX TREND



Source: S&P Global Market Intelligence,  
Data for all banks Nationally <\$10B as of 6/30/2023

# STUDY THE PAST

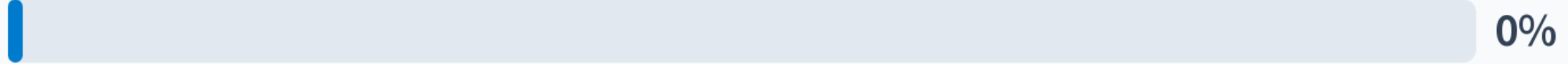
# HISTORICAL COST OF FUNDS TREND



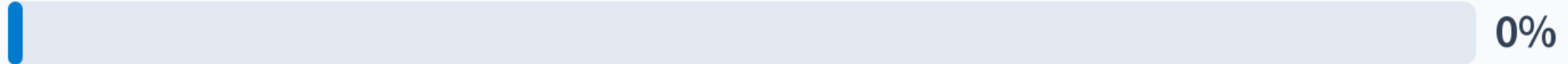
<b>Fed Funds</b>	1.75	3.25	4.50	5.00	5.25
------------------	------	------	------	------	------

## How much do you anticipate overall funding costs at your bank increasing in the next 12 months?

None



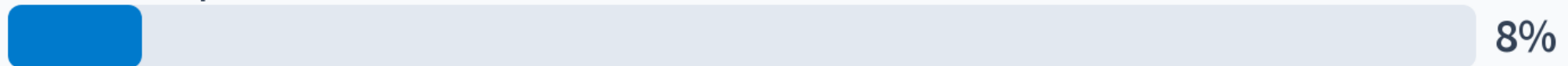
Less than 25 bps



25-50 bps



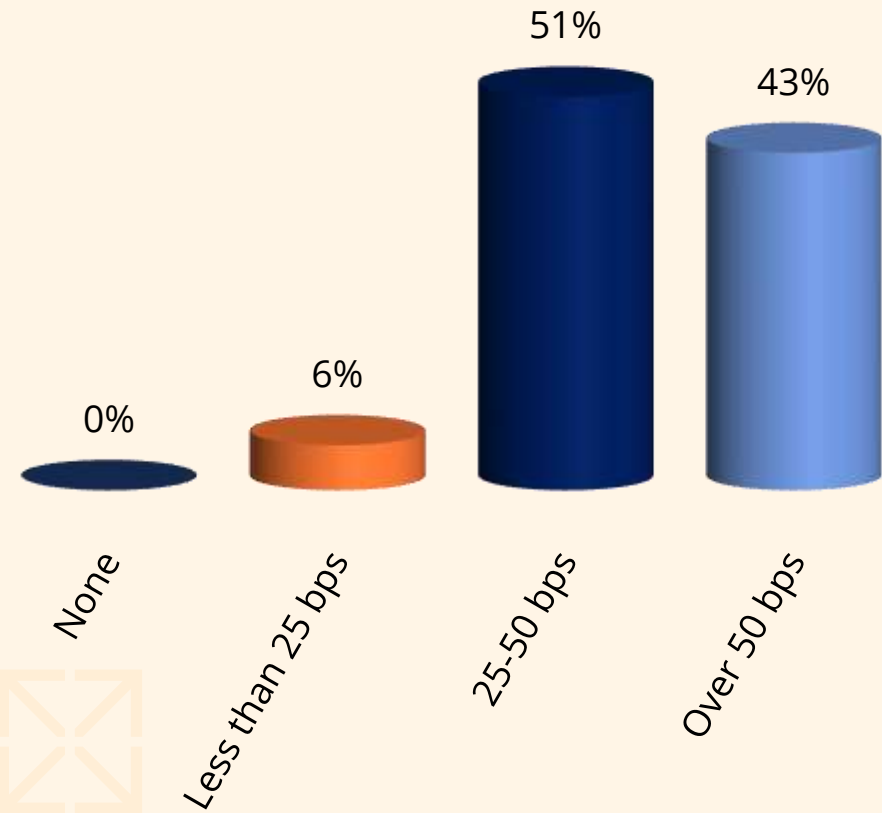
Over 50 bps



# SHESHUNOFF CEO PRE-MEETING SURVEY 4/4/23:

## HOW MUCH DO YOU ANTICIPATE OVERALL DEPOSIT RATES AT YOUR BANK INCREASING IN THE NEXT 12 MONTHS?

- A. None
- B. Less than 25 bps
- C. 25-50 bps
- D. Over 50 bps



Performance and Balance Sheet Snapshot - 2022Q4

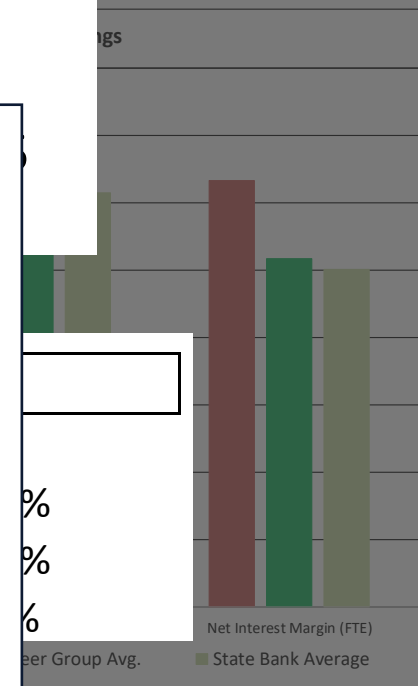
**Liquidity and Funding**

Pledged Securities (% of Portfolio)	35%
Liquidity Ratio	15%

What's the Range of Liquidity Ratios?

10<sup>th</sup> Percentile is 9.1%  
90<sup>th</sup> Percentile is 49.4%  
Range of 40.3%

Source: S&P Global Market Intelligence,  
Data for all Banks Nationally <\$15B as of 6/30/23



Earning Asset Mix and Balance Sheet Positions

Earning Asset Mix		
Asset Size (\$000)	3,533,305	
Net Loans (\$000)	2,518,839	71%
Security Portfolio (\$000)	613,553	17%
Cash and FFS (\$000)	41,099	1%

Investment Portfolio		
Municipals (% of Portfolio)	317,248	52%
MBS (% of Portfolio)	234,666	38%
CMO (% of Portfolio)	2,459	0%
Agencies (% of Portfolio)	25,943	4%
Other Securities (% of Portfolio)	33,237	5%

Liquidity and Funding	
Pledged Securities (% of Portfolio)	35%
Liquidity Ratio	15%
FHLB Advances and Brokered CDs (\$000)	488,695
Cost of Funds (% of Average Liabilities)	0.48%

