



**HUB**



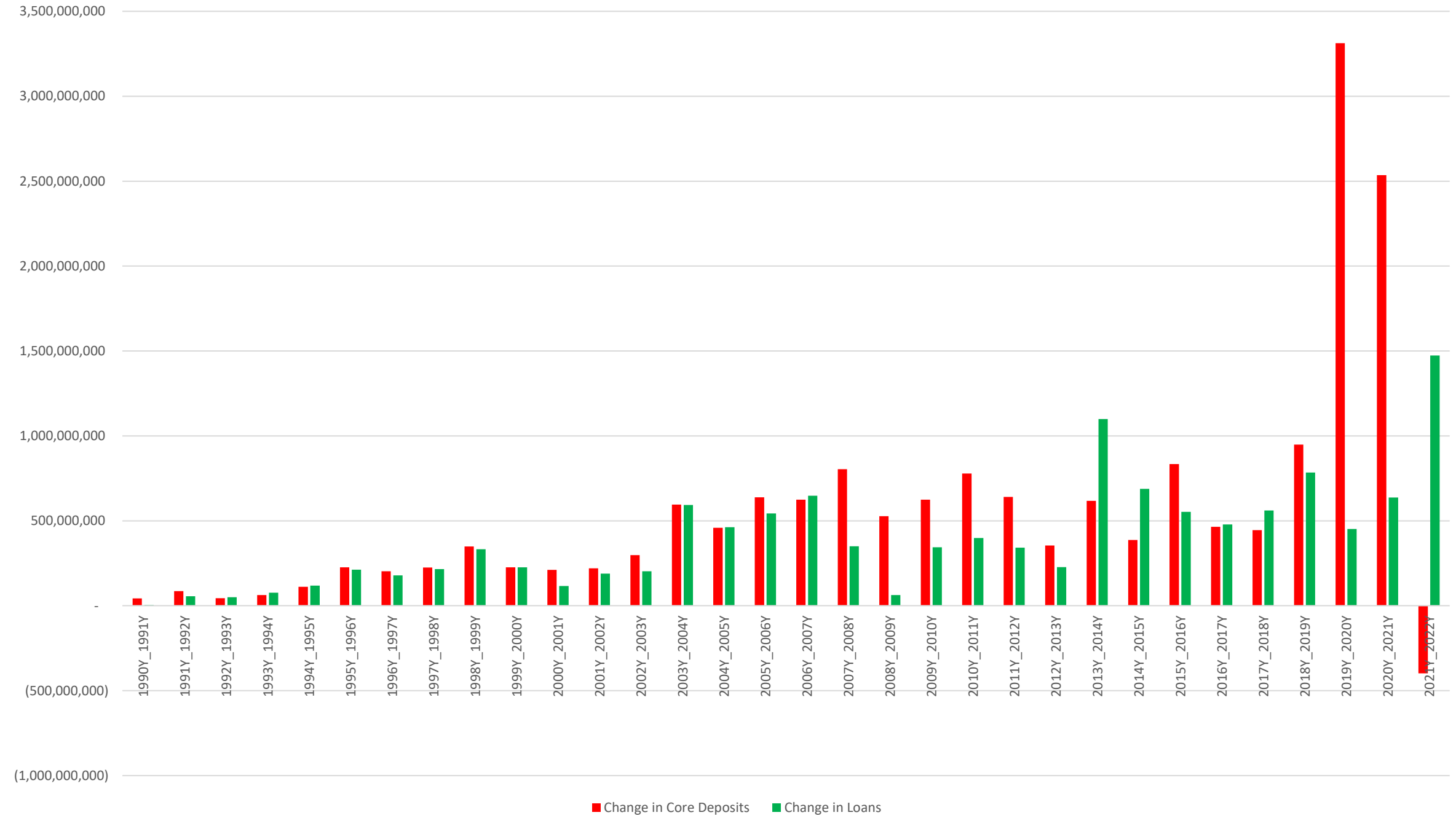
**TAYLOR**  
ADVISORS

# Balance Sheet Optimization: Driving Profitability

Omar Hinojosa, CFA

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

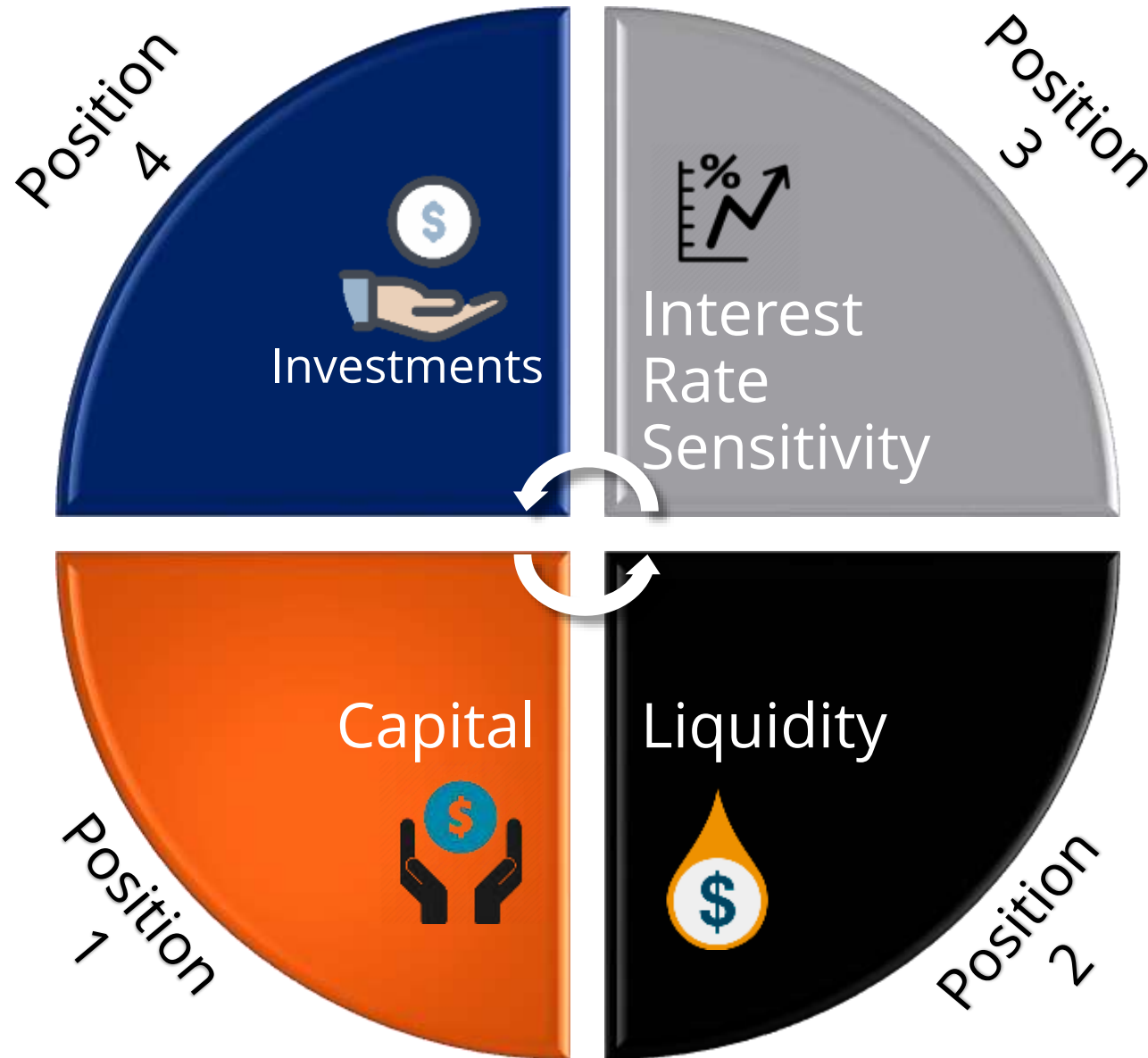
- Why ALCO/Balance Management is important to overall **profitability**
- Discuss why strategy formation is **not a one-size fits all** approach
- How can we **dissect our Net Interest Margin** and get better? See Performance SNAPSHOT
- How can we **Reimage “Old School” ALCO** to drive better and/different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



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 2.0</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 2.0</p>

