

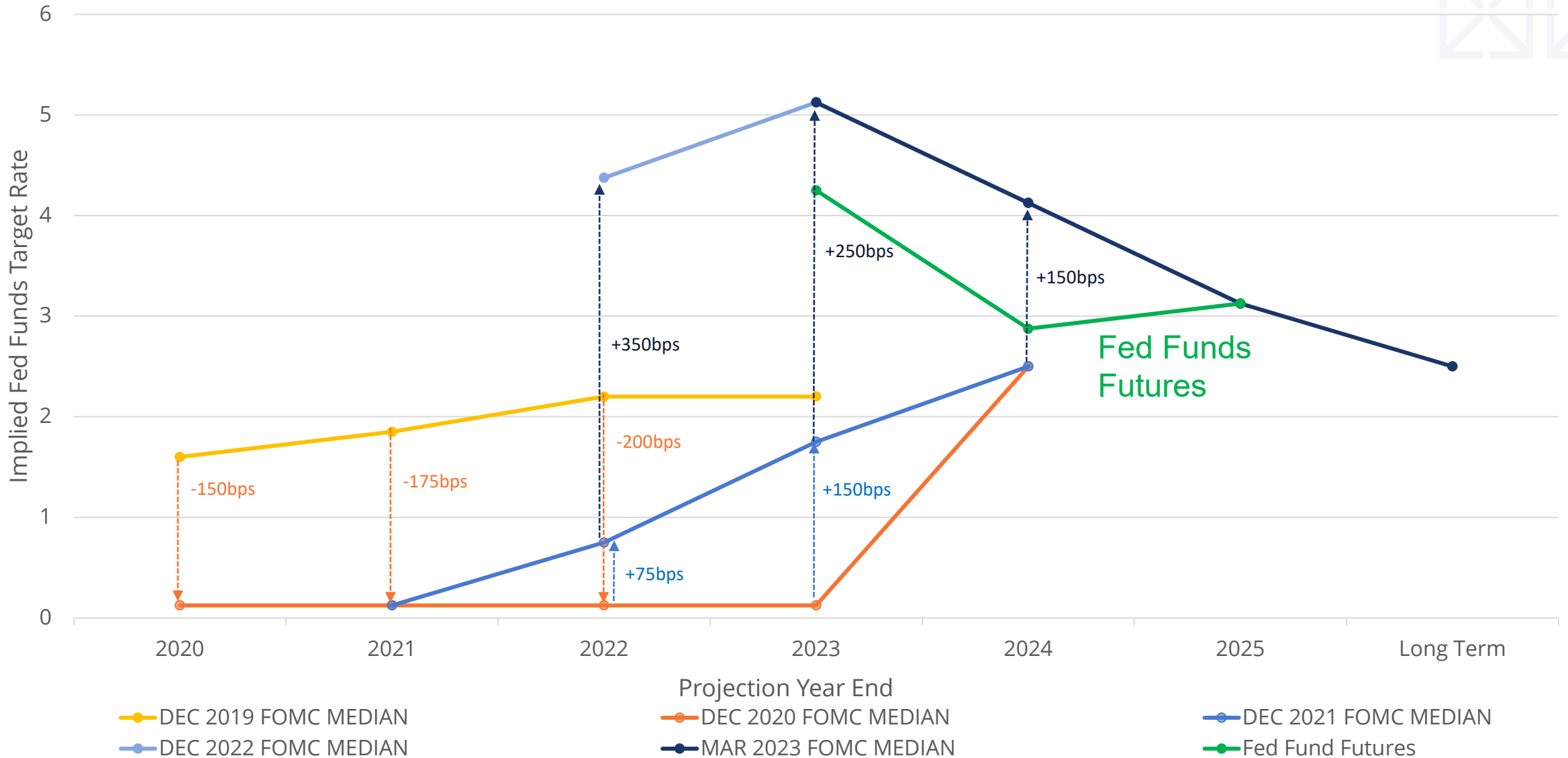


# Balance Sheet Management: How to Pull Ahead of Your Peers

# KEYHOWTO...TAKEAWAYS FROM TODAY'S PRESENTATION

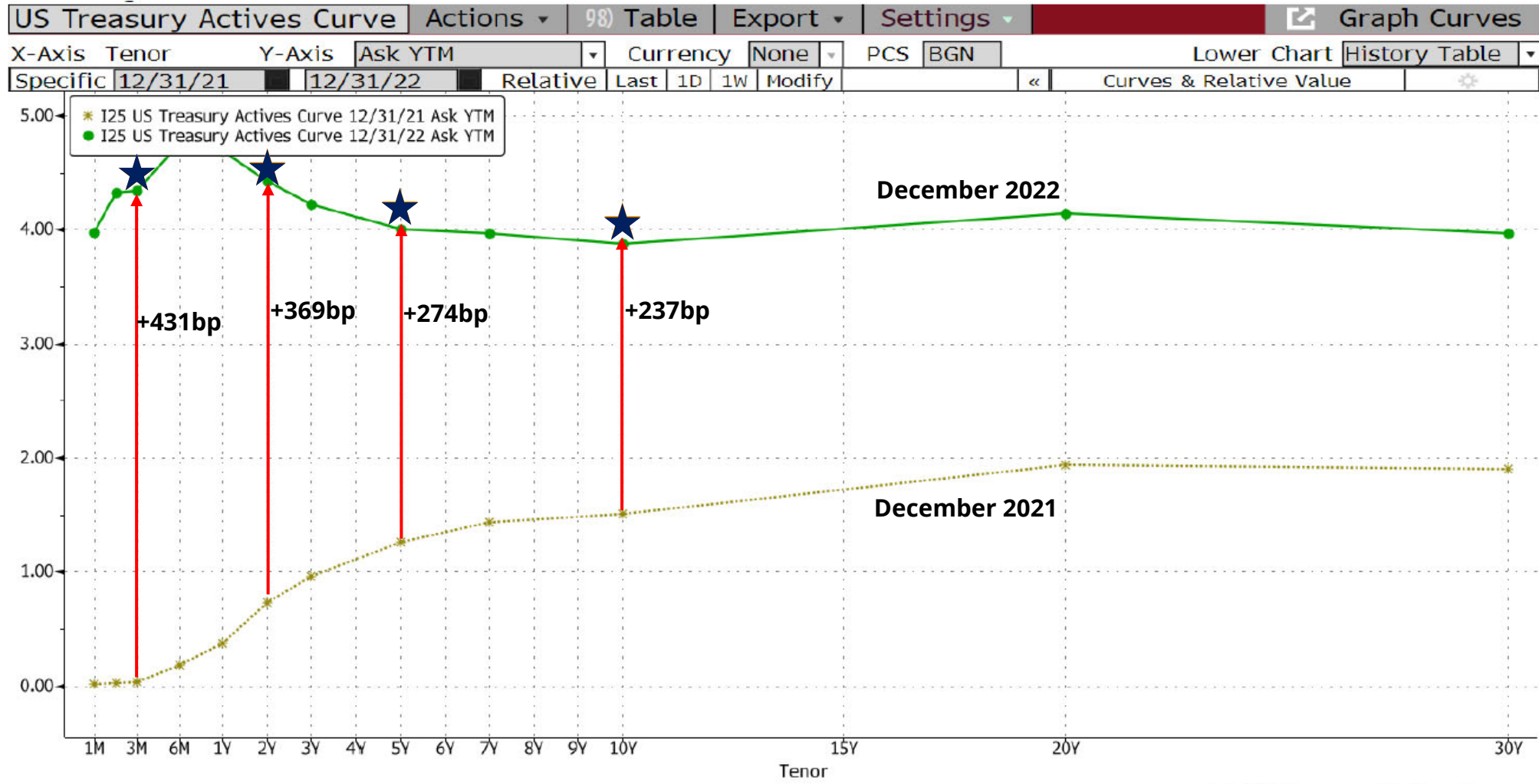
- Why ALCO/Balance Management is important to overall **profitability**
- Discuss why strategy formation is **not a one-size fits all** approach
- How can we **dissect our Net Interest Margin** and get better? See Performance SNAPSHOT
- How can we **Reimage “Old School” ALCO** to drive better and/different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

# 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
12) 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

# EQUITY RESEARCH HEADLINES



➤ M&A Strategy Is Working to Maintain ROA Despite **Rate Challenges**  
- *The First Bancshares, Inc.*



➤ A Good Quarter, but Further **NIM Pressure** Remains a Headwind  
- *Capstar Financial Holdings, Inc.*



➤ Strong Fees Offset **NIM Contraction** for a Beat as Dividend Increased: 1st Look  
- *Bank of Hawaii Corp.*



➤ **NIM Slip** Drives EPS Miss, First Look  
- *Southside Bancshares, Inc.*

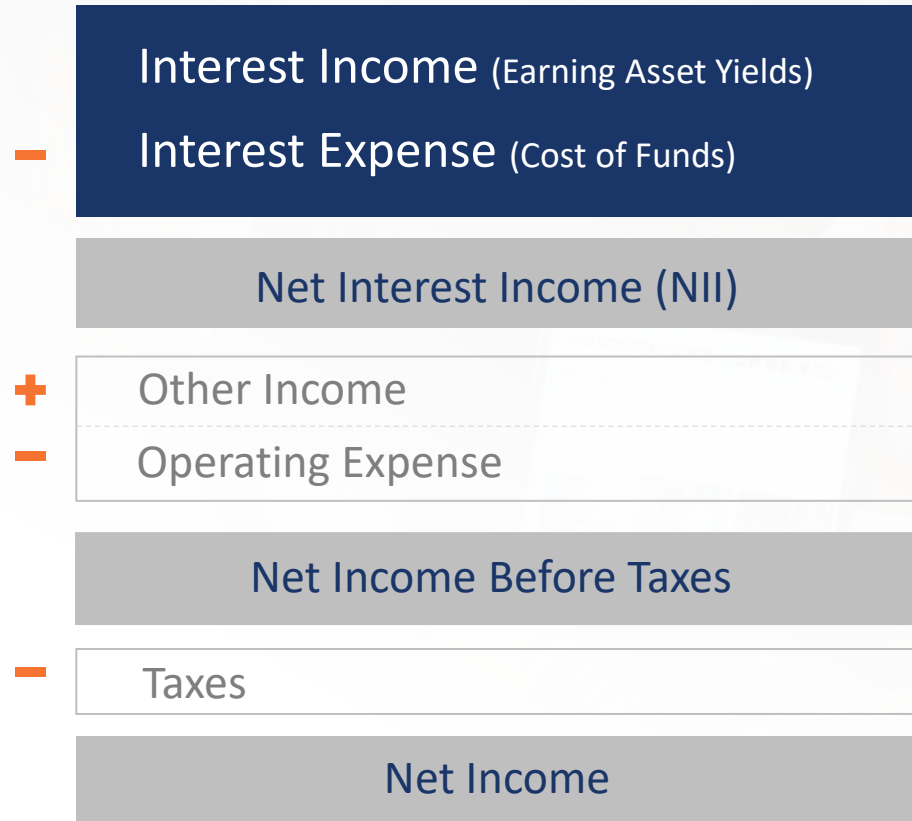


➤ **NII Pressure** Outweighs New Expense Cuts; Trimming Estimates  
- *Associated Banc-Corp*