Capital	
Tier 1 Capital	337,866
Tier-1 Leverage Ratio (%)	10.30
Total Risk Based Capital	366,377
Total Risk-Based Capital Ratio (%)	13.36
Municipals (% of Total RBC)	87%

- **How would your institution react if...**
  - FHLB Capacity was significantly reduced
  - Wholesale Deposit lines were shut off
  - Deposit run-off exceeded historical norms
  - The institution became subject to deposit rate caps
  
- **What tools do you have at your institution?**
  - Quantify and monitor liquidity position
  - Contingency Funding Plan: How would you cure a shortfall?
  - Early Warning Indicators
    - Prevent liquidity crisis before being subject to restrictions

# BALANCE SHEET MANAGEMENT – INTEREST RATE RISK



- Static/Dynamic Modeling
- Non-Parallel Shock/Ramp
- Impact on Asset Quality
- Assumption Development
- Assumption Stress Testing
- What-If Simulations

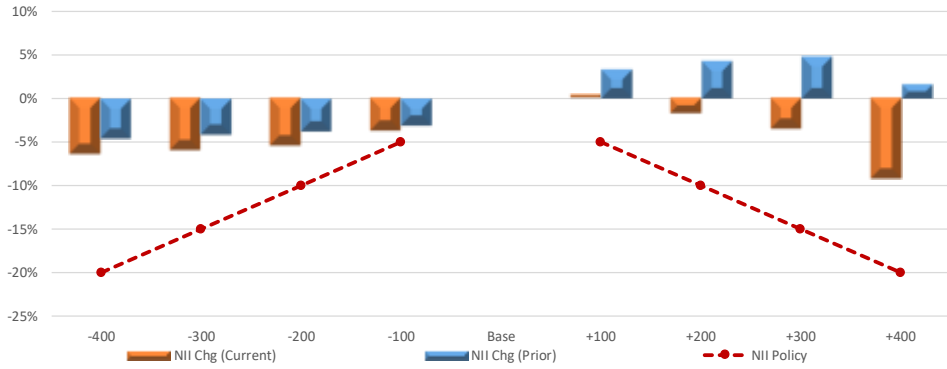
# STUDY THE PAST

Risk Scorecard								
12/31/2021								
	Policy Guideline	Dec-21	W/in Guideline (Y/N)	Oct-21	Jul-21	May-21	Feb-21	Nov-20
<b>Interest Rate Risk</b>								
Net Interest Income at Risk (1 Yr):	NII Max. Change							
Shocked up 400 bpts	-16%	14.32%	Yes	15.99%	14.11%	18.46%	22.31%	22.45%
Shocked up 300 bpts	-12%	11.33%	Yes	12.57%	11.07%	14.42%	17.60%	17.61%
Shocked up 200 bpts	-8%	8.02%	Yes	9.01%	7.90%	10.00%	12.07%	12.06%
Shocked up 100 bpts	-4%	4.24%	Yes	4.60%	4.09%	4.93%	6.12%	6.07%
Shocked down 100 bpts	-4%	-1.42%	Yes	-1.23%	-1.26%	-1.40%	-1.26%	-1.10%
Shocked down 200 bpts	-8%	-2.03%	Yes	-1.79%	-1.77%	-1.95%	-1.97%	-1.90%
Shocked down 300 bpts	-12%	-2.49%	Yes	-2.13%	-2.12%	-2.29%	-2.37%	-2.46%
Shocked down 400 bpts	-16%	-2.57%	Yes	-2.24%	-2.17%	-2.37%	-2.50%	-2.57%
Net Interest Income at Risk (2 Yr):	NII Max Change							
Shocked up 400 bpts	-32%	16.72%	Yes	18.34%	17.19%	21.91%	25.76%	25.72%
Shocked up 300 bpts	-24%	13.52%	Yes	14.61%	13.78%	17.49%	20.55%	20.51%
Shocked up 200 bpts	-16%	9.57%	Yes	10.65%	9.88%	12.21%	14.25%	14.25%
Shocked up 100 bpts	-8%	5.03%	Yes	5.38%	5.17%	6.12%	7.26%	7.26%
Shocked down 100 bpts	-8%	-1.84%	Yes	-1.61%	-1.48%	-1.61%	-1.32%	-1.32%
Shocked down 200 bpts	-16%	-2.67%	Yes	-2.33%	-2.19%	-2.35%	-2.42%	-2.42%
Shocked down 300 bpts	-24%	-3.36%	Yes	-2.89%	-2.81%	-2.93%	-3.23%	-3.23%
Shocked down 400 bpts	-32%	-3.47%	Yes	-3.07%	-2.88%	-3.07%	-3.39%	-3.39%
<b>Economic Value of Equity:</b>								
	EVE Max. Change							
Shocked up 400 bpts	-25%	2.71%	Yes	7.05%	7.73%	18.81%	24.40%	30.09%
Shocked up 300 bpts	-20%	4.74%	Yes	7.77%	9.18%	13.93%	20.78%	22.29%
Shocked up 200 bpts	-15%	5.97%	Yes	7.94%	6.03%	11.33%	16.03%	17.00%
Shocked up 100 bpts	-10%	4.27%	Yes	4.62%	3.02%	5.65%	8.18%	9.05%
Shocked down 100 bpts	-10%	-15.95%	No	-17.25%	-15.04%	-18.61%	-13.38%	-9.74%
Shocked down 200 bpts	-15%	-25.45%	No	-19.14%	-14.54%	-18.12%	-12.84%	-9.24%
Shocked down 300 bpts	-20%	-25.05%	No	-18.70%	-14.02%	-17.62%	-12.32%	-8.66%
Shocked down 400 bpts	-25%	-24.93%	Yes	-18.59%	-13.89%	-17.50%	-12.19%	-8.53%