# 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

# 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

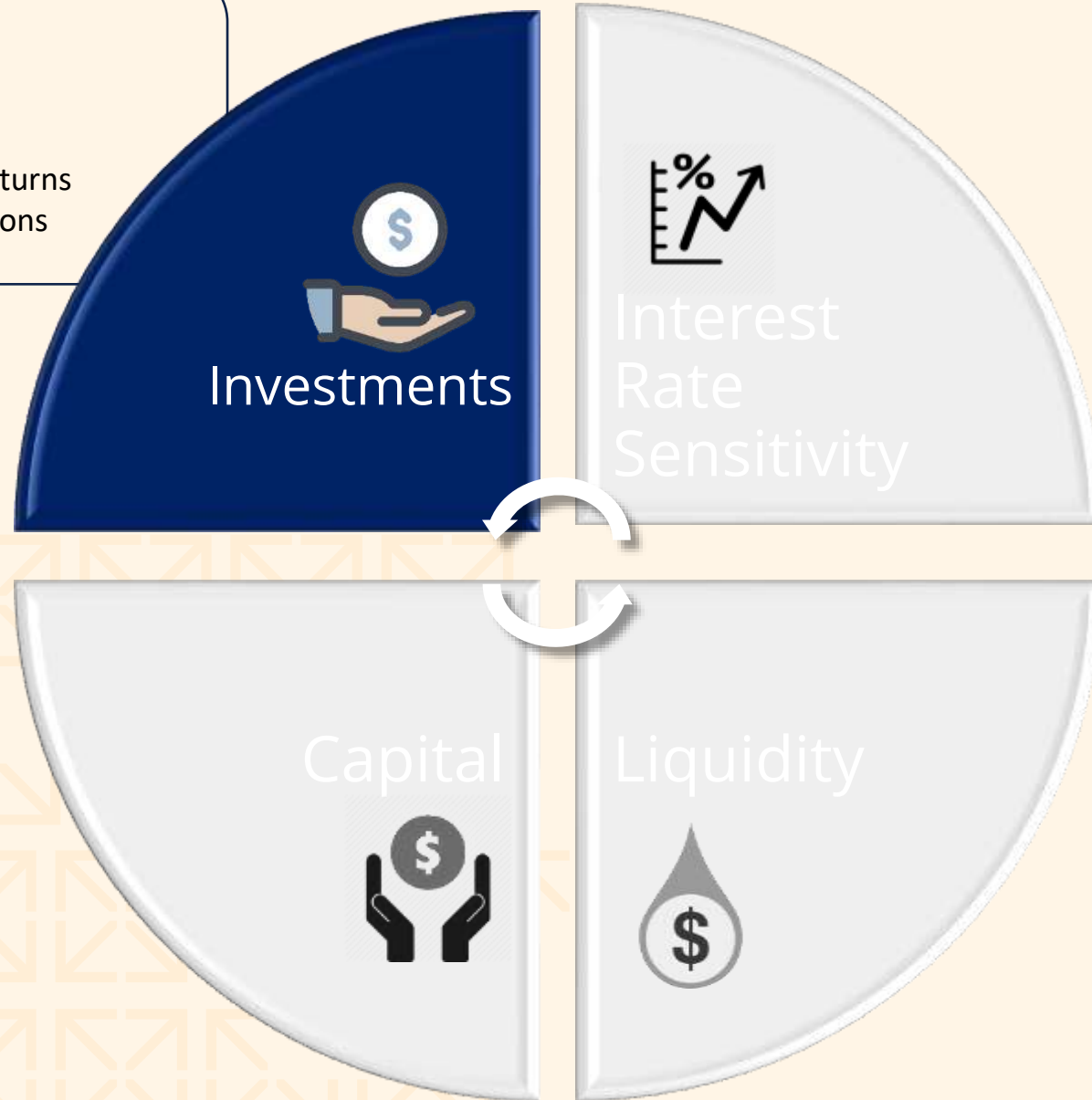
# PREPARE FOR THE FUTURE



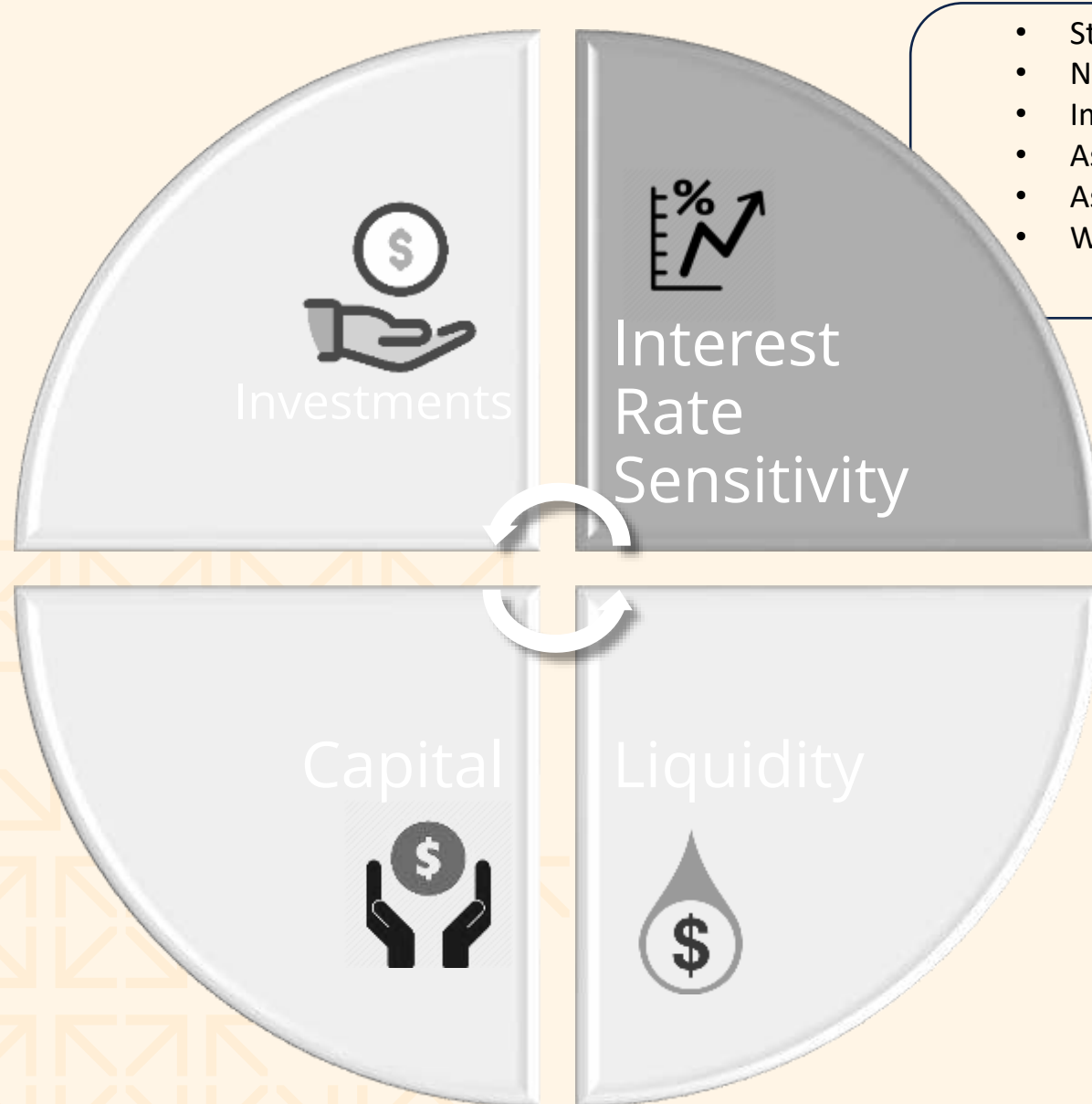
- Where *could we go*?
  - Accountability
    - Review Minutes: Action Items, Strategies
  - Tactical Forecasting
    - Loans vs. Deposit Projection
    - Liquidity Flows
  - Stress Testing
    - Capital: Credit Deterioration
    - Interest Rate Risk: Higher/Different Betas
    - Liquidity: Reduced Access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