➤ **NII Pressure** Tough to Outrun; Lowering Estimates  
- *PacWest Bancorp*

# BASIC INCOME STATEMENT



**Balance Sheet Management: Primary Focus**

ROE vs. ROA Focus

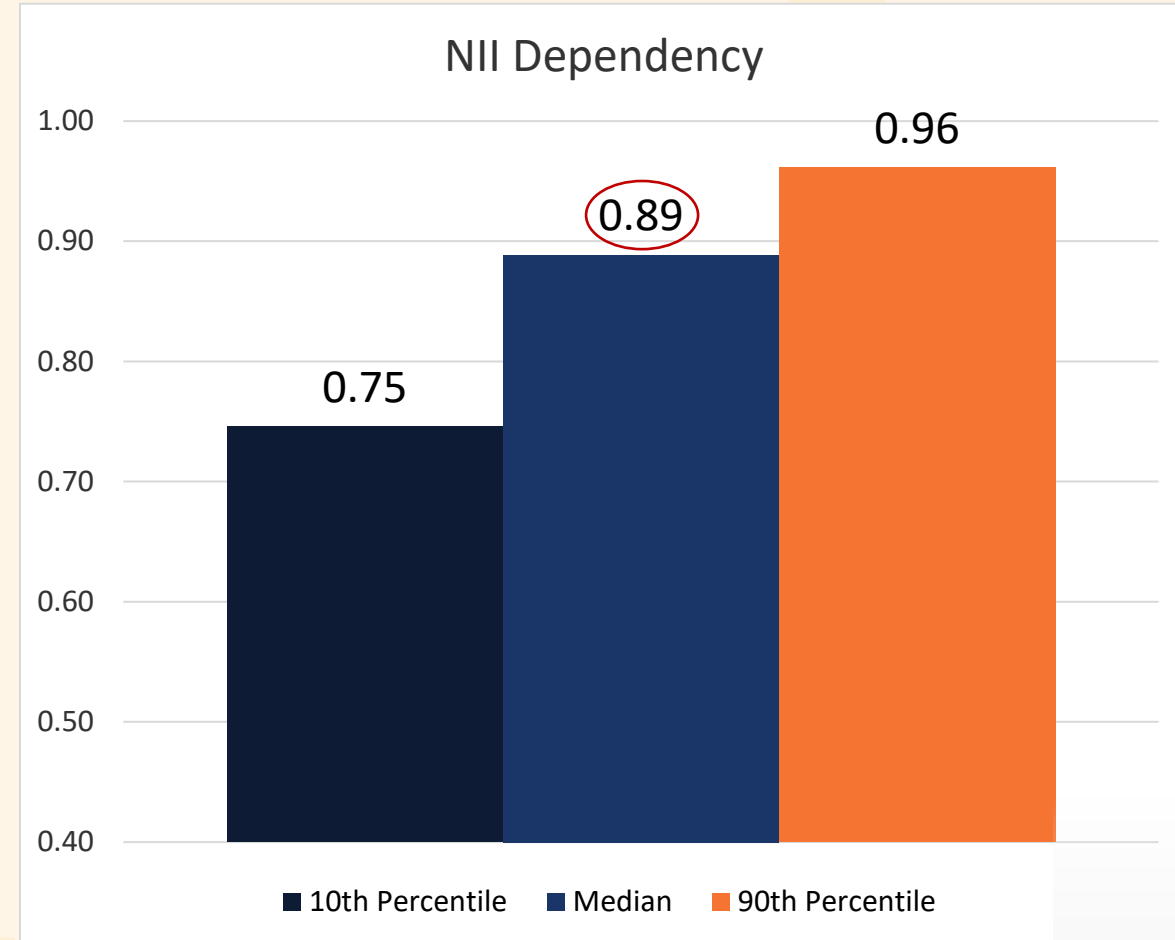
# NII DEPENDENCY AMONG ALL BANKS NATIONALLY

Net Interest  
Income (NII)

Net Interest  
Income (NII)

+

Non-Interest  
Income



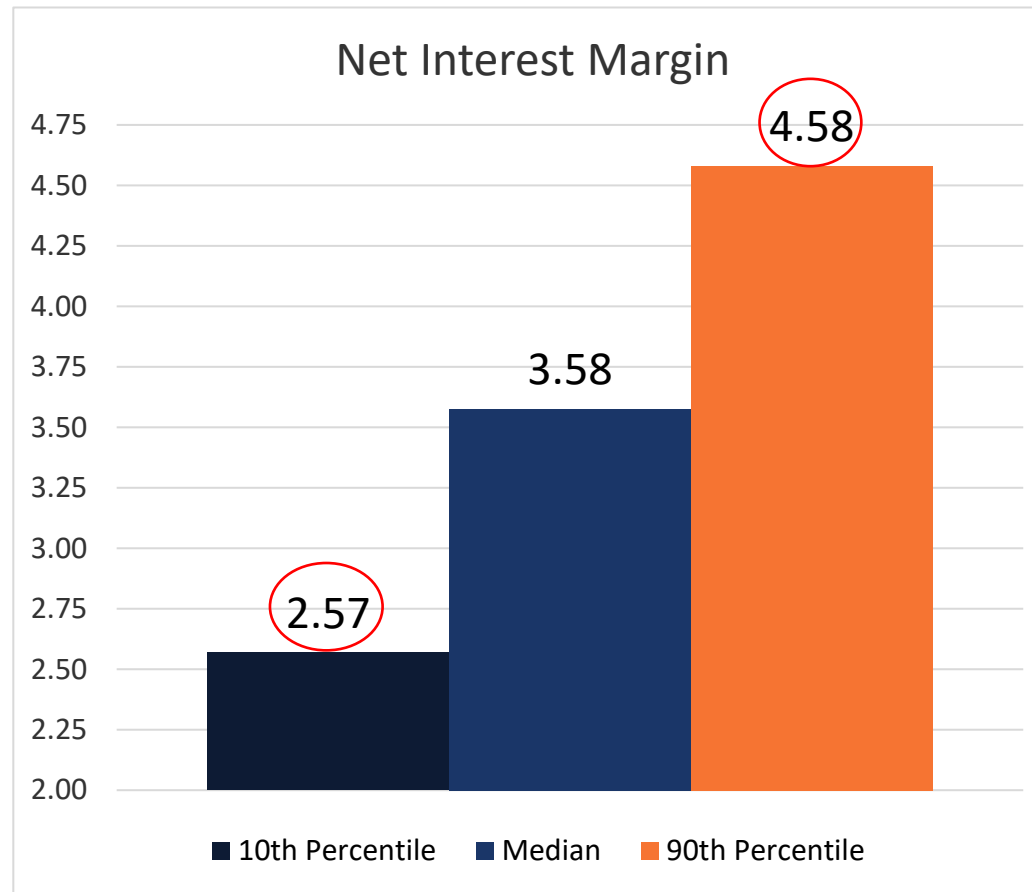
Source: S&P Global Market Intelligence,  
Data for all Banks Nationally <\$15B as of 3/31/23



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



# NET INTEREST MARGIN AMONG ALL BANKS NATIONAL



Source: S&P Global Market Intelligence,  
Data for all banks Nationally <\$15B as of 3/31/23

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

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

Asset Quality

NIM Compression

Non Interest Income

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**

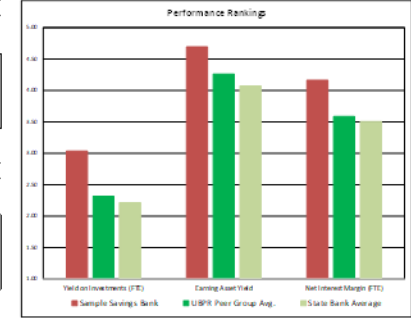
	Metric	Sample Savings Bank	State Bank Average	Percentile Rank
Net Interest Margin	Yield on Investments (FTE)	3.03	2.21	84%
	Yield on Total Loans	5.18	4.84	72%
Dissection	Earning Asset Yield	4.69	4.07	84%
	Interest Expense to Avg. Earning Assets	0.53	0.56	54%
	Net Interest Margin (FTE)	4.16	3.50	86%
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

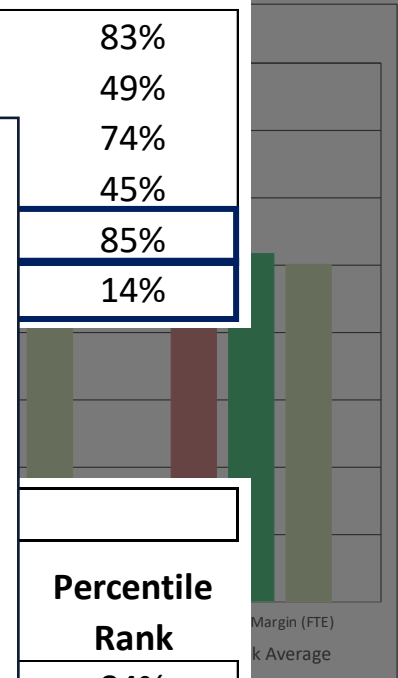
NET INTEREST INCOME  
DEPENDENCY?

NET INTEREST MARGIN?



**Sample Savings Bank versus UBPR Peer Group**

Metric		Sample Savings Bank	UBPR Peer Group Average	Percentile Rank
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	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 4.58%</p> <p>10<sup>th</sup> Percentile is 2.57%</p> <p>Range of 2.01%</p>				
<p><i>Source: S&amp;P Global Market Intelligence, Data for all Banks Nationally &lt;\$15B as of 3/31/23</i></p>				
<b>Net Interest Margin Dissection</b>	Yield on Investments (FTE)			84%
	Yield on Total Loans	5.18	4.84	72%
	Earning Asset Yield	4.69	4.07	84%
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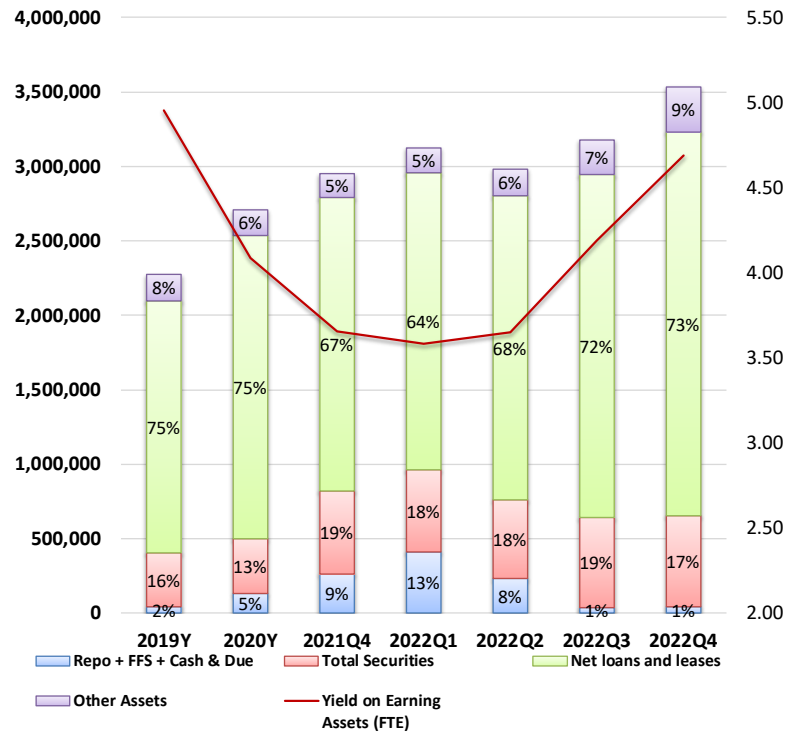


MBS (% of Portfolio)	234,666	38%	Tier-1 Leverage Ratio (%)	10.30
CMO (% of Portfolio)	2,459	0%	Total Risk Based Capital	366,377
Agencies (% of Portfolio)	25,943	4%	Total Risk-Based Capital Ratio (%)	13.36
Other Securities (% of Portfolio)	33,237	5%	Municipals (% of Total RBC)	87%