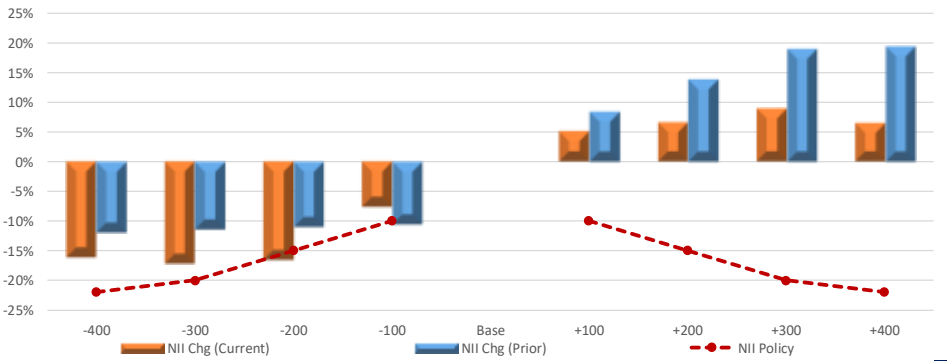
# MONITOR THE PRESENT

## Net Interest Income Year 1



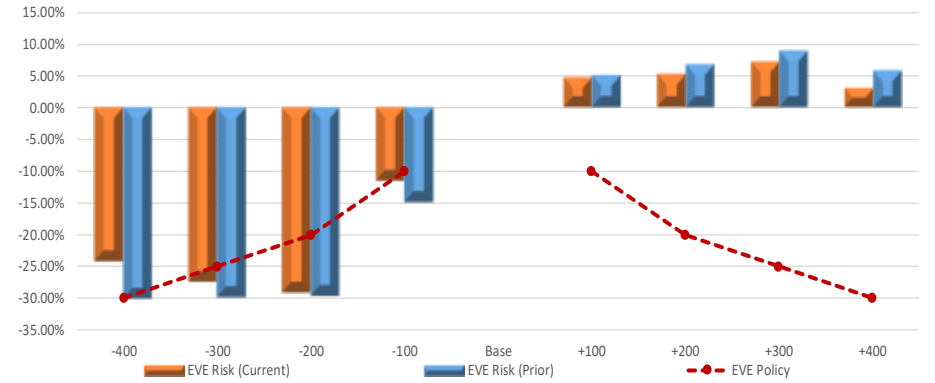
	-400	-300	-200	-100	Base	+100	+200	+300	+400
NII (Current)	21,759	21,852	21,969	22,363	\$ 23,219	23,307	22,815	22,402	21,108
NII (Prior)	22,208	22,302	22,384	22,529	\$ 23,245	23,994	24,223	24,344	23,618
NII Chg (Current)	-6.29%	-5.89%	-5.38%	-3.69%		0.38%	-1.74%	-3.52%	-9.09%
NII 1 YR Policy	-20.00%	-15.00%	-10.00%	-5.00%		-5.00%	-10.00%	-15.00%	-20.00%
NII Chg (Prior)	-4.46%	-4.06%	-3.71%	-3.08%		3.22%	4.21%	4.73%	1.60%

## Net Interest Income Year 2



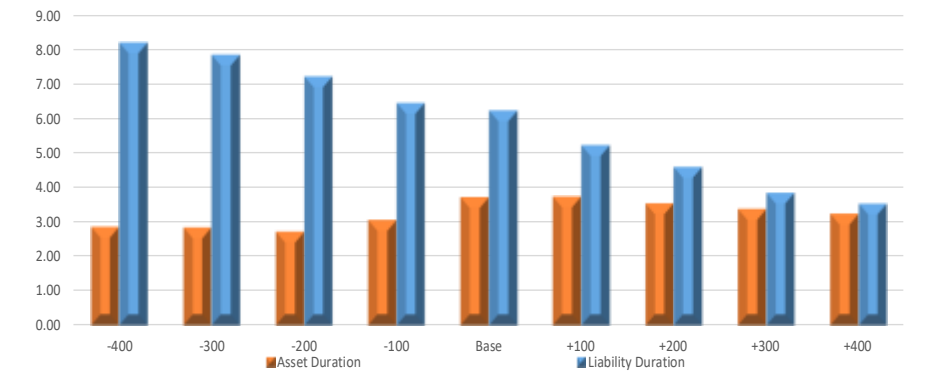
	-400	-300	-200	-100	Base	+100	+200	+300	+400
NII (Current)	19,707	19,472	19,608	21,712	\$ 23,512	24,708	25,061	25,606	25,028
NII (Prior)	20,496	20,604	20,702	20,801	\$ 23,248	25,194	26,457	27,644	27,750
NII Chg (Current)	-16.18%	-17.18%	-16.60%	-7.65%		5.09%	6.59%	8.91%	6.45%
NII 2 YR Policy	-22.00%	-20.00%	-15.00%	-10.00%		-10.00%	-15.00%	-20.00%	-22.00%
NII Chg (Prior)	-11.84%	-11.37%	-10.95%	-10.53%		8.37%	13.80%	18.91%	19.36%

## Economic Value of Equity



	-400	-300	-200	-100	Base	+100	+200	+300	+400
EVE (Current)	104,384	99,883	97,561	121,668	\$ 137,463	144,001	144,675	147,292	141,592
EVE (Prior)	97,505	97,771	97,966	118,298	\$ 138,912	145,851	148,351	151,267	147,019
EVE Risk (Current)	-24.06%	-27.34%	-29.03%	-11.49%		4.76%	5.25%	7.15%	3.00%
EVE Policy	-30.00%	-25.00%	-20.00%	-10.00%		-10.00%	-20.00%	-25.00%	-30.00%
EVE Risk (Prior)	-29.81%	-29.62%	-29.48%	-14.84%		5.00%	6.80%	8.89%	5.84%

## Asset/ Liability Duration



	-400	-300	-200	-100	Base	+100	+200	+300	+400
Asset Duration	2.82	2.80	2.67	3.02	3.66	3.68	3.49	3.32	3.18
Liability Duration	8.20	7.85	7.21	6.45	6.24	5.22	4.60	3.83	3.52

# PREPARE FOR THE FUTURE INTEREST RATE RISK STRESS TEST

## Stress Testing of Critical Assumptions

### Net Interest Income Year 1

Scenario*	-400	-300	-200	-100	Level	+100	+200	+300	+400
Static Forecast	-4.2%	-4.2%	-4.2%	-2.8%		1.4%	4.8%	10.3%	16.6%
50% Prepay	-3.4%	-3.4%	-3.5%	-2.4%	0.0%	1.2%	4.4%	9.7%	15.8%
150% Prepay	-5.0%	-4.9%	-4.9%	-3.2%	0.0%	1.6%	5.2%	10.8%	17.3%
.8x Deposit Beta	-4.2%	-4.3%	-4.3%	-3.0%	0.0%	1.7%	5.3%	11.1%	17.6%
1.2x Deposit Beta	-4.2%	-4.2%	-4.2%	-2.7%	0.0%	1.1%	4.3%	9.6%	15.7%
<b>ALCO Policy</b>	<b>-24%</b>	<b>-18%</b>	<b>-12%</b>	<b>-6%</b>		<b>-6%</b>	<b>-12%</b>	<b>-18%</b>	<b>-24%</b>