# BALANCE SHEET MANAGEMENT – INVESTMENTS

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

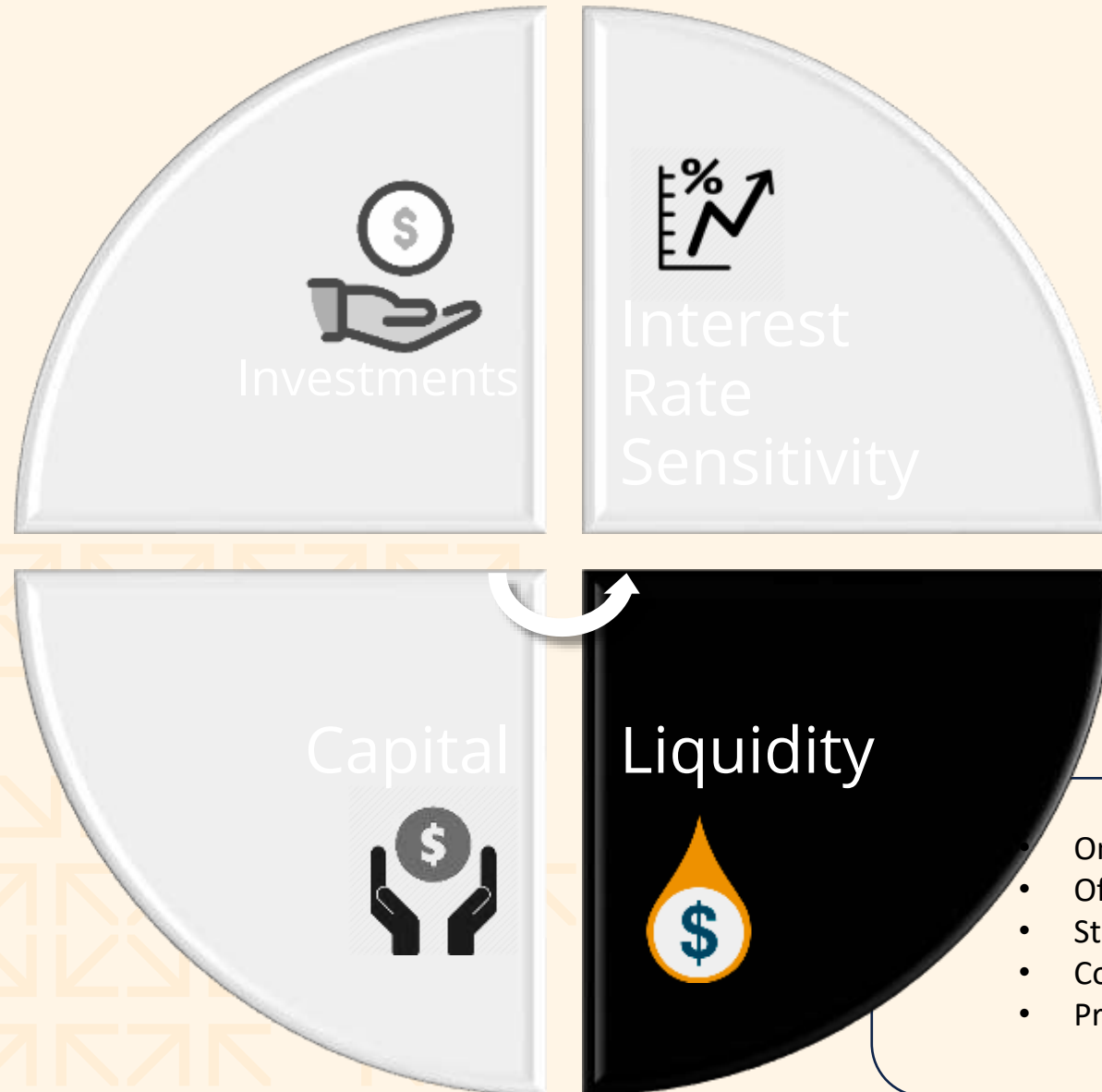


# BALANCE SHEET MANAGEMENT – INTEREST RATE RISK



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

# BALANCE SHEET MANAGEMENT - LIQUIDITY



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

1837  
1873

**1st Kentucky Derby 1875**  
Aristides

1907

**1st Triple Crown Winner 1919**  
Sir Barton

1st US Depression 1929

**World Record Time 1973**  
Secretariat

**1st High Speed Bank Run 1984**  
Continental Illinois  
**Largest Bank Failure 2008**  
Washington Mutual

**Last Triple Crown Winner 2018**  
Justify

**1st Derby without fans 2021**

**Largest 1 day Bank Run 2023**  
Silicon Valley Bank

# Volatility

1:30 PM: SVB is a solid bank. I know their CEO, Greg Becker. Great guy. I figure this is a temporary issue caused mainly by people panicking. They'll recover. I buy shares of SVB at what I consider significantly low prices.

2:09 PM: One of the wires for the other company clears.

~3:00 PM: My chats with tech founders from Latin America start to catch up.

4:05 PM: SVB calls us. Tells us that our savings will be wired the same day, as requested.

4:10 PM: We jump on a plane to fly back to San Francisco.

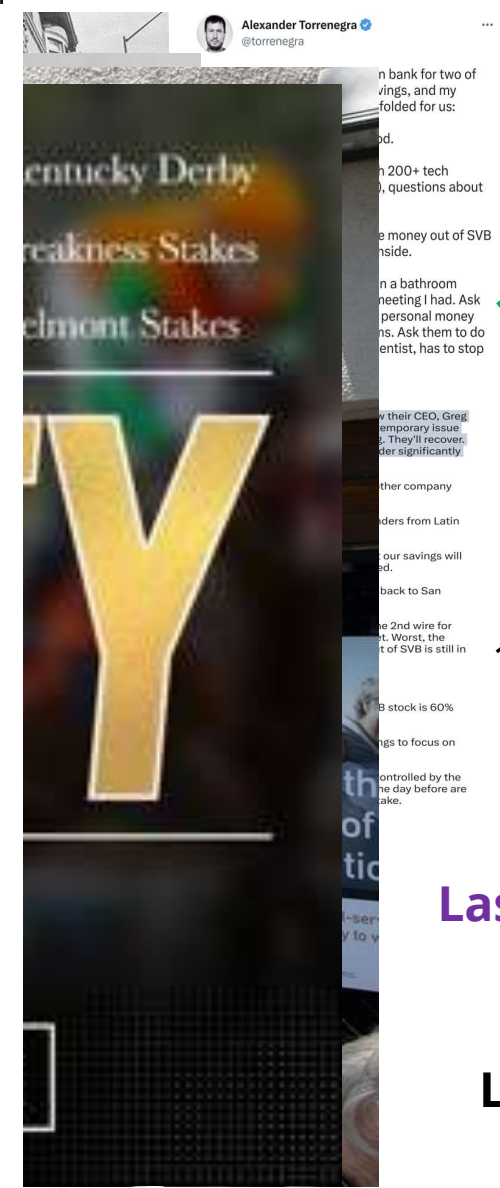
11:50 PM: We land. We learn that the 2nd wire for the 2nd company hasn't cleared yet. Worst, the wire to get our personal savings out of SVB is still in the queue.

2 AM: Go to bed.

Friday 7 AM: Wake up. Nothing. SVB stock is 60% down overnight.