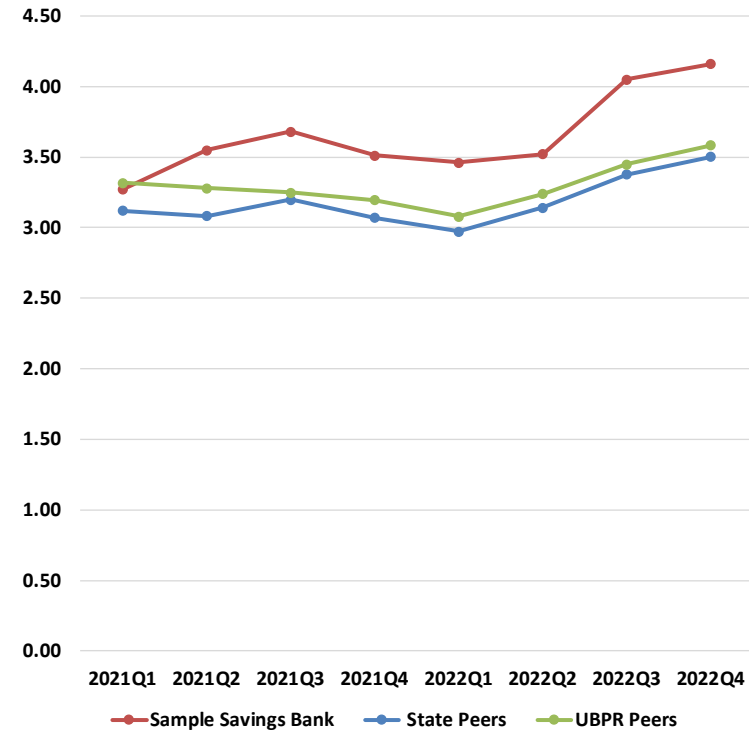
Historical Performance

Historical Performance

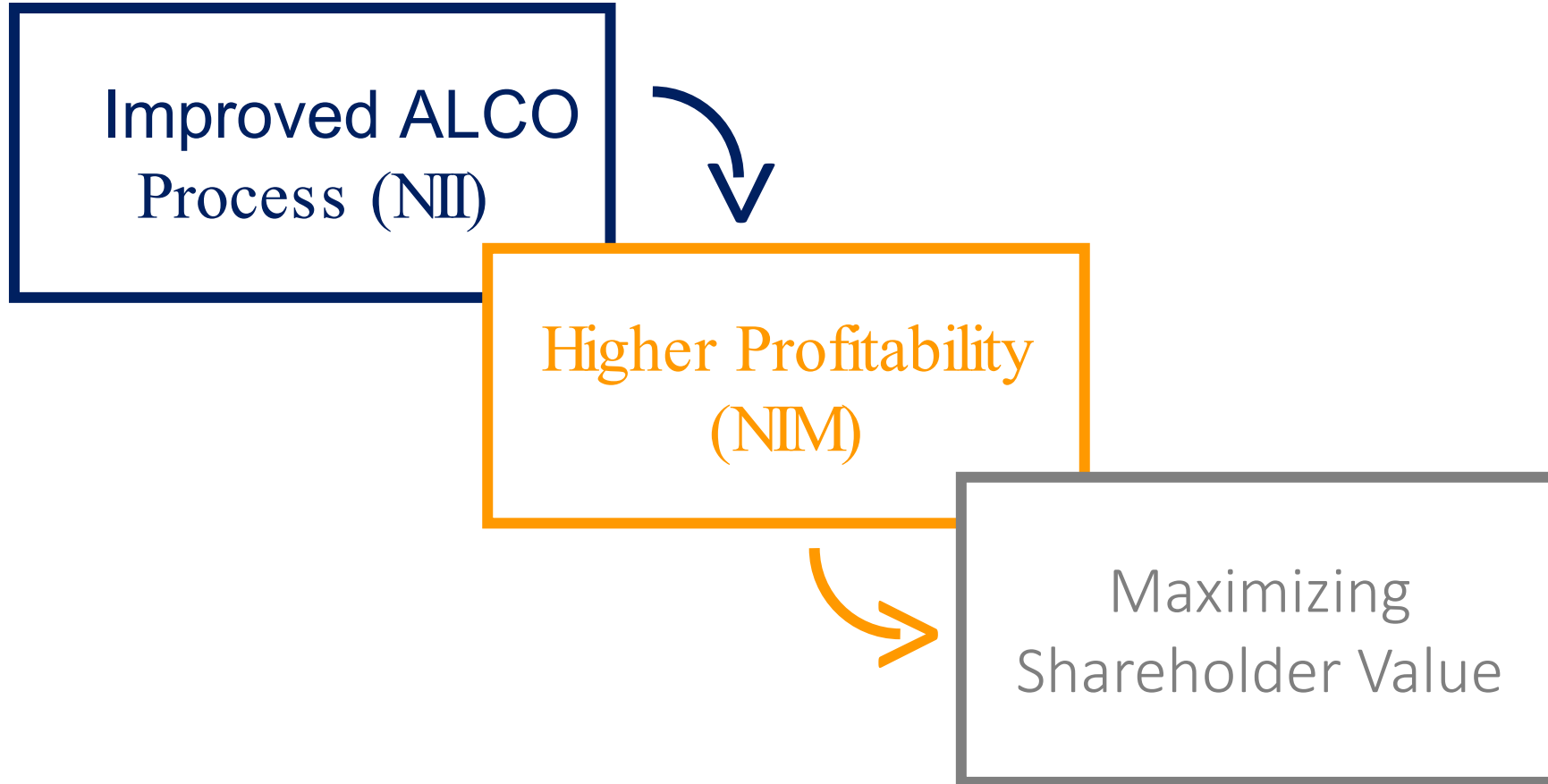
Balance Sheet Trend



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>1st 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

