



The Premier National
Graduate School of Banking®

Welcome to



MASTERCLASS



Managing Liquidity Risk in Turbulent Waters

Pacific Coast Banking School

2024 Master Class Series

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Today's Presenter



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With over 25 years of experience in balance sheet and model risk management, and hands-on experience in audit and leading the operations of DCG's Financial Analytics Department, Mark has unique expertise for optimizing and "right-sizing" risk management in the community, mid-size, and large banking space.

In his current role, Mark facilitates educational programs and collaborative workshops and is a trusted resource for financial institutions, industry, and state trade associations, as well as regulatory agencies on a variety of balance sheet and model risk management/validation topics, including IRR, Liquidity, CECL, BSA/AML, MRM/ERM and ALCO.

Mark is a frequent author and top-rated speaker on a vast array of risk management topics and is a member of the Financial Managers Society's Board of Directors and California Bankers Association's Enterprise Risk Management Committee. The son of an educator and member of the faculty of Pacific Coast Banking School, Mark's passion for teaching drives his desire to work with bankers to strive for excellence within their organizations.

Mark lives on the North Shore of Boston with his wife, two children, and two dogs. He is a graduate of St. Michael's College in Vermont with a degree in accounting.

Liquidity Management Is Challenging Leaders

Kristin Dupuis,
Chief Financial Officer



The current environment and regulatory pressures present new challenges – are we prepared?

Last year's bank failures have me concerned I'm not doing enough for stress testing

My policies need to be refreshed but I'm not sure where to start

My CFP needs to be updated so my team is ready to handle a crisis

I'm concerned about the stability of my deposits - I need a gameplan fast!

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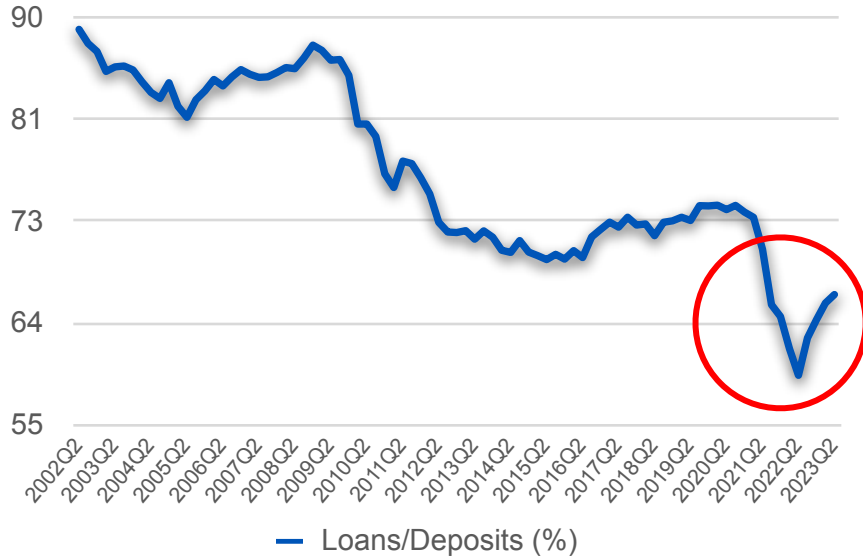
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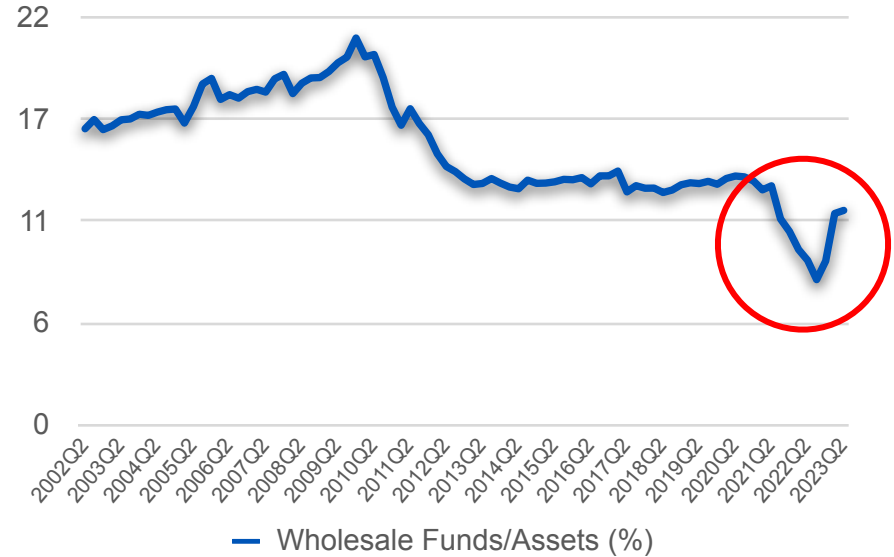
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We Were at Historic Lows