7:30 AM: Cancel all morning meetings to focus on the problem.

~8:00 AM: Learn that SVB is now controlled by the government. The shares I bought the day before are now likely worthless. I made a mistake.



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📱 Text **SW370** to **22333** once to join

## What do you think will come next?

A significant  
Kentucky Derby Event

The next bank  
failure/crisis

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# BALANCE SHEET MANAGEMENT - CAPITAL



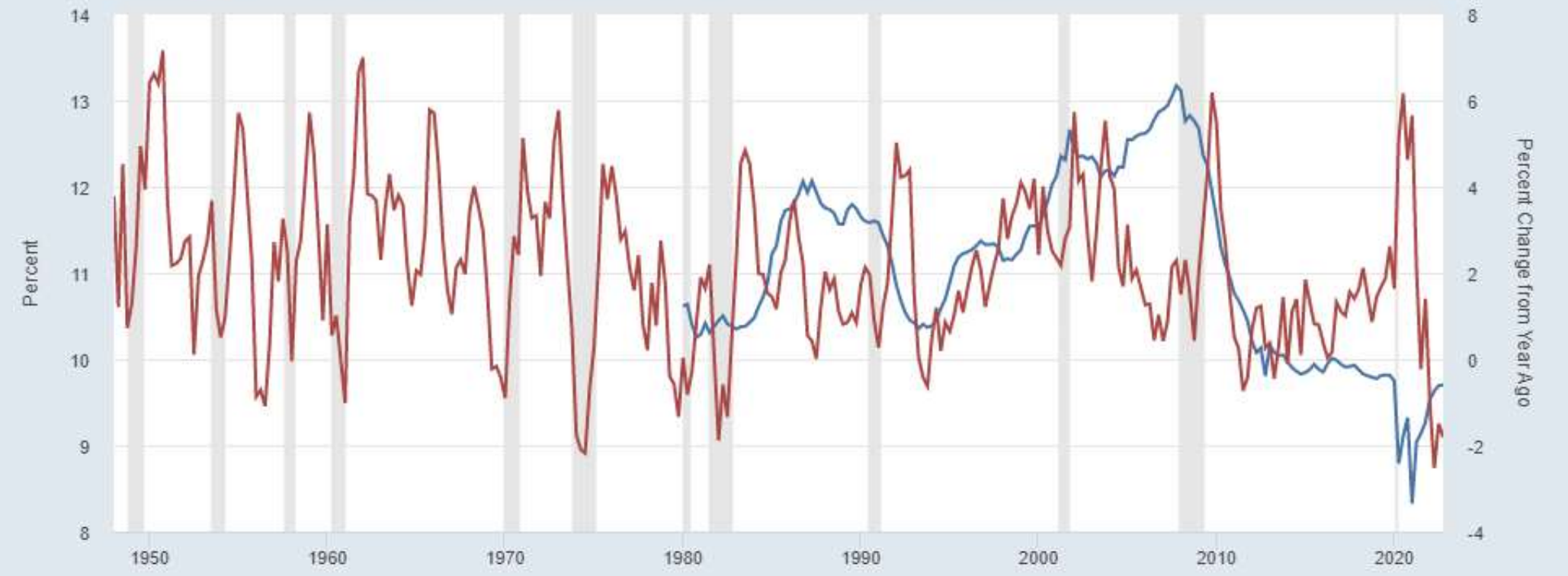
FRED — Consumer Debt Service Payments as a Percent of Disposable Personal Income



FRED — Household Debt Service Payments as a Percent of Disposable Personal Income



**FRED** — Household Debt Service Payments as a Percent of Disposable Personal Income (left)  
 — Nonfarm Business Sector: Labor Productivity (Output per Hour) for All Workers (right)