Profit Improvement

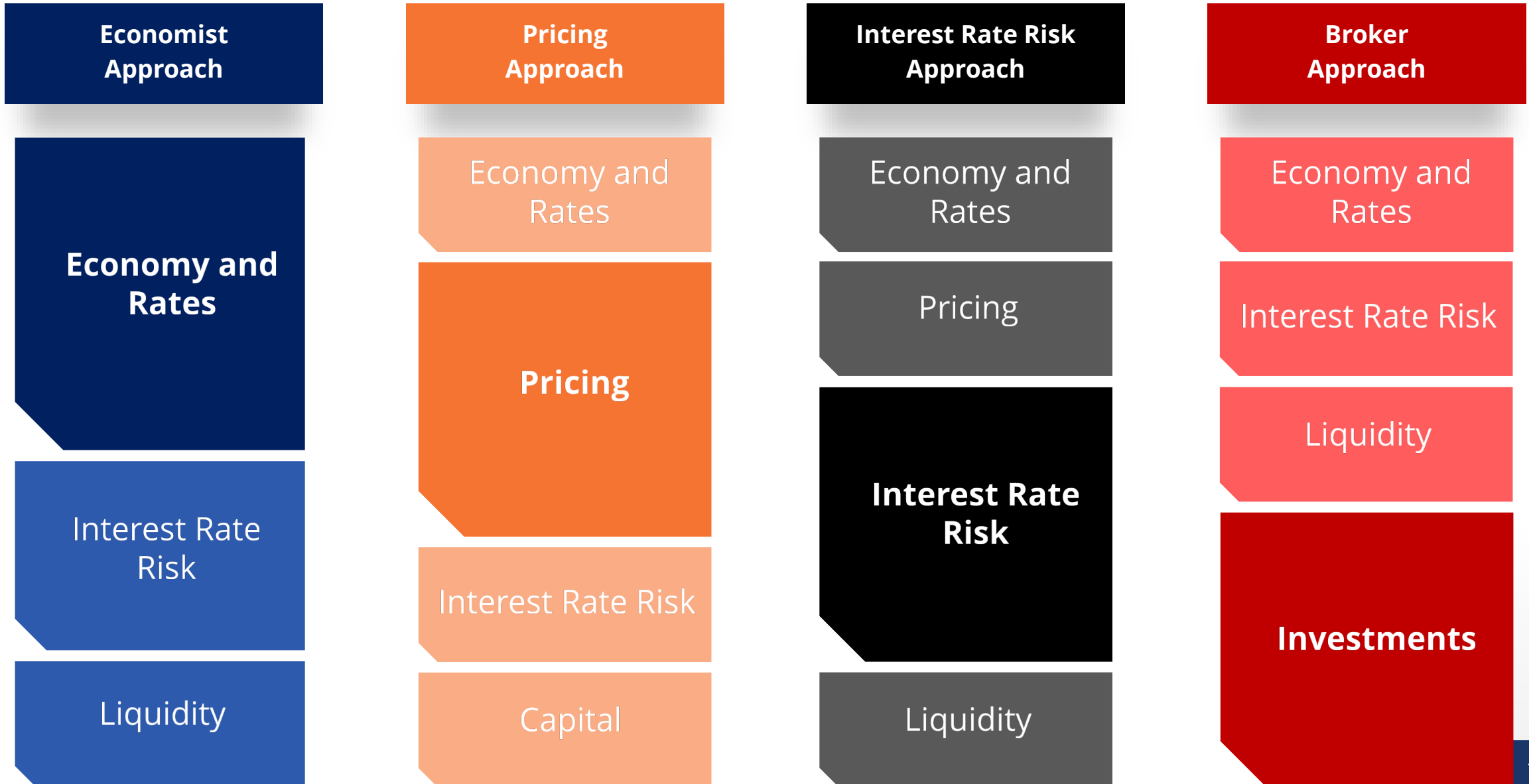
Setting Deposit Rates

Regurgitating  
Information

# WHAT ARE COMMON APPROACHES TO THE ALCO PROCESS?



# APPROACHES TO ALCO



# Which area in your ALCO meetings do you overweight?

Economy

Product Pricing

Interest Rate Risk

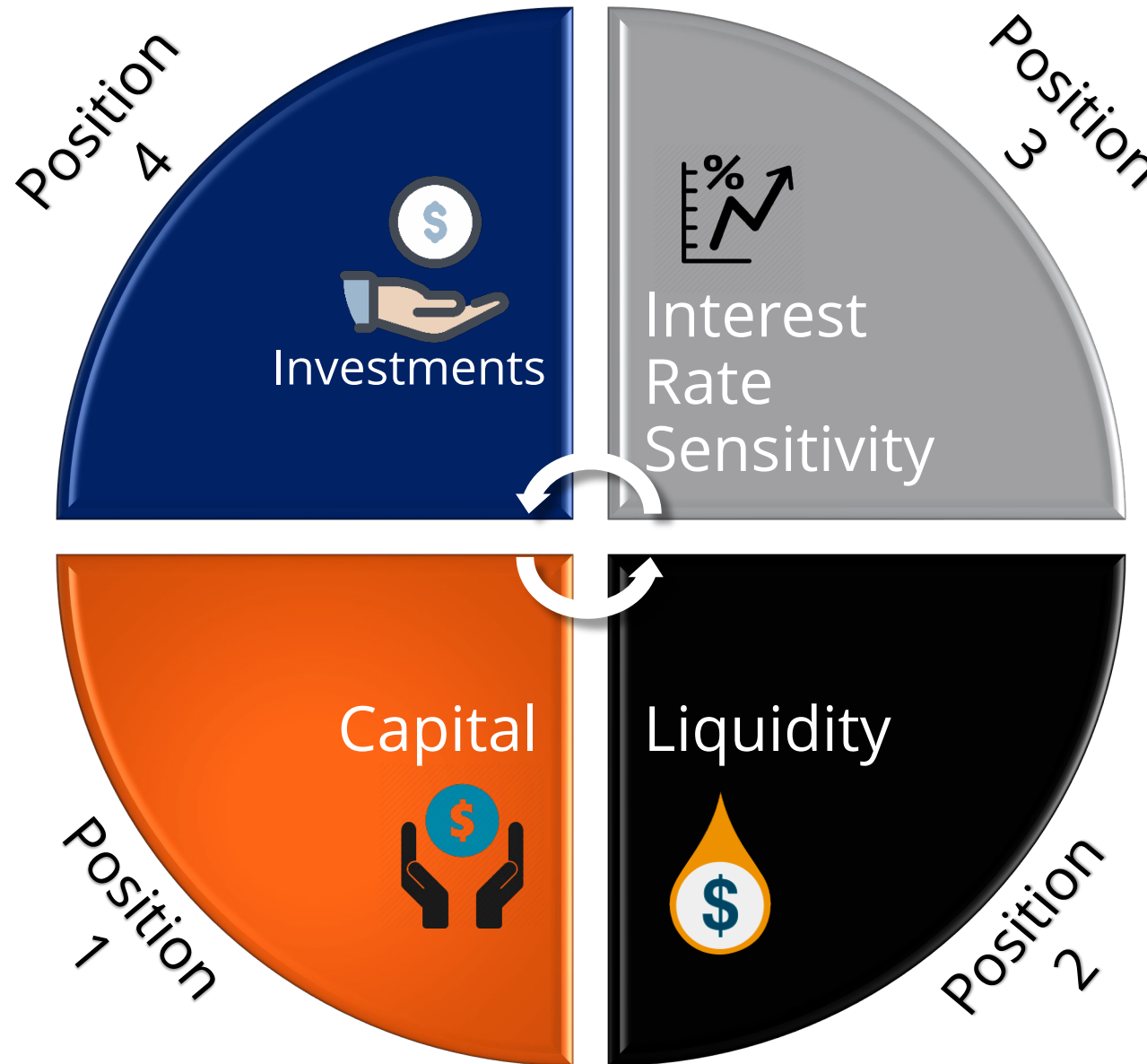
Investments

# WHAT SHOULD AN ALCO PROCESS AND PACKET LOOK LIKE?



# Position Assessment

# ALCO BEST PRACTICES

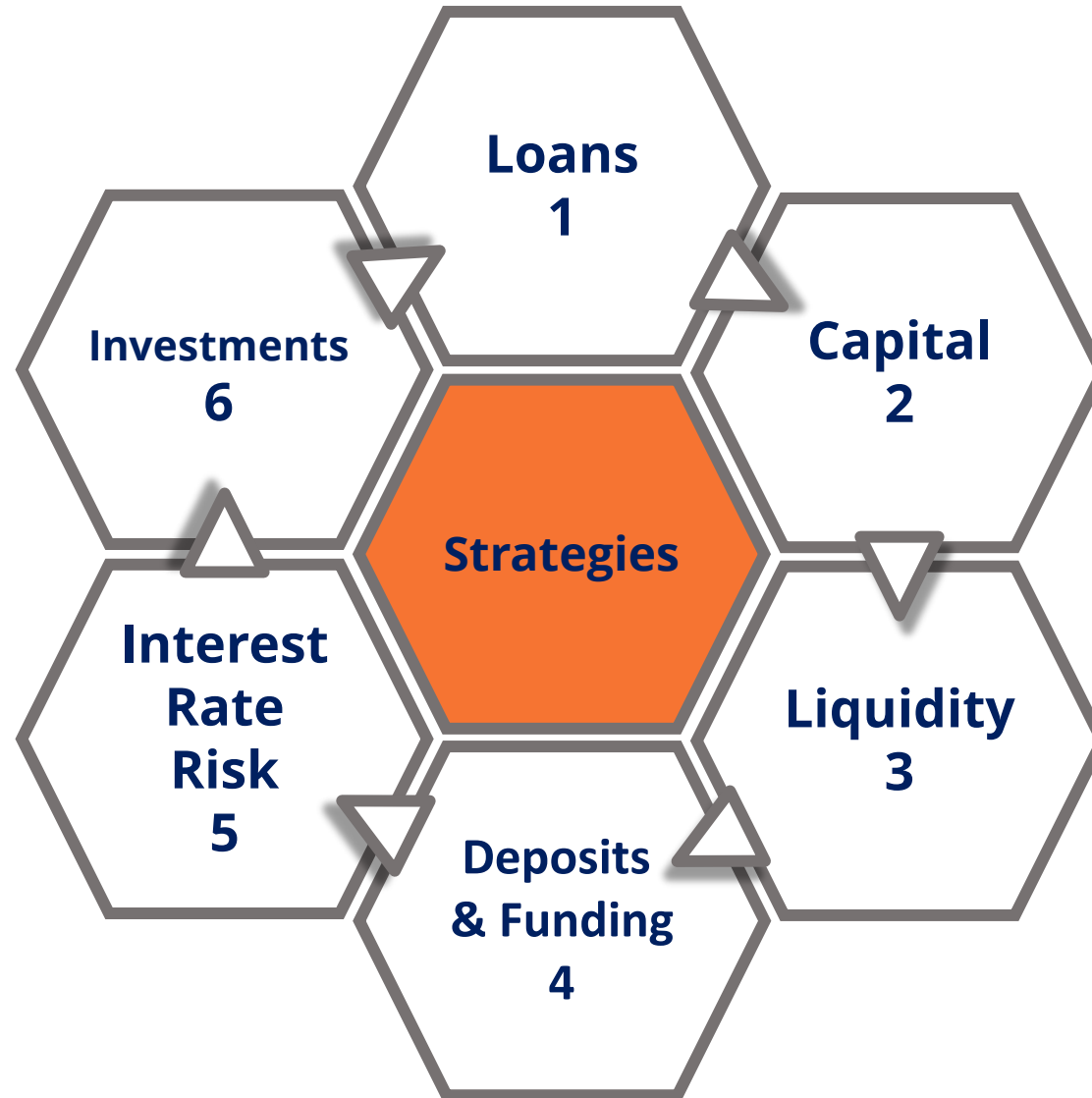


# HOW ARE FINANCIAL INSTITUTIONS DIFFERENT?

	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



# IMPORTANT LOAN PRICING CONSIDERATIONS

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

Non-Call Bullet Structure

Date	Issuer/Headline	Coupon	Maturity	Spread	Curr	Outst	Book Mgr	Note
101) 2/9	FREDDIE MAC	5.500	02/28/28		USD	30	JOINT LEADS	5-NC6MO INC
102) 2/8	FED FARM CREDIT	3.875	02/14/28		USD	110	JOINT LEADS	5-NC
103) 2/8	FED HOME LN BANK	4.700	02/14/28		USD	50	CITI-sole	5-NC2 BERM
104) 2/8	FED HOME LN BANK	5.000	02/09/28		USD	40	FHN-sole	5-NC1.5 INC
105) 2/7	FARMER MAC	3.850	02/14/28		USD	25	MS-sole	5-NC INC
106) 2/7	FREDDIE MAC	5.100	02/28/28		USD	30	WFS-sole	5-NC1 1X INC
107) 2/7	FED HOME LN BANK	5.300	02/09/28		USD	25	FHN,MS	5-NC1 BERM
108) 2/6	FED HOME LN BANK	5.300	02/09/28		USD	75	STFL-sole	5-NC1 BERINC

Call Option @ Year 2

~80bp Yield Differential for Bullet vs Callable, both 5 Year Maturities

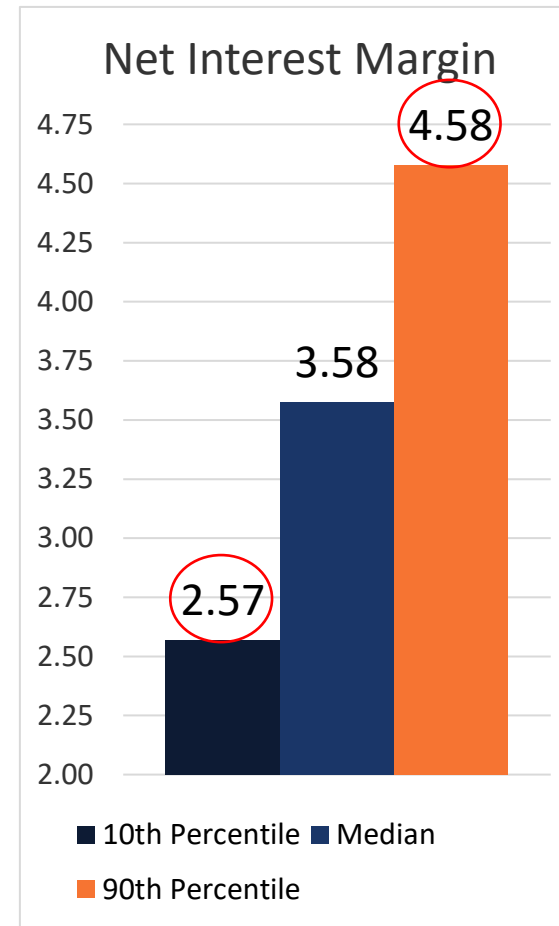
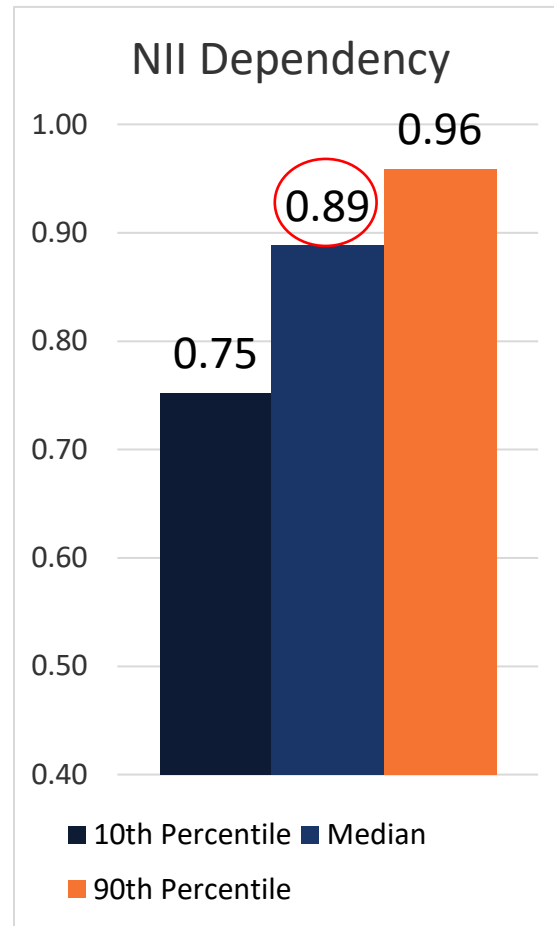
# How would you rate your ALCO process when it comes to driving profitability and strategies?

Above  
Average

Average

Below  
Average

# NII DEPENDENCY AND NIM AMONG ALL BANKS NATIONALLY



Source: S&P Global Market Intelligence,  
Data for all banks Nationally <\$15B as of 12/31/22

**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

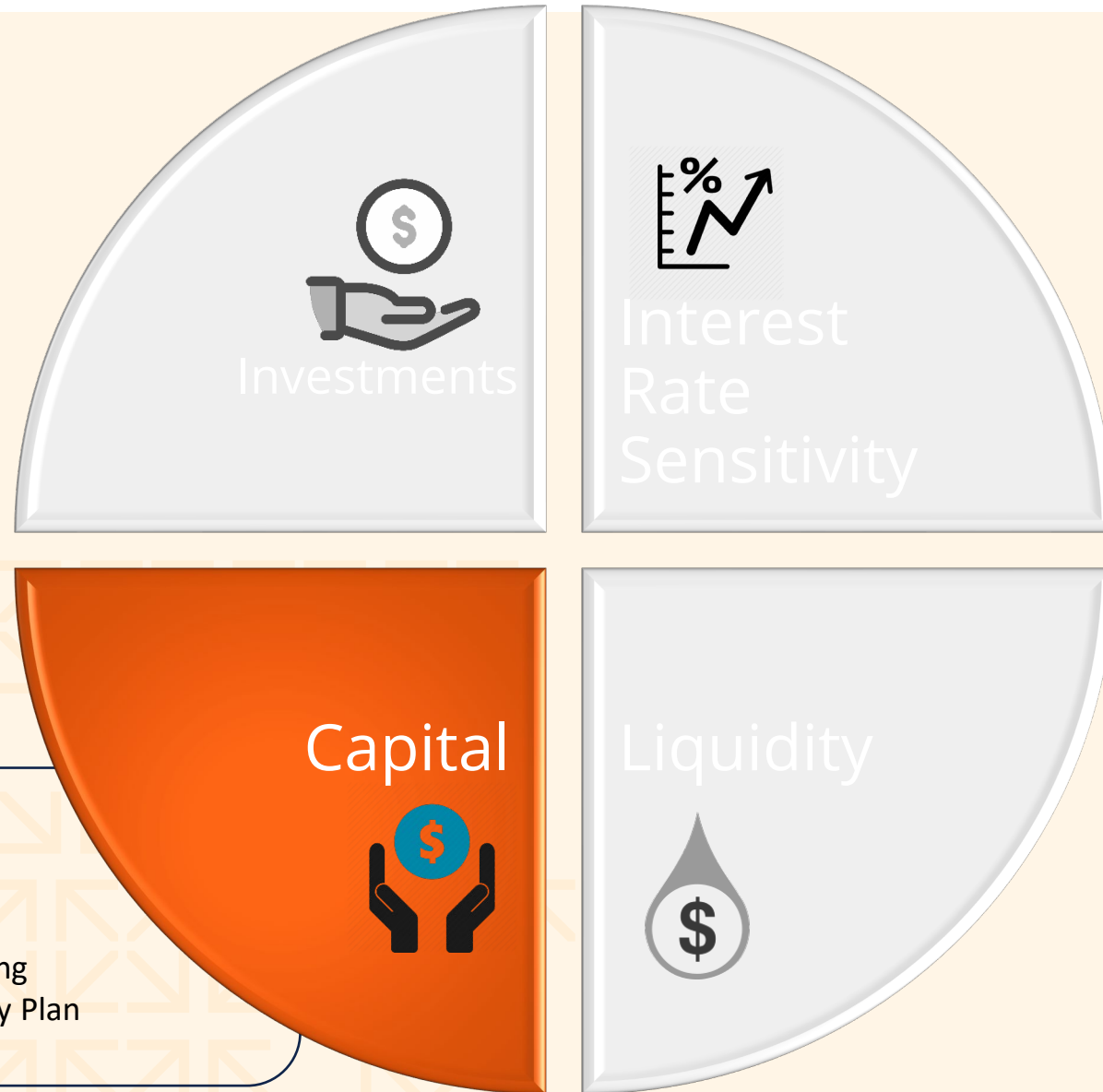


# PREPARE FOR THE FUTURE



- 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
<b>Net Interest Margin Dissection</b>	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
<b>Net Interest Margin Dissection</b>	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**

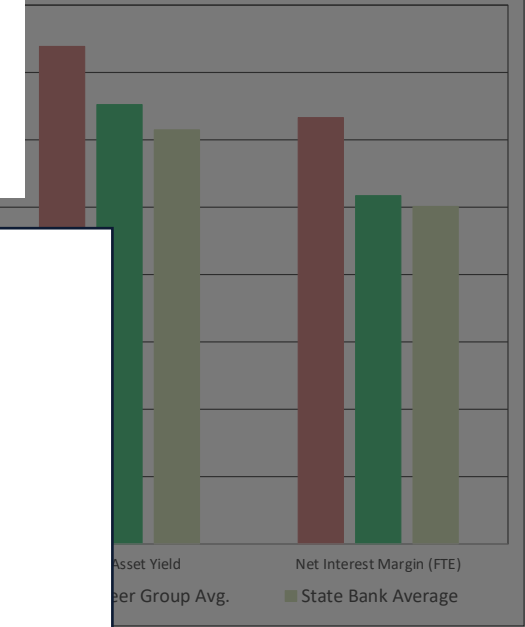
Tier 1 Capital	337,866
Tier-1 Leverage Ratio (%)	10.30
Total Risk Based Capital	366,377
Total Risk-Based Capital Ratio (%)	13.36
Municipals (% of Total RBC)	87%

What's the Range of Capital Ratios?