### Net Interest Income Year 2

Scenario	-400	-300	-200	-100	Level	+100	+200	+300	+400
Static Forecast	-8.6%	-8.6%	-8.5%	-5.7%		3.6%	9.4%	17.6%	26.7%
50% Prepay	-7.1%	-7.1%	-7.1%	-4.8%	0.0%	3.1%	8.6%	16.4%	25.1%
150% Prepay	-9.8%	-9.8%	-9.7%	-6.4%	0.0%	4.0%	10.1%	18.6%	28.0%
.8x Deposit Beta	-8.6%	-8.7%	-8.6%	-5.8%	0.0%	3.8%	9.8%	18.2%	27.5%
1.2x Deposit Beta	-8.6%	-8.6%	-8.4%	-5.5%	0.0%	3.4%	9.0%	17.0%	25.8%
<b>ALCO Policy</b>	<b>-29%</b>	<b>-23%</b>	<b>-17%</b>	<b>-11%</b>		<b>-11%</b>	<b>-17%</b>	<b>-23%</b>	<b>-29%</b>

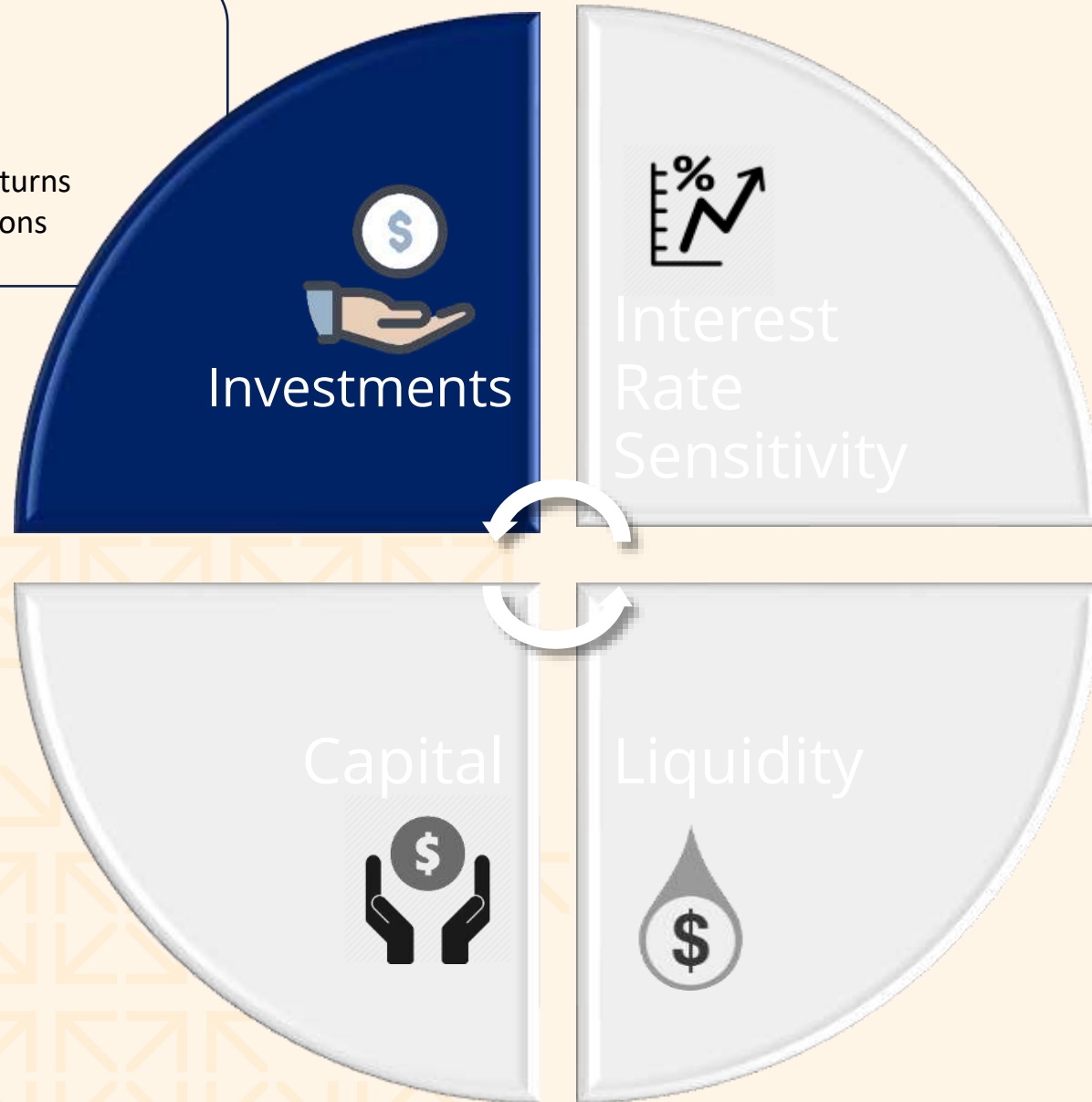
### Economic Value of Equity

Scenario	-400	-300	-200	-100	Level	+100	+200	+300	+400
Static Forecast	-23.4%	-23.3%	-10.9%	-2.6%		-1.5%	-3.6%	-5.5%	-7.0%
50% Prepay	-13.5%	-13.5%	-3.2%	0.3%	0.0%	-3.1%	-5.9%	-8.3%	-10.3%
150% Prepay	-28.0%	-28.0%	-15.2%	-4.5%	0.0%	-0.4%	-1.7%	-3.1%	-4.2%
.8x Deposit Beta	-22.8%	-22.9%	-10.7%	-2.8%	0.0%	-1.3%	-3.1%	-4.7%	-6.1%
1.2x Deposit Beta	-22.8%	-22.8%	-10.6%	-2.4%	0.0%	-1.8%	-4.0%	-6.1%	-7.8%
25% Decay Term	-7.9%	-7.9%	-3.3%	0.9%	0.0%	-4.0%	-8.2%	-12.0%	-15.2%
<b>ALCO Policy</b>	<b>-35%</b>	<b>-30%</b>	<b>-25%</b>	<b>-15%</b>		<b>-15%</b>	<b>-25%</b>	<b>-30%</b>	<b>-35%</b>