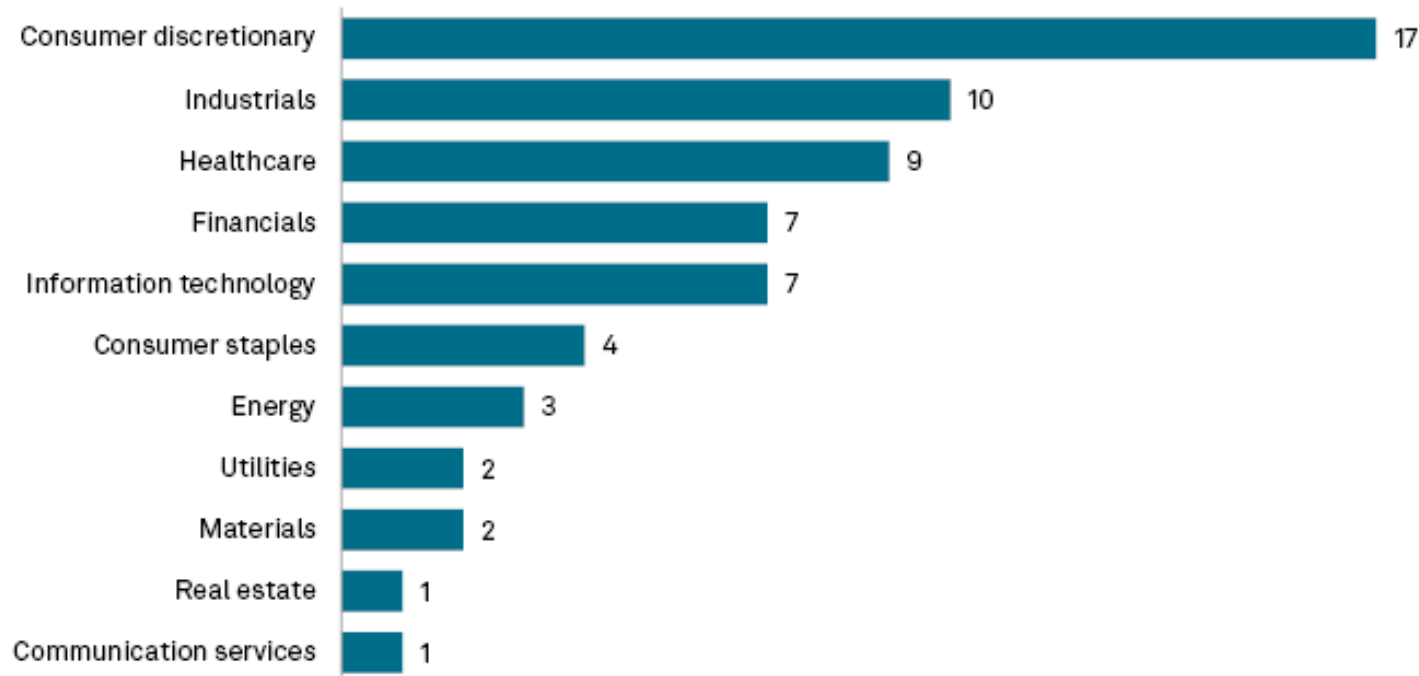
Shaded areas indicate U.S. recessions.

Sources: Board of Governors; BEA; BLS

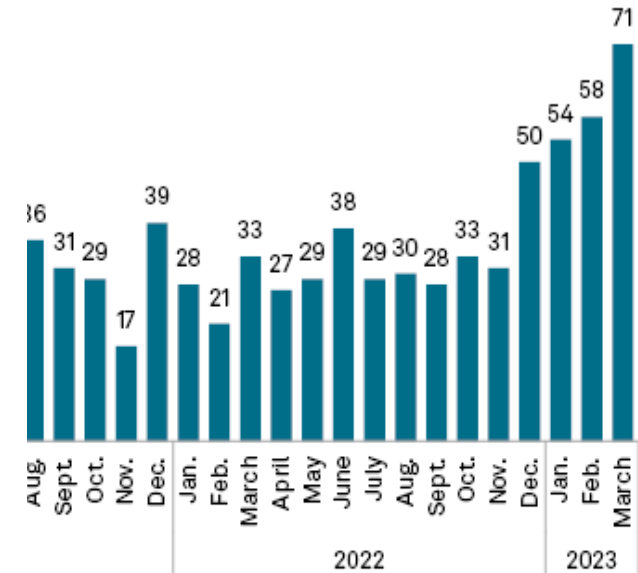
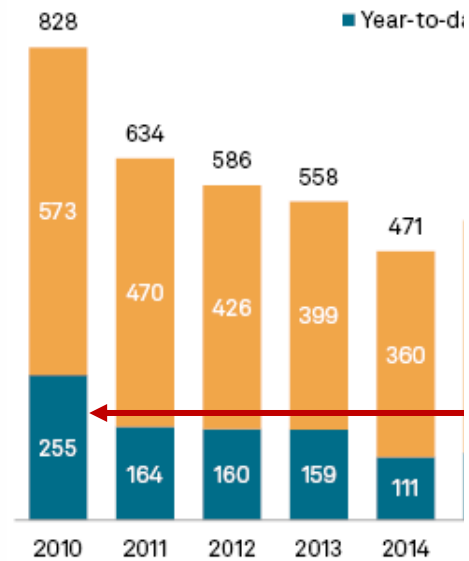
fred.stlouisfed.org

# BANKRUPTCIES ON THE RISE...

## 2023 bankruptcy filings by primary sector



## US bankruptcy filings by year



Includes S&P Global Market Intelligence-covered U.S. companies that announced a bankruptcy between Jan. 1, 2020, and Feb. 28, 2023.

Data compiled Mar. 2, 2023.

Includes S&P Global Market Intelligence-covered U.S. companies that announced a bankruptcy between Jan. 1, 2023, and Feb. 28, 2023.