**90<sup>th</sup> Percentile is 16.08%**  
**10<sup>th</sup> Percentile is 8.43%**  
 Range of 7.65%

*Source: S&P Global Market Intelligence,  
 Data for all Banks Nationally <\$15B as of 3/31/23*

**Performance Rankings**

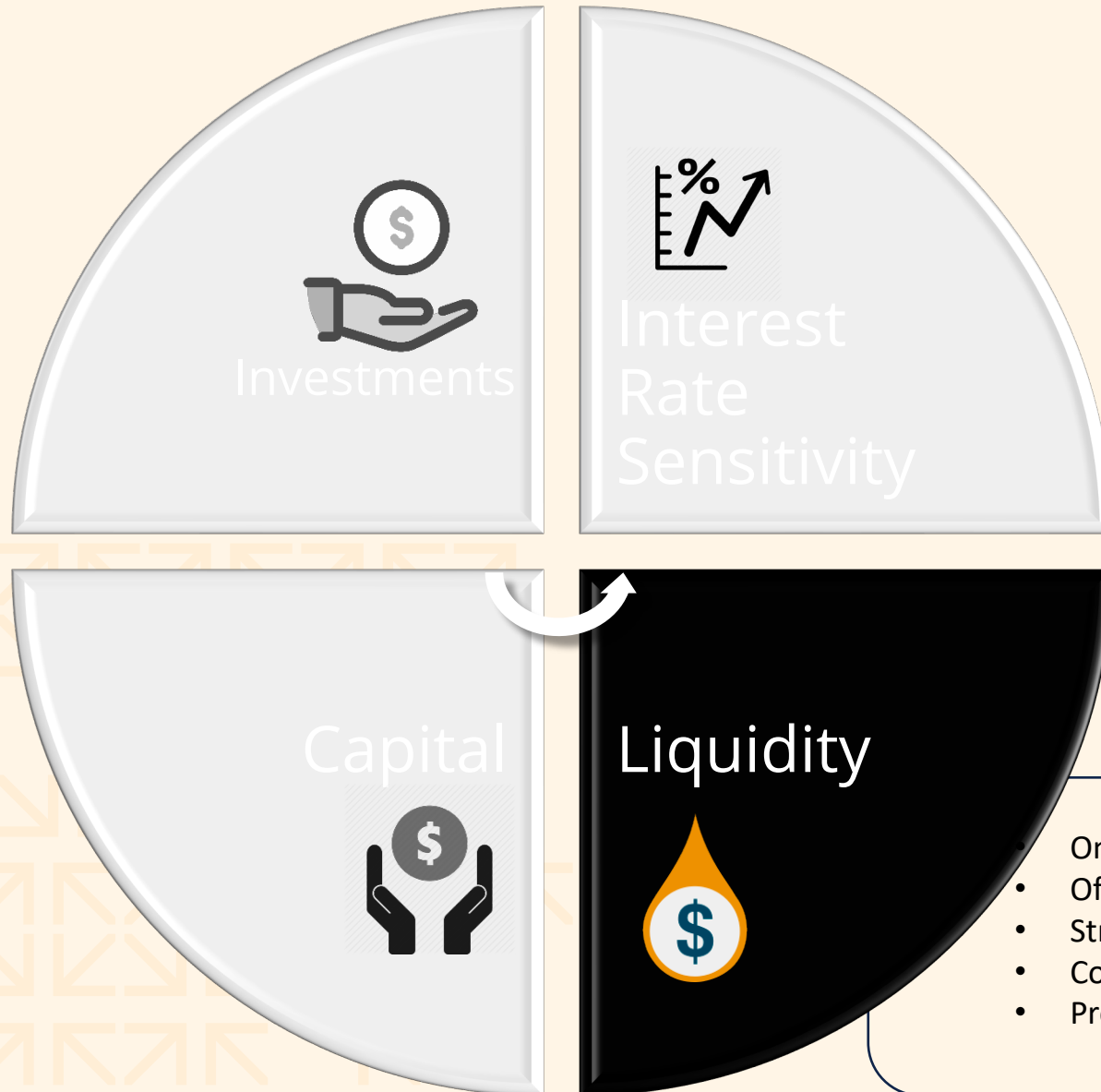


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# PREPARE FOR THE FUTURE CAPITAL STRESS TEST

- **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



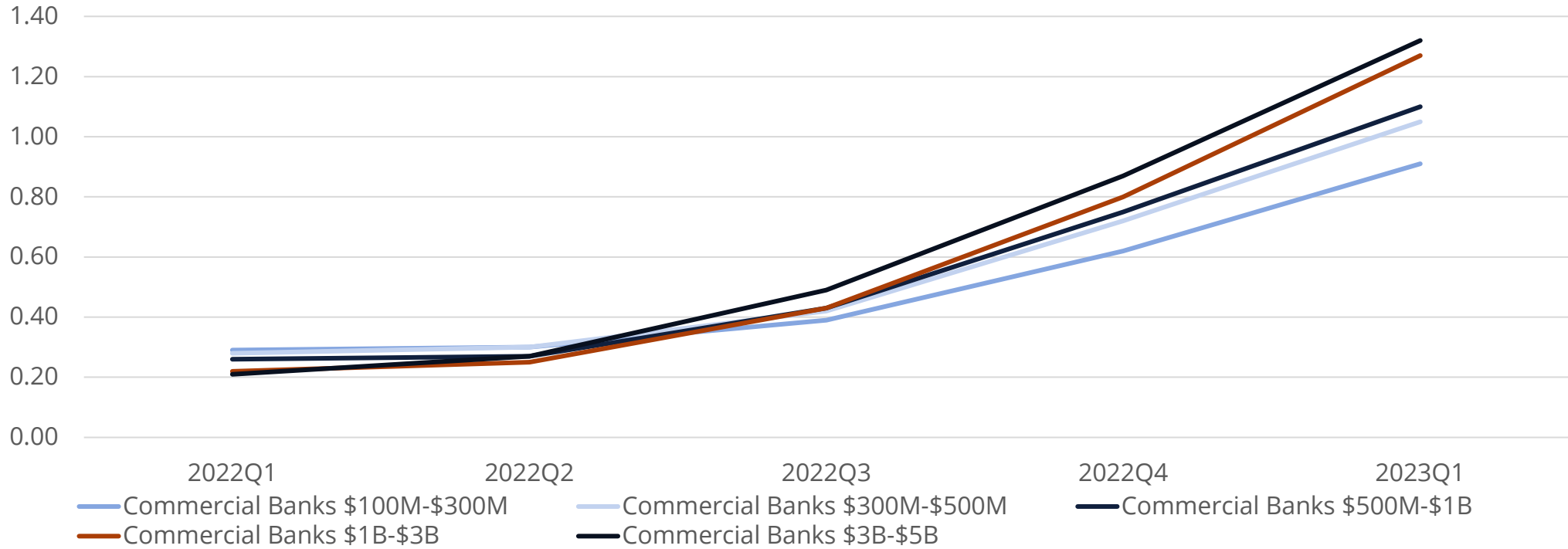
- On Balance Sheet
- Off Balance Sheet
- Stressed Liquidity
- Contingency Funding
- Profit Center

# STUDY THE PAST ASSET MIX TREND



Source: S&P Global Market Intelligence,  
Data for all banks Nationally <\$10B as of 3/31/23

# STUDY THE PAST HISTORICAL COST OF FUNDS TREND





# 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

Performance and Balance Sheet Snapshot - 2022Q4

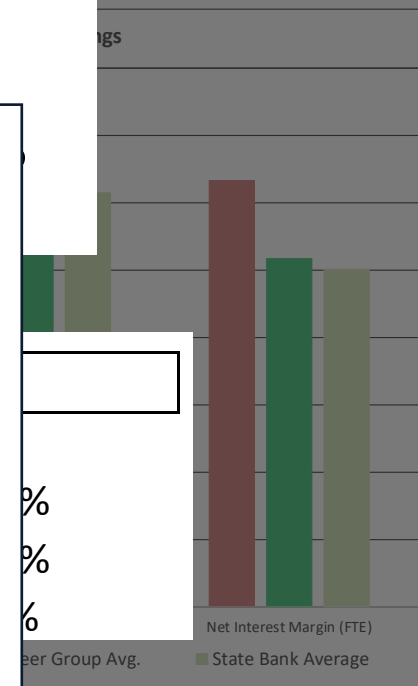
**Liquidity and Funding**

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

What's the Range of Liquidity Ratios?

10<sup>th</sup> Percentile is 10.5%  
90<sup>th</sup> Percentile is 52.9%  
Range of 42.4%

Source: S&P Global Market Intelligence,  
Data for all Banks Nationally <\$15B as of 3/31/23



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%

# PREPARE FOR THE FUTURE LIQUIDITY STRESS TEST

- **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

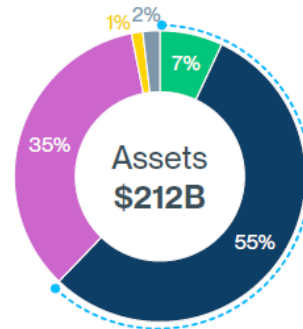
# SILICON VALLEY BANK LIQUIDITY MANAGEMENT

## Ample liquidity + flexibility to manage liquidity position

### High-quality, liquid balance sheet

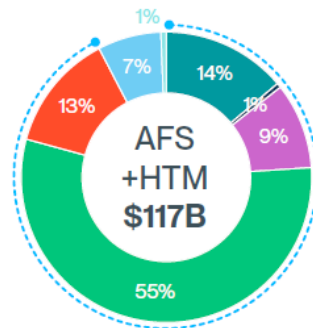
**62%** of assets in cash and fixed income securities

- Cash
- Fixed Income Securities
- Net Loans
- Non-marketable Securities
- Other



**92%** of fixed income portfolio in U.S. Treasuries and securities issued by government-sponsored enterprises

- U.S. Treasury Securities
- Agency Debenture
- Agency CMOs – Fixed Rate
- Agency RMBS
- Agency CMBS
- Municipal Bonds
- Corporate Bonds



### Levers to support liquidity

Securities cashflows

**~ \$2-3B**  
estimated securities paydowns/quarter

Targeting Fed cash at **4-6%** of total deposits (**\$7-11B**)\*

Flexible on- vs. off-balance sheet liquidity solutions and deposit pricing strategies