Source: Stifel Analytics  
Interest Rate Risk Model

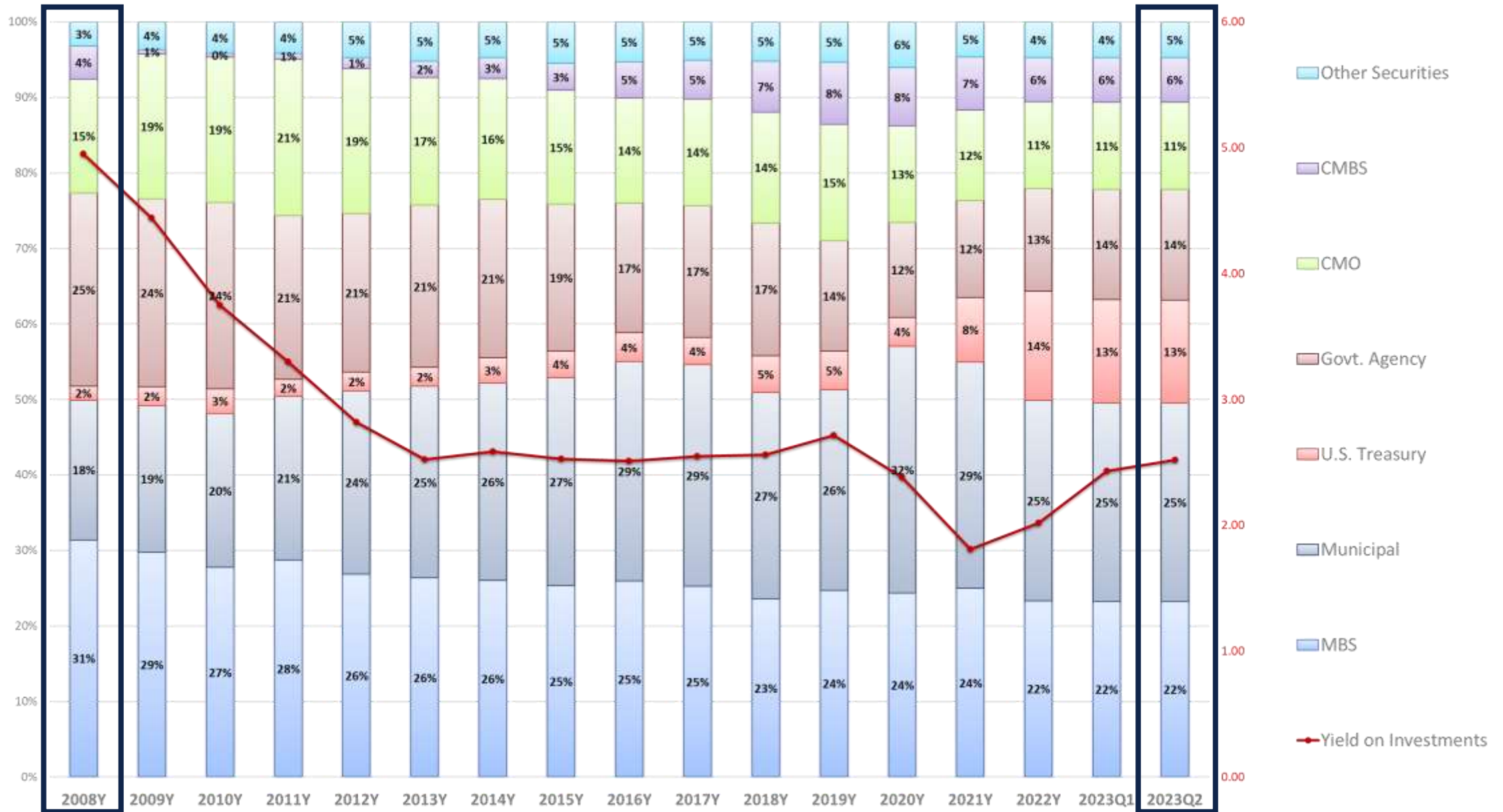
# BALANCE SHEET MANAGEMENT – INVESTMENTS

- Liquidity Risk
- Price Risk
- Credit Risk
- Impairment
- Risk Adjusted Returns
- ALM Considerations



# STUDY THE PAST

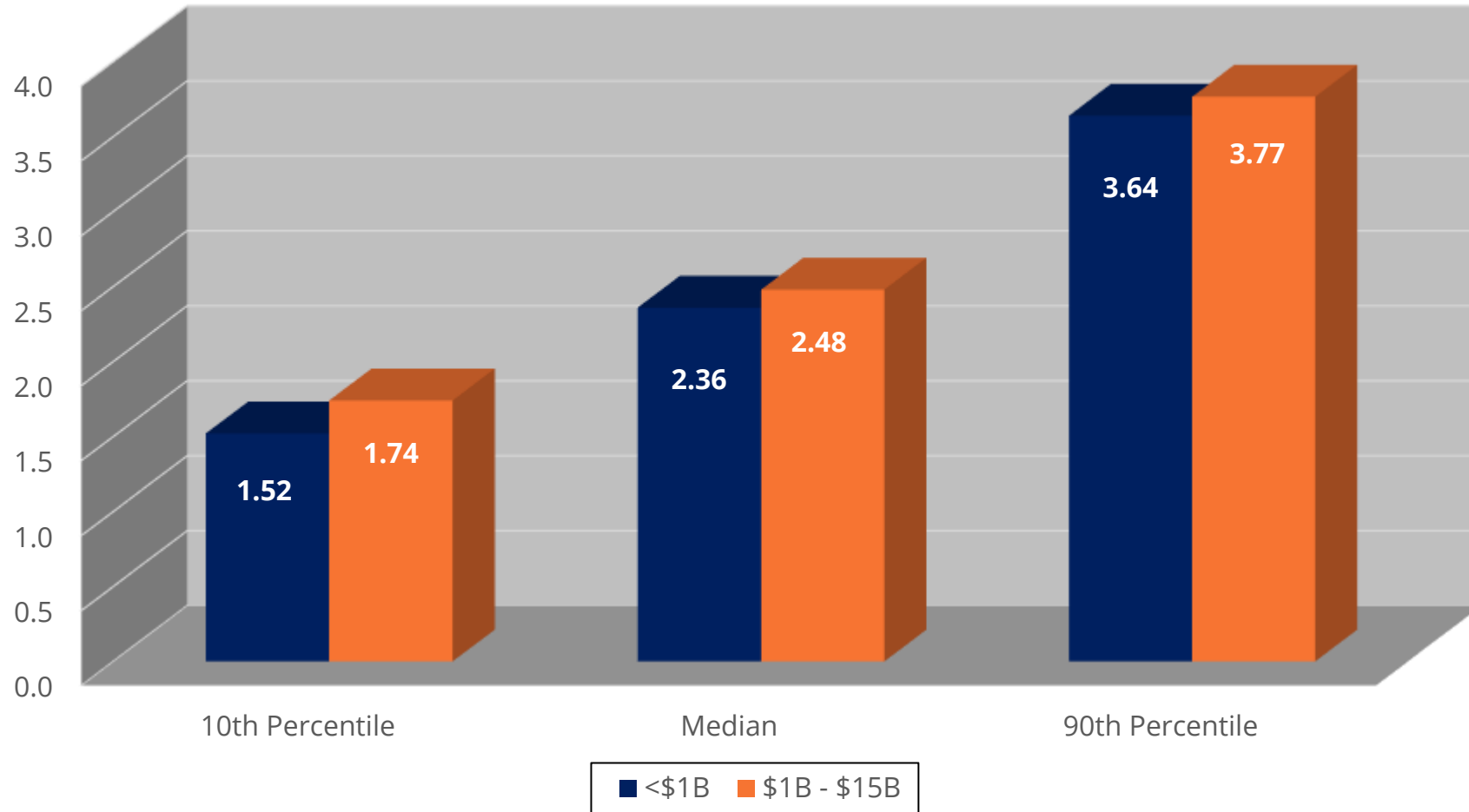
# SECURITY MIX TREND



Source: S&P Global Market Intelligence, Data for all U.S. Commercial Banks <\$10B as of 6/30/23