Loans/Deposits

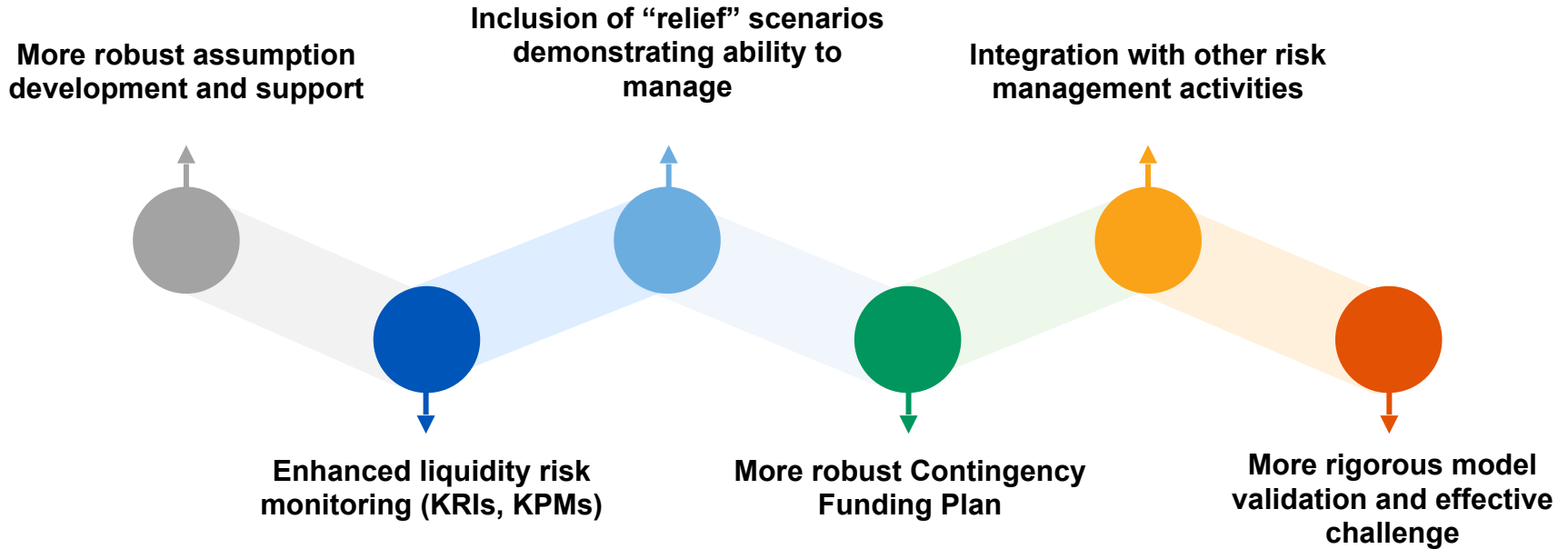


Wholesale Funds/Assets



Source: S&P Global

Heightened Regulatory Concerns



Growing concern: Requirements to hold more OBS liquidity???

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What Are Proactive Institutions Doing for Stress Testing?



SCENARIOS

Expand stress scenario and design; include deposit runoff and loan growth, credit concerns and collateral restrictions