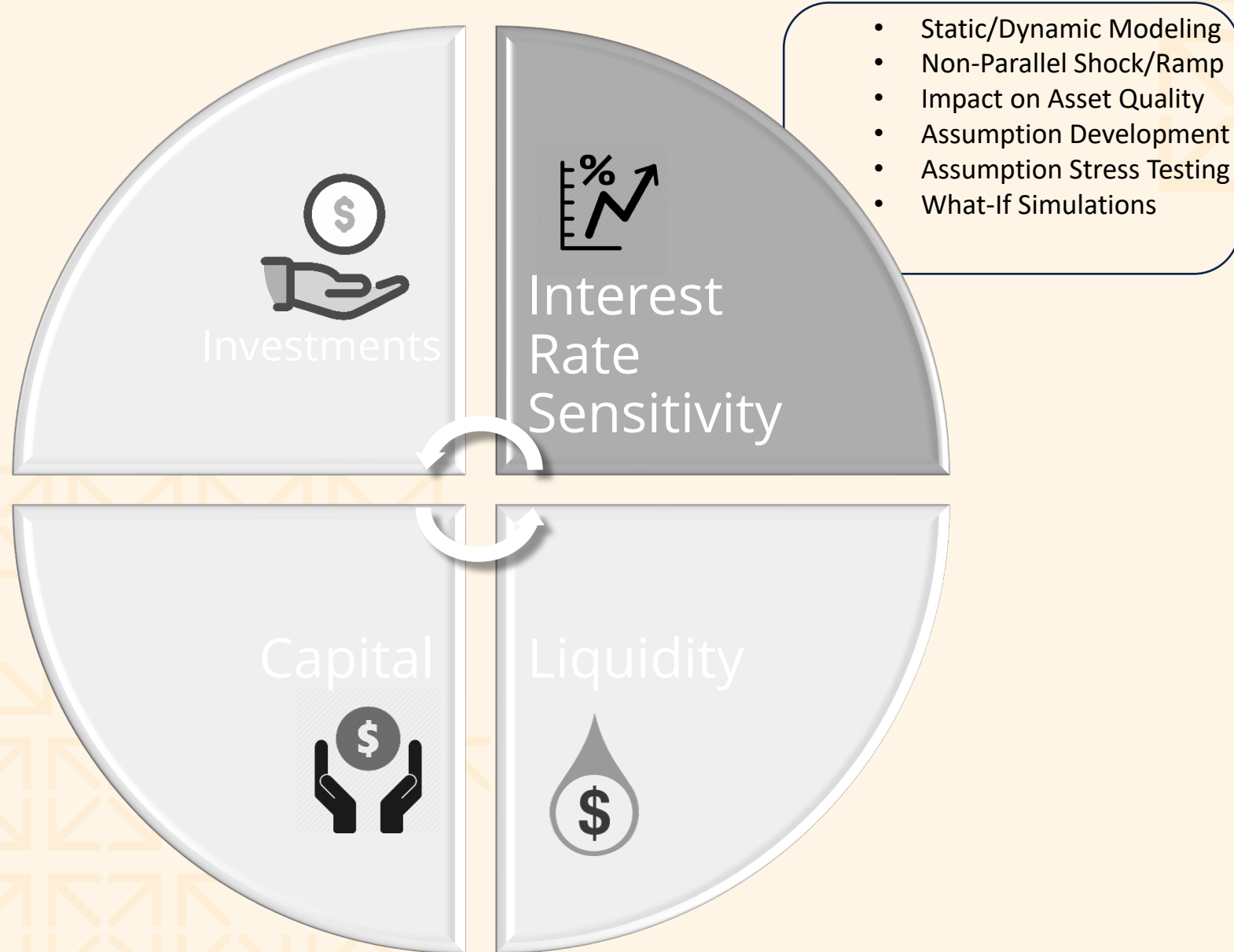
**\$79B**  
Off-balance sheet sweep and repo client funds (OBS balances that can be shifted on-balance sheet to support deposits)

**~ 70%**  
Modeled interest-bearing deposit beta

Remaining borrowing capacity

**\$69B**  
(FHLB, Repo, FRB and Fed Funds lines)

# BALANCE SHEET MANAGEMENT INTEREST RATE RISK

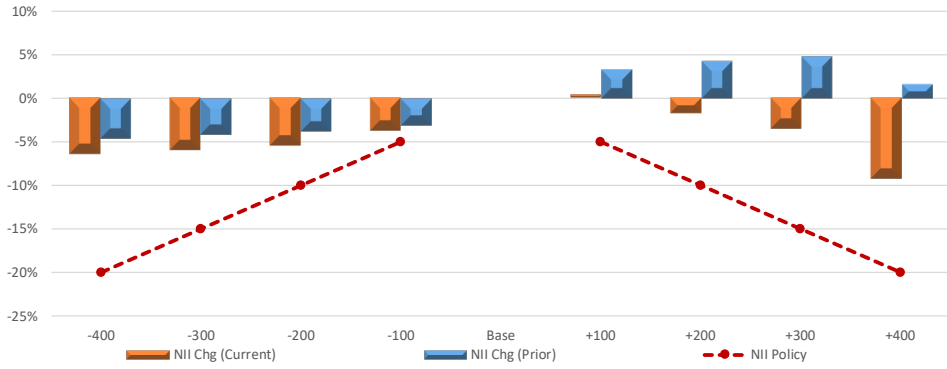


# STUDY THE PAST

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>	<b>EVE Max. Change</b>							
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%

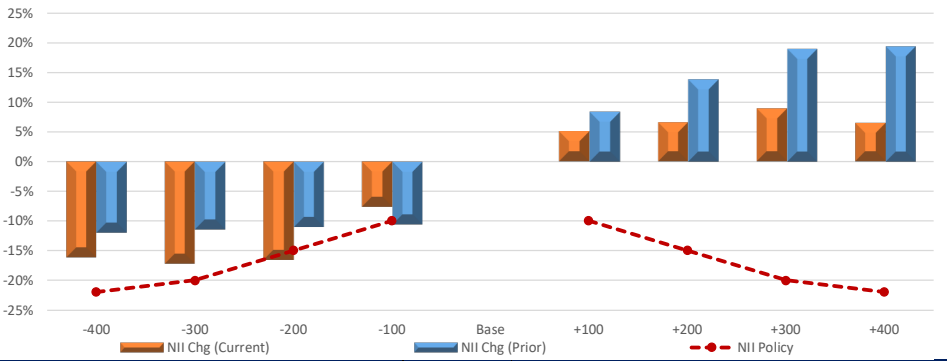
# MONITOR THE PRESENT

## Net Interest Income Year 1



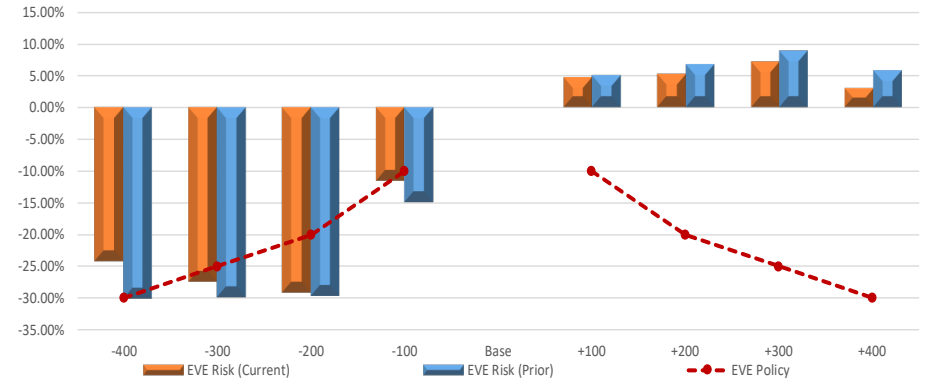
	-400	-300	-200	-100	Base	+100	+200	+300	+400
NII (Current)	21,759	21,852	21,969	22,363	\$ 23,219	23,307	22,815	22,402	21,108
NII (Prior)	22,208	22,302	22,384	22,529	\$ 23,245	23,994	24,223	24,344	23,618
NII Chg (Current)	-6.29%	-5.89%	-5.38%	-3.69%		0.38%	-1.74%	-3.52%	-9.09%
NII 1 YR Policy	-20.00%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



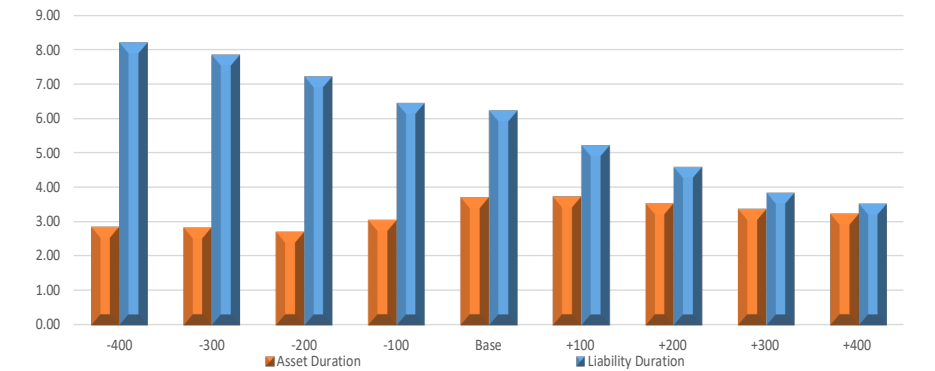
	-400	-300	-200	-100	Base	+100	+200	+300	+400
NII (Current)	19,707	19,472	19,608	21,712	\$ 23,512	24,708	25,061	25,606	25,028
NII (Prior)	20,496	20,604	20,702	20,801	\$ 23,248	25,194	26,457	27,644	27,750
NII Chg (Current)	-16.18%	-17.18%	-16.60%	-7.65%		5.09%	6.59%	8.91%	6.45%
NII 2 YR Policy	-22.00%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

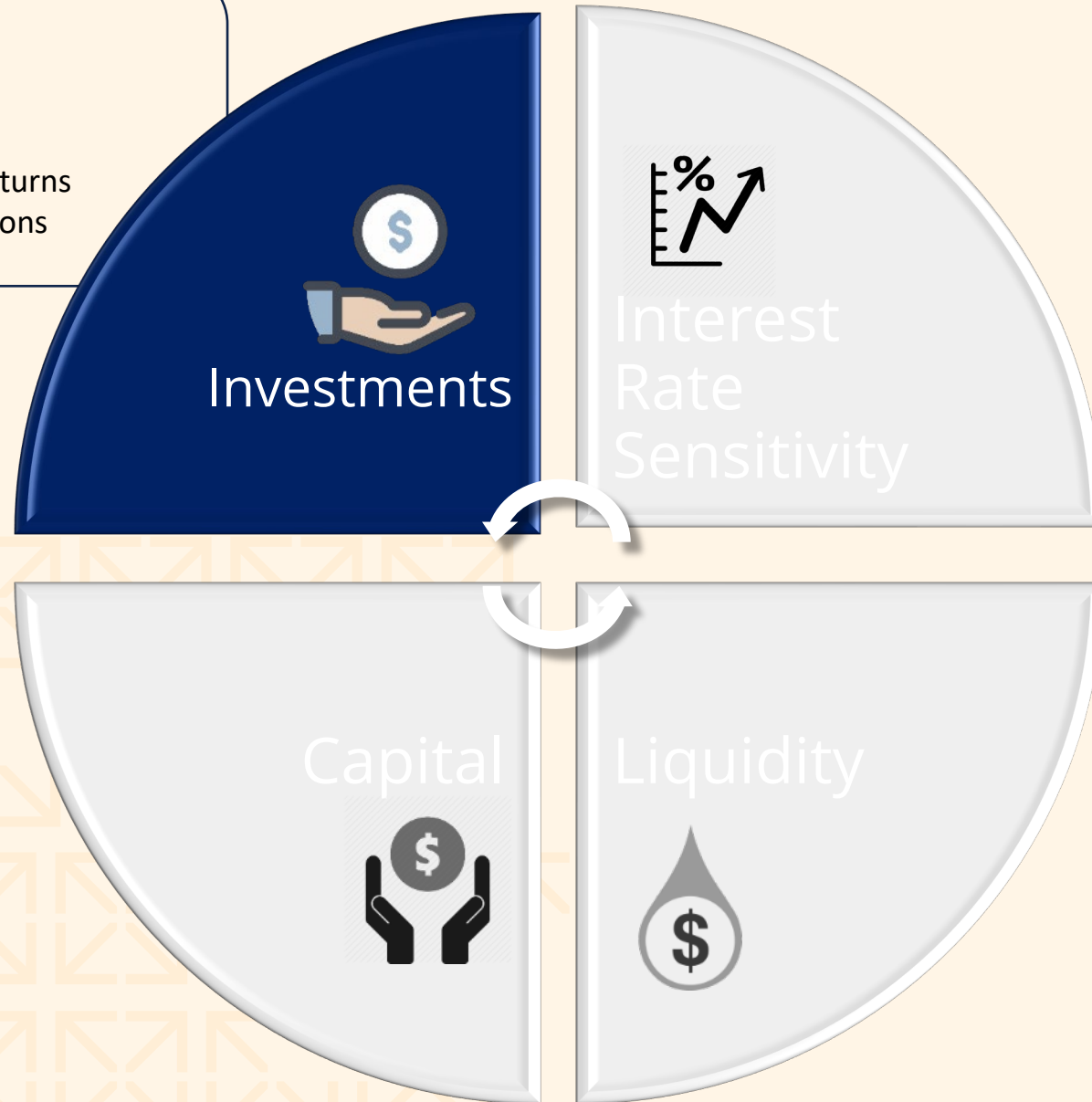
Scenario	-400	-300	-200	-100	Level	+100	+200	+300	+400
Static Forecast	-23.4%	-23.3%	-10.9%	-2.6%		-1.5%	-3.6%	-5.5%	-7.0%
50% Prepay	-13.5%	-13.5%	-3.2%	0.3%	0.0%	-3.1%	-5.9%	-8.3%	-10.3%
150% Prepay	-28.0%	-28.0%	-15.2%	-4.5%	0.0%	-0.4%	-1.7%	-3.1%	-4.2%
.8x Deposit Beta	-22.8%	-22.9%	-10.7%	-2.8%	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