# MONITOR THE PRESENT

# INVESTMENT YIELD STATISTICS



Source: S&P Global Market Intelligence,  
Data for all Banks Nationally <\$15B as of 6/30/23

# PREPARE FOR THE FUTURE INVESTMENT MANAGEMENT BEST PRACTICES



## Strategy

- Independent expert advice on portfolio strategies with regular review
- Whole-Institution perspective approach to portfolio positioning



## Investment Mix

- Diversification among investment sectors, risk/reward & relative value analysis
- Expanded range of permissible investment products



## Security Selection

- Market knowledge and expertise helps optimal security selection
- Monitor policy compliance with security purchases



## Trade Execution

- Poor trade execution can impact investment returns
- Fiduciary vs. Broker

# TAYLOR ADVISORS EBRIEF – ASSESSING YOUR INVESTMENT PROCESS

## Assessing Your Investment Process and Portfolio Performance: Broker vs. Advisor Approach

10/28/2020 | 8 MIN READ

*Investment portfolios and overnight cash positions have grown significantly at many financial institutions due to a recent surge in deposits and slower portfolio loan demand. With record low interest rates, carrying excess cash on the balance sheet has been costly. These factors are forcing executive teams to re-focus on the investment portfolio to help relieve net interest margin pressure from declining earning asset yields.*

*In general, financial institutions have two options for managing the investment portfolio. We will refer to these as the Broker and the Advisor approach.*

### ***The Broker Approach***

*An institution's financial executive (CFO, President, Portfolio Manager, etc.) has the option of working directly with a variety of brokers/brokerage firms to make investments for the portfolio. Usually, brokers will present different products for consideration often via...*

[Read Full Article](#)

*If you are considering a change from a broker approach to an advisor approach or switching advisors, below we discuss seven benefits and/or best practices of working with an investment advisor to improve portfolio and balance sheet performance:*

1. Investment Management from a Whole Balance Sheet Perspective
2. Accountability & Transparency
3. Strategy and Relative Value Analysis
4. **Exclusive Product Access**
5. Staying in Control
6. **Reducing Transaction Costs and Improving Execution**
7. Redirected Productivity

# Poor Trade Execution: Lower Liquidity

056832AM Muni 99 Disclaimer 94 Export 97 Settings Trade History

Issuer BAINBRIDGE GA COMB UTILITY REV CUSIP 056832AM0  
 Series Coupon 4.000 Maturity 12/01/37 Issued 12/28/21 State GA  
 Range: 02/01/22 - 07/21/22 Trade Size All Sizes

1) Bond 2) Series 3) Issuer

View Price Spread: Convention YTW YTM

Trade Aggregate			Price			Dealer to Client Volume(M)			D-D
Days	Volume (M)*	Trds	High	Low	Avg	Dlr Buy	Dlr Sell	Net	Vol(M)
2	5,440	12	99.500	96.512	97.645	1,360	1,360	0	2,720

Charts

	Date	Vol(M)*	Trds	High	Low	Avg	Dlr Buy	Dlr Sell	Net	Vol(M)
101)	06/23/22	1,000	1	99.500	99.500	99.500	0	1,000	-1,000	0
102)	06/16/22	4,440	11	98.750	96.512	97.476	1,360	360	1,000	2,720

\*Volumes of MM+ are considered 5MM until the actual volume is disclosed.  
 Australia 61 2 9777 8600 Brazil 5511 2395 9000 Europe 44 20 7330 7500 Germany 49 69 9204 1210 Hong Kong 852 2977 6000  
 Japan 81 3 4565 8900 Singapore 65 6212 1000 U.S. 1 212 318 2000 Copyright 2022 Bloomberg Finance L.P.  
 SN 455022 EDT GMT-4:00 G657-3659-171 21-Jul-2022 16:08:21

## Transaction Details

99.500 Client Px  
 - 96.512 Broker Px  
 = **2.988 Excessively High Mark-Up**

x 1,000,000 PAR  
**\$29,880 Broker Commission**

x 10 million PAR  
**\$298,800 Broker Commission**



### Bank Purchase (BQ)

Trade Date 4/27/2022

Union Schools, IN

YTW = 2.85%

TEY = 4.05% →

### Difference

YTW = 50 bps

TEY = 71 bps ←

### Taylor Advisors Purchase (BQ)

Trade Date 4/27/2022

Lakeland Schools, IN

YTW = 3.35%

← TEY = 4.76%

90621PJZ Muni		Report	Alert	Settings	Page 1/12	Security Description: Muni
UNION CNTY IN SCH BLDG CORP						
94 Notes		CUSIP 90621PJZ8				
TICKER UNIEDU		Cpn 4.000	Maturity 01/15/2031	Dated 05/17/2022 State IN		
25) Municipal Bond	26) Series	27) Obligor Description	28) Insights			
Pages	Municipal Bond Information		Trading Information			
11) Bond Info	Issue Type	REVENUE BONDS	1st Settle Dt	05/17/2022		
12) Addtl Info	Ult Borrower	Union County-College Corn...	Next Settle Dt	04/12/2023		
13) Involved Parties	Maturity Type	NON-CALLABLE	Int Accrual Dt	05/17/2022		
14) Adj Cpn Info	Ext Redemption	NONE	1st Coupon Dt	07/15/2023		
15) Credit Enhance	Coupon	FIXED 4.000	Sale Date	04/26/2022		
16) Credit Ratings	Prc/Yld @ Iss	107.574/3.000	Piece/Inc/Par	5,000/5,000/5,000		
17) Call Sched & ERP	Coupon Freq	SEMI-ANNUAL	BVAL AAA Spd...	39		
18) Put Schedule	Tax Provision	FED BQ/ST TAX-EXEMPT				
19) Sink & Est Sink	Credit Enhancement					
20) Refunding Info	Insurance/Program - ST INTERCEPT					
21) DES Notes	Quick Links					
22) Impact	Bond Ratings					
	S&P(Std)	AA+	STA			
	Underlying	A+	STA			
31) TDH	MSRB Trade					
32) CACS	Material Evt					
33) CF	Filings					
34) CN	Sec News					
35) HDS	Holders					
66) Send Bond						