ASSUMPTIONS

Defend and document assumption development and support



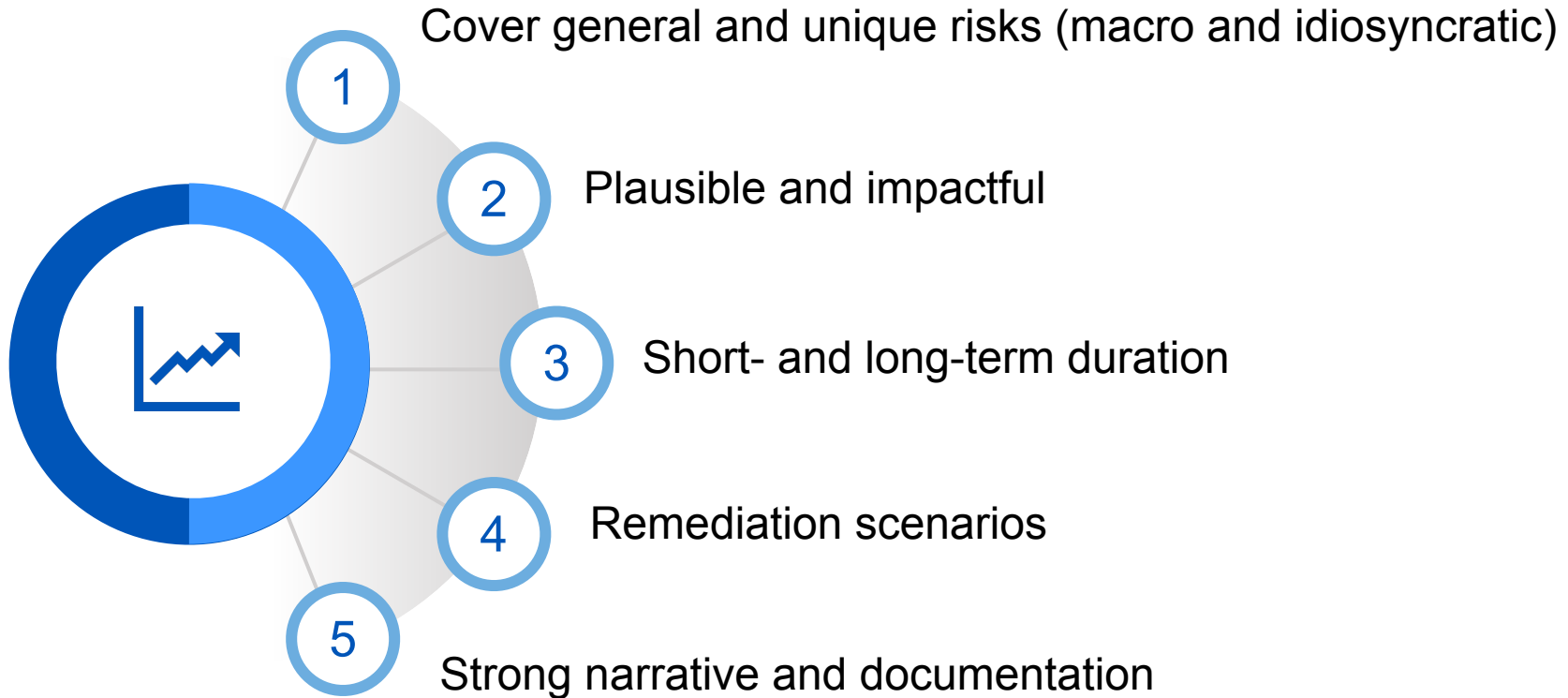
BACKTEST

Often overlooked aspect of liquidity process

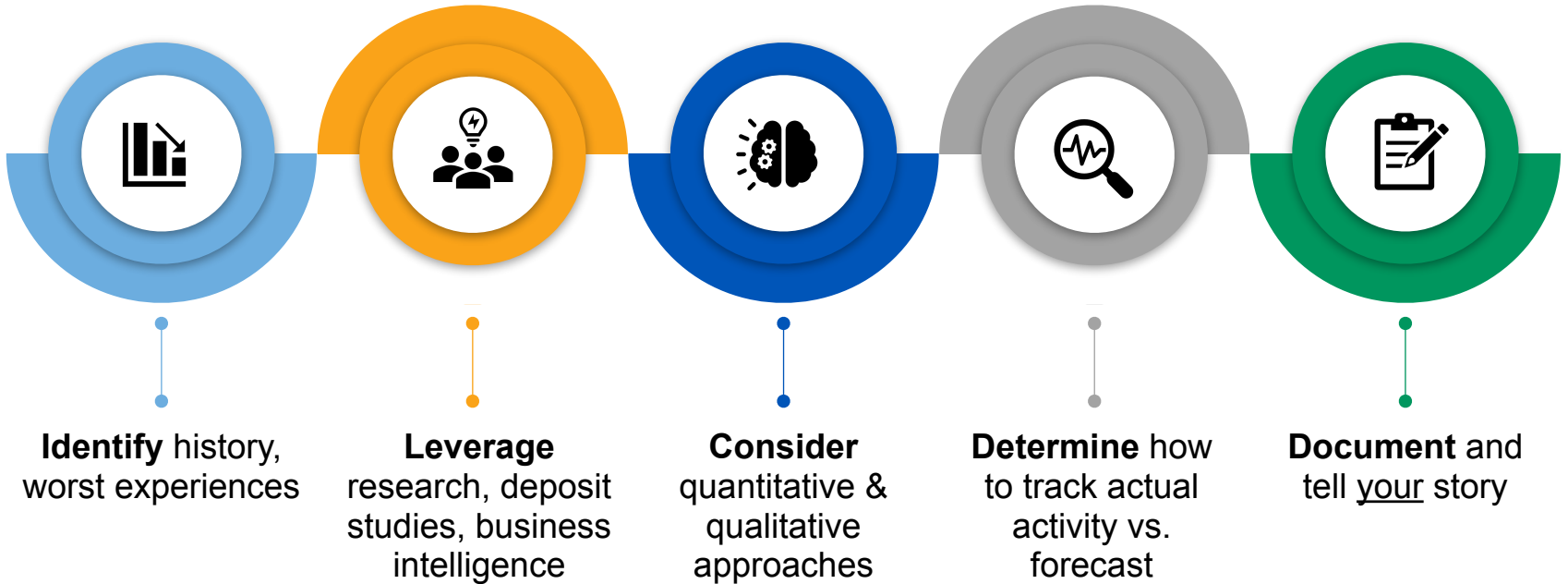