# What is the PRIMARY objective of your investment portfolio?

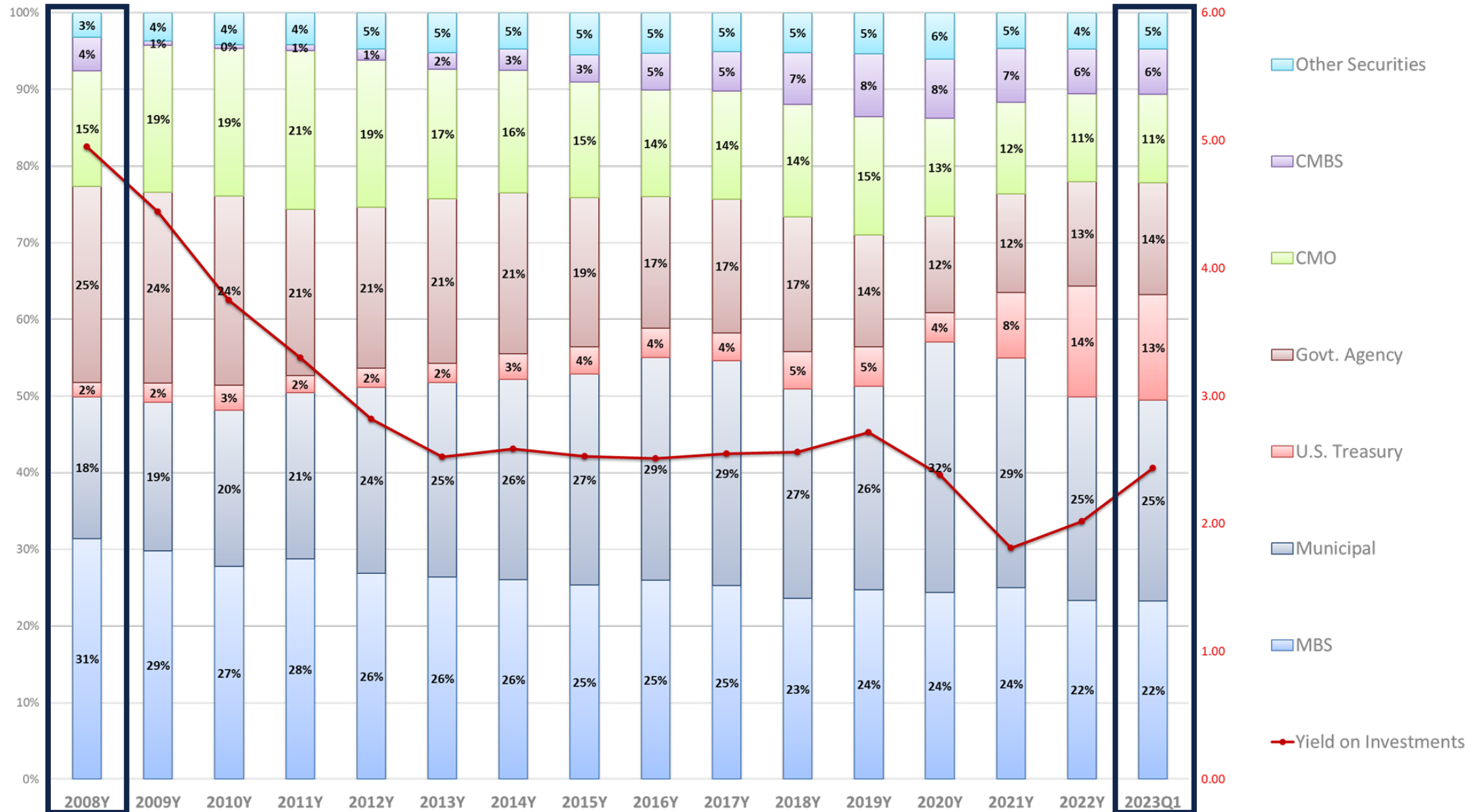
Liquidity

Interest Rate Risk Management

Earnings

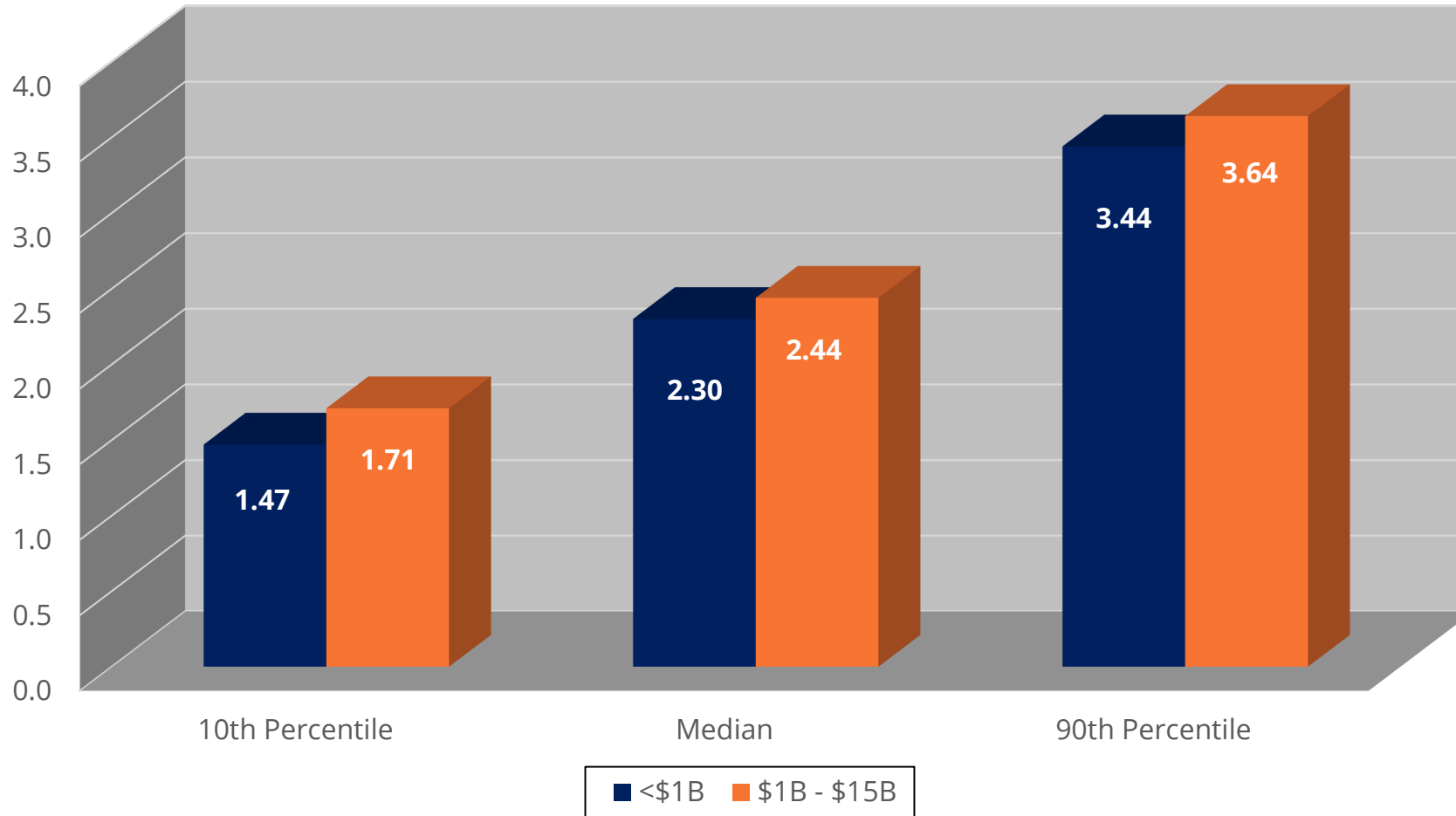
Pledging

# STUDY THE PAST SECURITY MIX TREND



Source: S&P Global Market Intelligence, Data for all U.S. Commercial Banks <\$10B as of 3/31/23

# MONITOR THE PRESENT INVESTMENT YIELD STATISTICS



Source: S&P Global Market Intelligence,  
Data for all Banks Nationally <\$15B as of 3/31/23

# 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 EBRISSES 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

88789FDC Muni	99) Disclaimer	94) Export	97) Settings	Trade History
Issuer TIPPECANOE VLY AKRON IN SCH BL				CUSIP 88789FDC9
Series				IN
Coupon 5.000 Maturity 07/15/37 Issued 02/24/22 State IN				

Bond, Size: All Sizes, Trade Date: 02/04/22 > Cpn: 5, Mty: 07/15/37, Iss: 02/24/22 88789FDC

	Time	Sale Type	Vol(M)	Price	Yield	Spd(YT...)	Spd(YT...)	Spd(Con...)
101)	12:23	Sale to Customer	1,000	129.653	1.850	38	107	28
102)	11:57	Sale to Customer	1,235	129.653	1.850	38	107	28
103)	11:00	Inter-Dealer	2,235	128.020	2.000	53	118	43

## Transaction Details

$$\begin{aligned}
 & 129.653 \text{ Client Px} \\
 & - \underline{128.020} \text{ Broker Px} \\
 & = \mathbf{1.633} \text{ High Mark-Up}
 \end{aligned}$$

$$\begin{aligned}
 & \times \underline{1,235,000 \text{ PAR}} \\
 & \mathbf{\$20,168} \text{ Broker Commission}
 \end{aligned}$$

$$\begin{aligned}
 & \times \underline{10 \text{ million PAR}} \\
 & \mathbf{\$163,300} \text{ Broker Commission}
 \end{aligned}$$

**Sample Bank Purchase (BQ)**

Trade Date 3/27/2019

Dupont, WA Water

YTW = 2.75%

TEY = 3.48%



**Difference**

YTW = 75 bps

TEY = 95 bps



**Taylor Advisors Purchase (GM)**

Trade Date 3/27/2019

Escambia, FL Housing

YTW = 3.50%

TEY = 4.43%

26614DAV Muni		92 Report	93 Alert	97 Settings	Page 1/11	Security Description: Muni
DUPONT WA WTR & STORMWTR REVENUE		94 Notes		CUSIP 26614DAV6		
Ticker DUPWTR Cpn 4.000 Maturity 12/01/2039 Dated 04/10/2019 State WA						
25) Municipal Bond 20 Series 27) Issuer Description						
Pages	Municipal Bond Information			Trading Information		
11) Bond Info	Issue Type	REVENUE BONDS		1st Settle Dt	04/10/2019	
12) Addtl Info	Ult Borrower	City of Dupont WA Water &...		Next Settle Dt	07/17/2019	
13) Involved Parties	Maturity Type	CALL/SINK		Int Accrual Dt	04/10/2019	
14) Adj Cpn Info	Ext Redemption	NONE		1st Coupon Dt	12/01/2019	
15) Credit Enhance	Coupon	FIXED	4.000	Next Par Call	12/01/2028@Par	
16) Credit Ratings	Prc/Yld @ Iss	109.632/2.850		Next Sink	12/01/2038@Par	
17) Call Sched & ERP	Coupon Freq	SEMI-ANNUAL		For \$ 350M		
18) Put Schedule	Tax Provision	FED BQ		Week of Sale	03/25/2019	
19) Sink & Est Sink	Credit Enhancement			Piece/Inc/Par	5,000/5,000/5,000	
20) Refunding Info						
21) DES Notes						
Quick Links	Bond Ratings					
31) TDH MSRB Trade	S&P	AAA		STA		
32) CACS Material Evt						
33) CF Filings						
34) CN Sec News						
35) HDS Holders						
66) Send Bond						

296122VS Muni		92 Report	93 Alert	97 Settings	Page 1/11	Security Description: Muni
ESCAMBIA CNTY FL HSG FIN AUTH SF MTGE REVENUE		94 Notes		CUSIP 296122VS0		
Ticker ESCSFH Cpn 3.500 Maturity 10/01/2039 Dated 04/30/2019 State FL						
25) Municipal Bond 20 Series 27) Issuer Description						
Pages	Municipal Bond Information			Trading Information		
11) Bond Info	Issue Type	REVENUE BONDS		1st Settle Dt	04/30/2019	
12) Addtl Info	Ult Borrower	Escambia County Housing F...		Next Settle Dt	07/17/2019	
13) Involved Parties	Maturity Type	CALL/SINK		Int Accrual Dt	04/30/2019	
14) Adj Cpn Info	Ext Redemption	YES (Type: OPT/MAND)		1st Coupon Dt	10/01/2019	
15) Credit Enhance	Coupon	FIXED	3.500	Next Par Call	10/01/2028@Par	
16) Credit Ratings	Prc/Yld @ Iss	100.000/3.500		Next Sink	04/01/2035@Par	
17) Call Sched & ERP	Coupon Freq	SEMI-ANNUAL		For \$ 130M		
18) Put Schedule	Tax Provision	FED TAX-EXEMPT		Week of Sale	03/25/2019	
19) Sink & Est Sink	Credit Enhancement			Piece/Inc/Par	5,000/5,000/5,000	
20) Refunding Info						
21) DES Notes						
Quick Links	Bond Ratings					
31) TDH MSRB Trade	Moody's (Undl)	Aaa				
32) CACS Material Evt						
33) CF Filings						
34) CN Sec News						
35) HDS Holders						
66) Send Bond						

Better Credit Quality



WHAT IS YOUR INSTITUTION'S  
PORTFOLIO YIELD?