Secondary Purchase @ 2.85% YTW

511786BN Muni		Report	Alert	Settings	Page 1/12	Security Description: Muni
LAKELAND IN SCH BLDG CORP						
94 Notes		CUSIP 511786BN4				
TICKER LKLSCD		Cpn 4.000	Maturity 07/15/2031	Dated 05/19/2022 State IN		
25) Municipal Bond	26) Series	27) Obligor Description	28) Insights			
Pages	Municipal Bond Information		Trading Information			
11) Bond Info	Issue Type	REVENUE BONDS	1st Settle Dt	05/19/2022		
12) Addtl Info	Ult Borrower	Lakeland School Corp	Next Settle Dt	04/12/2023		
13) Involved Parties	Maturity Type	NON-CALLABLE	Int Accrual Dt	05/19/2022		
14) Adj Cpn Info	Ext Redemption	NONE	1st Coupon Dt	07/15/2023		
15) Credit Enhance	Coupon	FIXED 4.000	Sale Date	04/25/2022		
16) Credit Ratings	Prc/Yld @ Iss	105.085/3.350	Piece/Inc/Par	5,000/5,000/5,000		
17) Call Sched & ERP	Coupon Freq	SEMI-ANNUAL	BVAL AAA Spd...	72		
18) Put Schedule	Tax Provision	FED BQ/ST TAX-EXEMPT				
19) Sink & Est Sink	Credit Enhancement					
20) Refunding Info	Insurance/Program - ST INTERCEPT					
21) DES Notes	Quick Links					
22) Impact	Bond Ratings					
	S&P(Std)	AA+	STA			
	Underlying	A	STA			
31) TDH	MSRB Trade					
32) CACS	Material Evt					
33) CF	Filings					
34) CN	Sec News					
35) HDS	Holders					
66) Send Bond						

Bought at New Issue

WHAT IS YOUR INSTITUTION'S  
PORTFOLIO YIELD?

INVESTMENT MIX?



Performance and Balance Sheet Snapshot - 2021Q4  
Sample Savings Bank (SSB)

Performance

Sample Savings Bank versus UBPR Peer Group

	Metric	Sample Savings Bank	UBPR Peer Group Average	Percentile Rank
Net Interest Margin Dissection	Yield on Investments (FTE)	3.81	1.78	98%
	Yield on Total Loans	4.39	4.69	33%
	Earning Asset Yield	4.23	3.49	88%
	Interest Expense to Avg. Earning Assets	0.40	0.22	89%
	Net Interest Margin (FTE)	3.82	3.26	84%
	Net Interest Income Dependency Ratio	0.46	0.81	2%

Metric	Sample Savings Bank	State Bank Average	Percentile Rank
Yield on Investments (FTE)	3.81	2.03	97%

Earning Asset Mix and Balance Sheet Positions

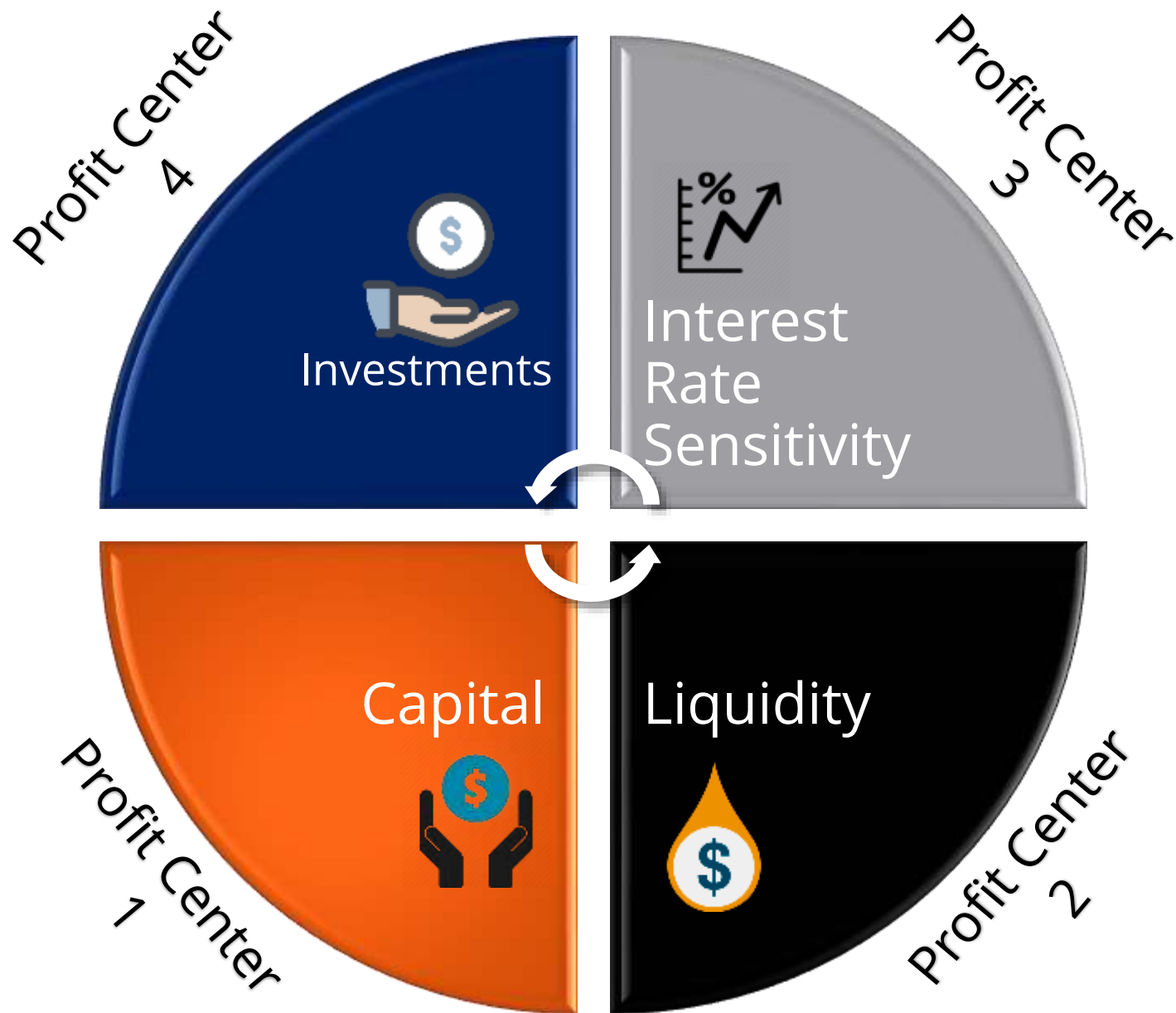
Earning Asset Mix

Asset Size (\$000)	1,758,936	
Net Loans (\$000)	1,303,874	74%
Security Portfolio (\$000)	220,927	13%
Cash and FFS (\$000)	36,991	2%