S&P Global Market Intelligence's bankruptcy coverage is limited to public companies or private companies with public debt where either assets or liabilities at the time of the bankruptcy filing are greater than or equal to \$2 million, or private companies where either assets or liabilities at the time of the bankruptcy filing are greater than or equal to \$10 million.

Primary sector not available for 48 bankruptcies filed in 2023.

Source: S&P Global Market Intelligence.

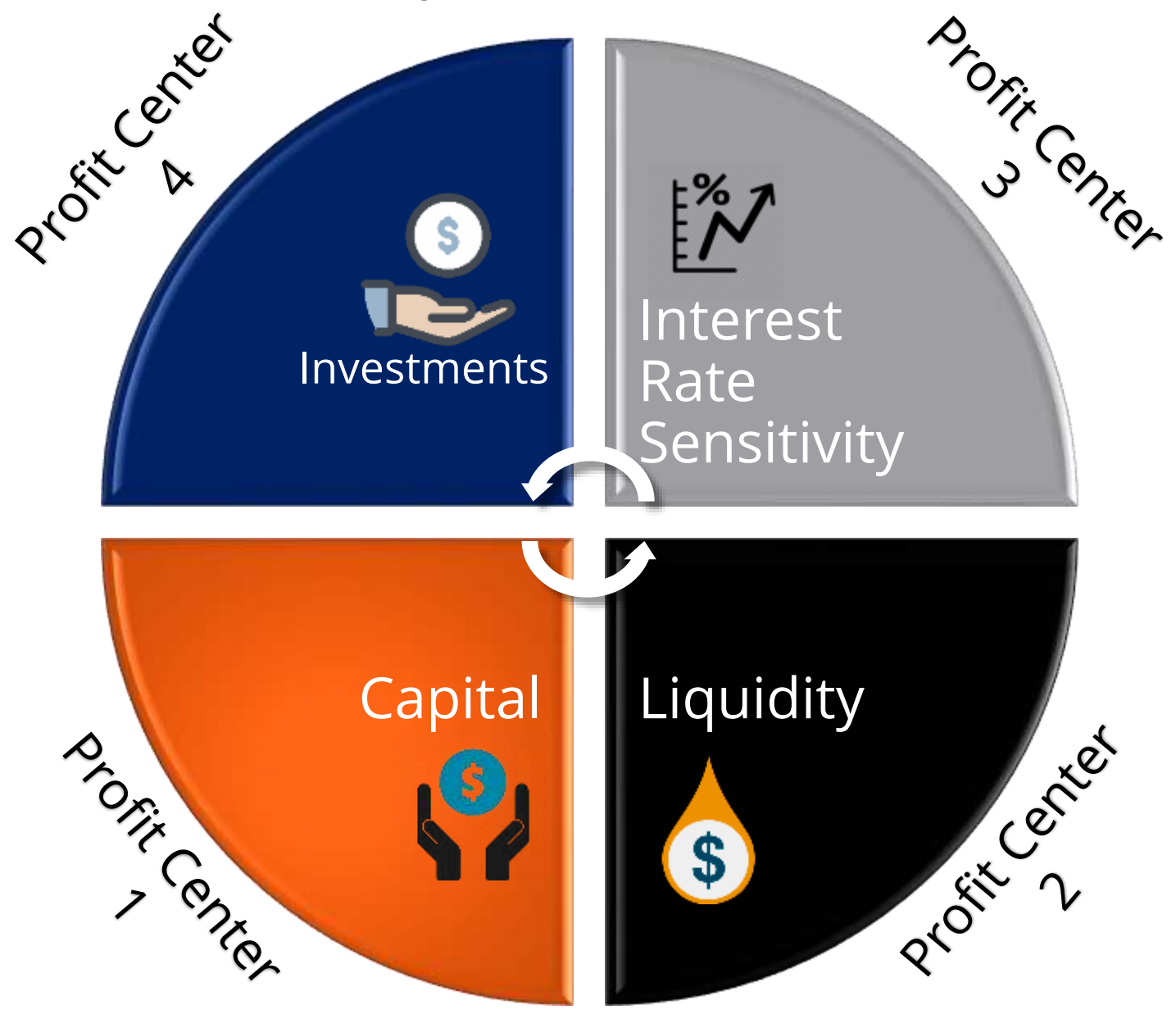
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is that announced a bankruptcy between Jan. 1, 2020, and

id to public companies or private companies with public ipctcy filing are greater than or equal to \$2 million, or private bankruptcy filing are greater than or equal to \$10 million.



# 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
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
2,500,000	1,250	2,500	3,750	5,000	6,250	7,500
5,000,000	2,500	5,000	7,500	10,000	12,500	15,000
10,000,000	5,000	10,000	15,000	20,000	25,000	30,000