INVESTMENT MIX?



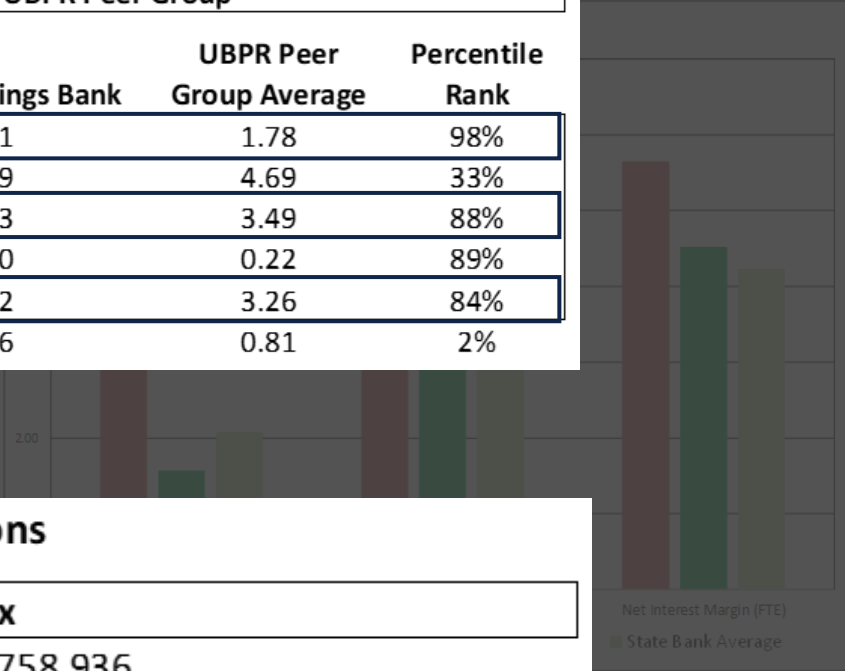
Performance and Balance Sheet Snapshot - 2021Q4  
Sample Savings Bank (SSB)

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)	Yield on Investments (FTE)	3.81	1.78	98%
	Yield on Total Loans	Yield on Total Loans	4.39	4.69	33%
	Earning Asset Yield	Earning Asset Yield	4.23	3.49	88%
	Interest Expense to Avg. Earning Assets	Interest Expense to Avg. Earning Assets	0.40	0.22	89%
	Net Interest Margin (FTE)	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%
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%



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%
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%

# A PROVEN INVESTMENT PROCESS LEADS TO HIGHER RETURNS OVER LONG PERIODS OF TIME

## Taylor Advisors Performance

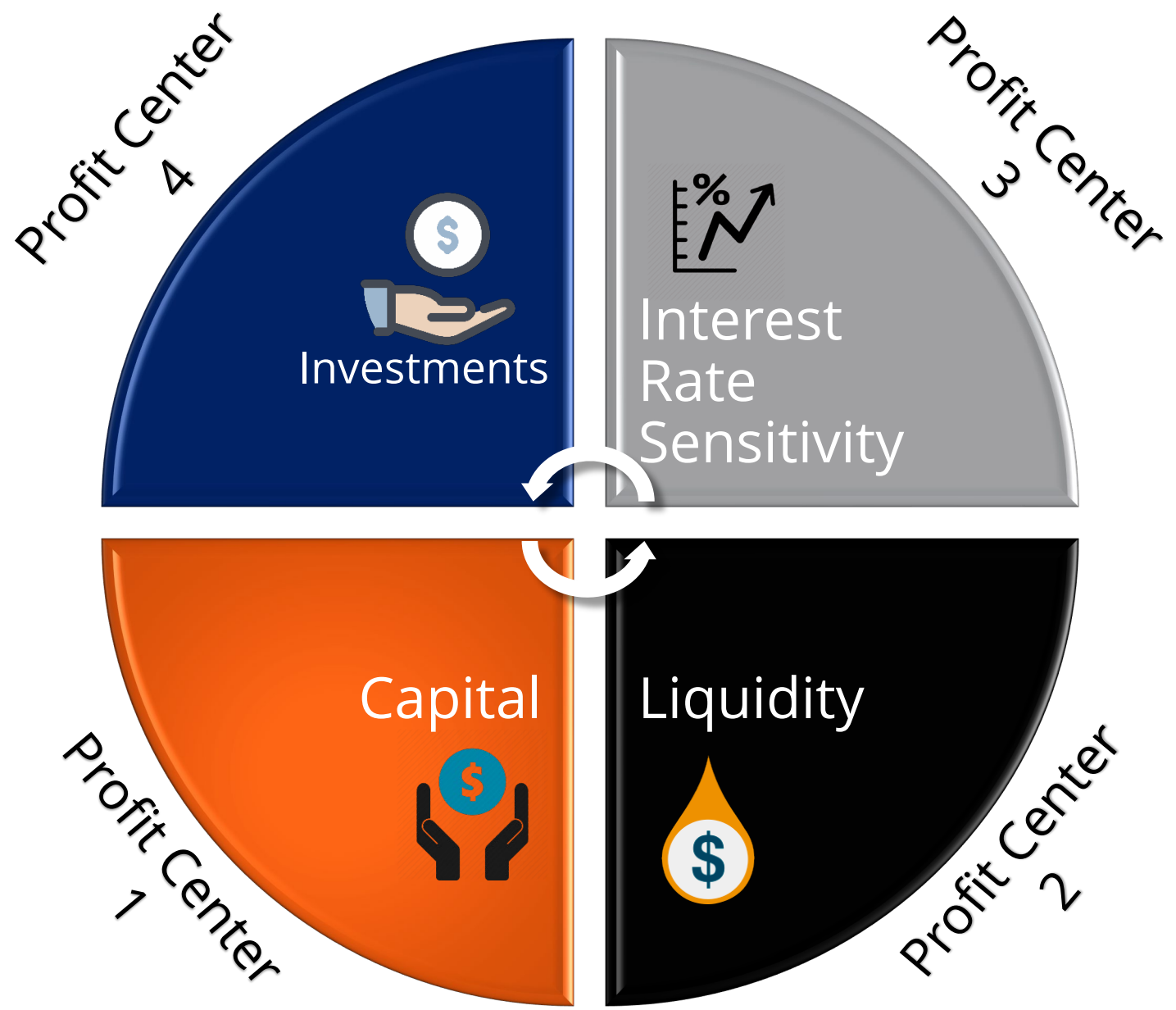
### Yield on Investment Securities (Fully Taxable Equivalent)

#### Municipal Advisory Clients

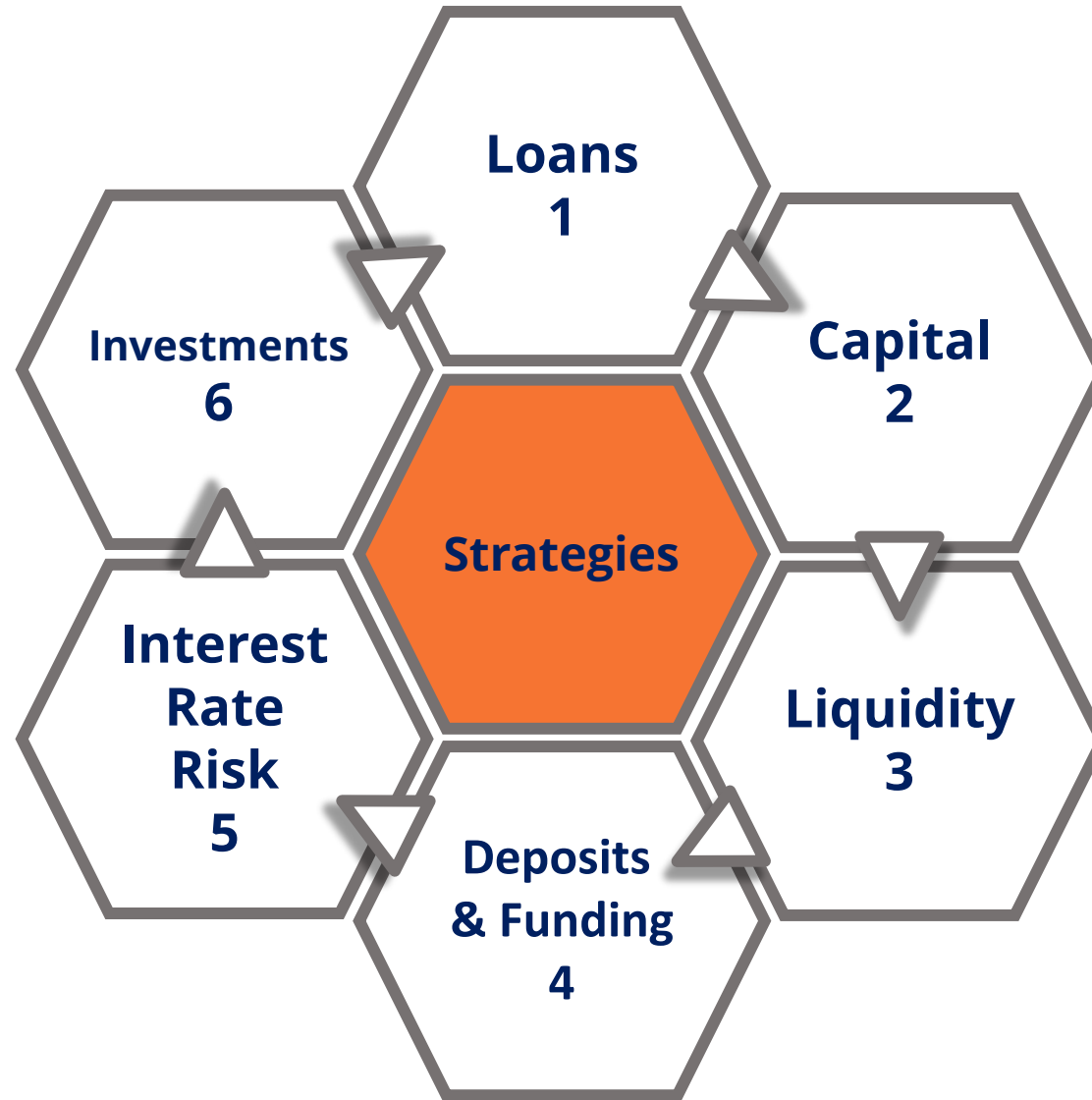
Investment Yield Performance Municipal Advisory Clients				
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Time Period	New Clients	Tenured Clients	Non-Clients	Taylor Advisors Outperformance (Tenured Clients)
MRQ	2.21	2.65	2.24	<b>+0.41</b>
T12M	1.84	2.42	1.99	<b>+0.43</b>
2021	1.62	2.24	1.74	<b>+0.50</b>
2020	2.26	2.93	2.27	<b>+0.66</b>
2019	2.55	3.28	2.61	<b>+0.67</b>
2018	2.79	3.10	2.46	<b>+0.64</b>
2017	2.57	3.41	2.41	<b>+1.00</b>
2016	2.63	3.44	2.35	<b>+1.09</b>

# KEY PROFIT CENTERS



# OBJECTIVES AND STRATEGIES



## You expect your Bank's Net Interest Margin:

To Continue to expand  
with additional hikes

Has likely plateaued and  
could compress this year

Has already started to  
compress

# 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!



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