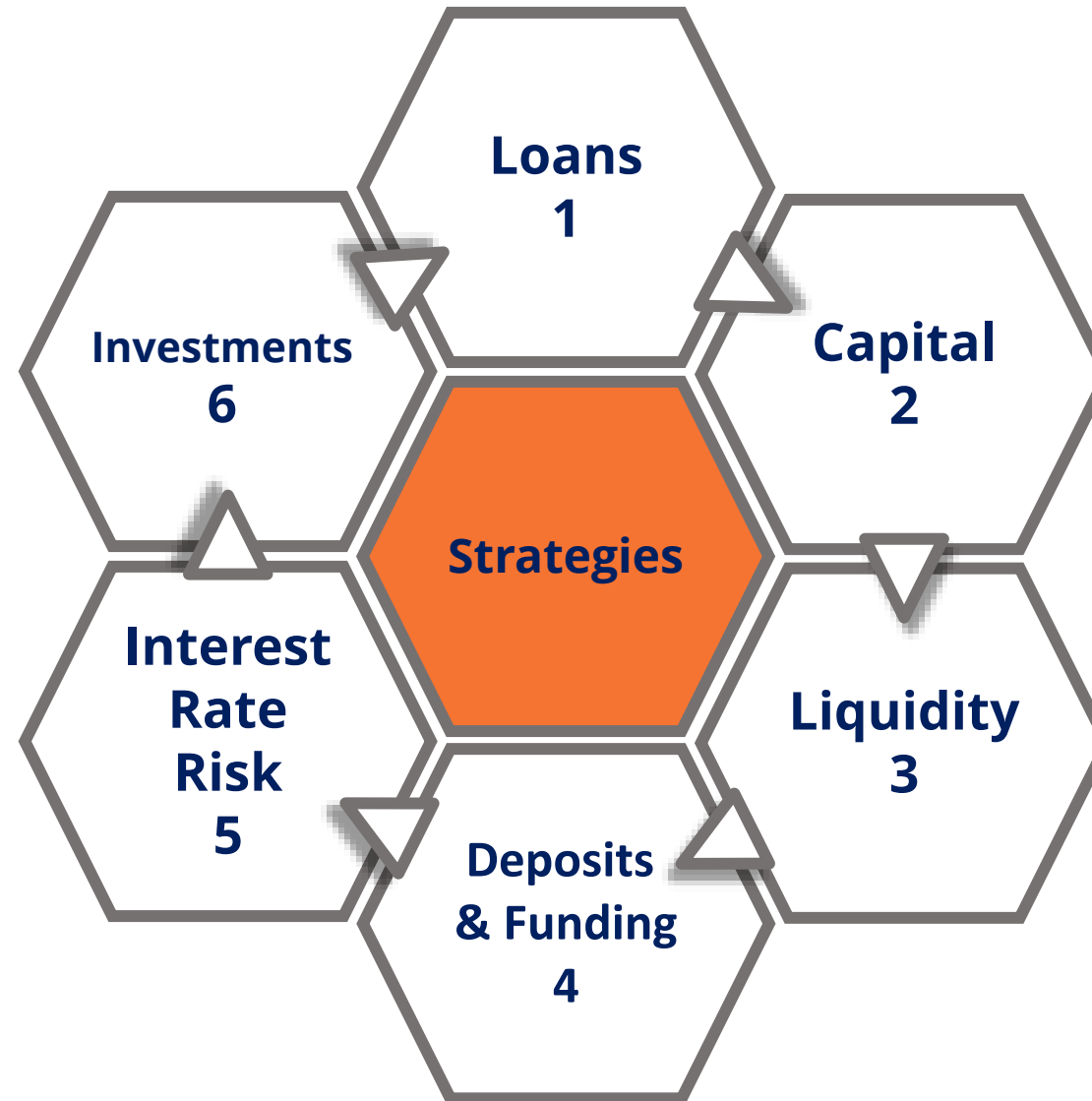
Investment Portfolio		
Municipals (% of Portfolio)	194,909	88%
MBS (% of Portfolio)	23,158	10%
CMO (% of Portfolio)	2,016	1%
Agencies (% of Portfolio)	120	0%
Other Securities (% of Portfolio)	724	0%

Capital	
Tier 1 Capital	172,150
Tier-1 Leverage Ratio (%)	10.28
Total Risk Based Capital	186,930
Total Risk-Based Capital Ratio (%)	13.25
Municipals (% of Total RBC)	104%

# Key Profit Centers



# OBJECTIVES AND STRATEGIES

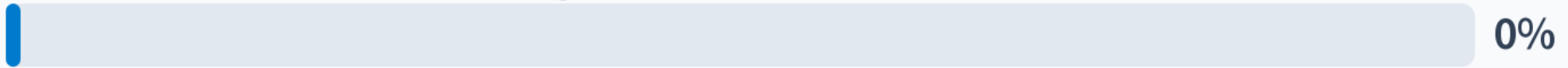


# ONE YEAR NIM DOLLAR IMPACT

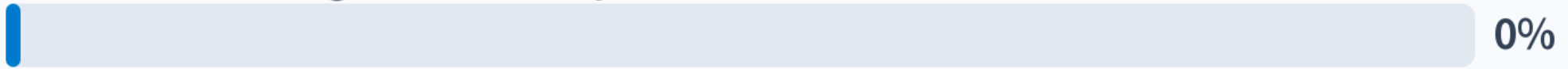
Earning Asset Size (in \$000)	Net Interest Income Change in thousands of dollars (due to Yield change in basis points)					
	5	10	15	20	25	30
25,000	13	25	38	50	63	75
50,000	25	50	75	100	125	150
100,000	50	100	150	200	250	300
250,000	125	250	375	500	625	750
500,000	250	500	750	1,000	1,250	1,500
1,000,000	500	1,000	1,500	2,000	2,500	3,000

## What do you think about reimagining your ALCO Process?

I'm happy with the way things are.



There are some good takeaways.



We need to make some changes.





# Thank You!

Use your Phone to Scan our QR Code

- Presentation with Polling Responses
- Reserve 3Q2023 Performance Snapshot
- Articles mentioned in the presentation



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