Traditional Approach to Scenario Design



Scenario Design Considerations

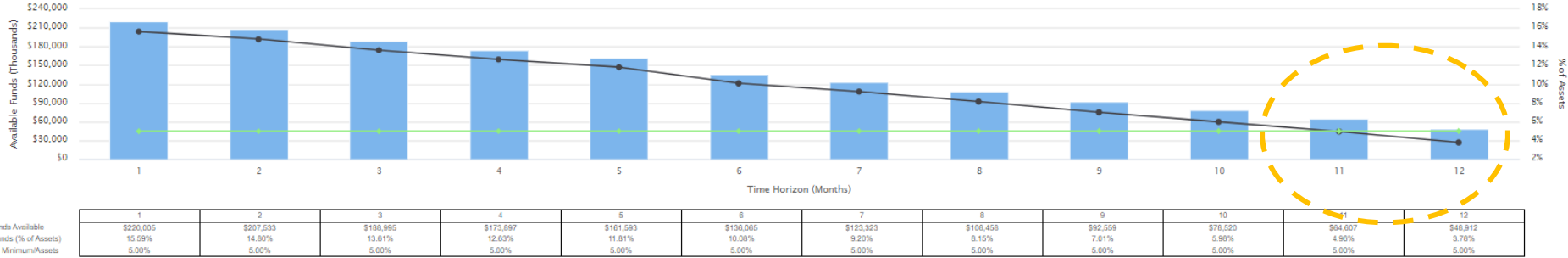


Stress Assumption Development

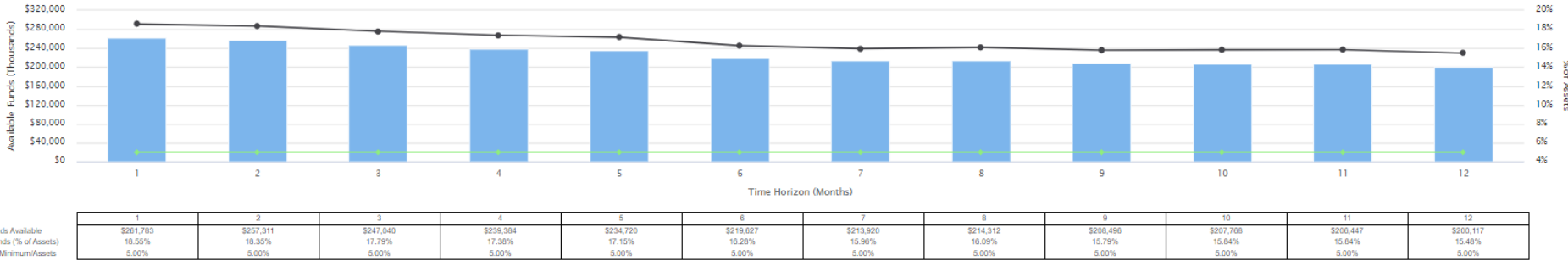


Severe Stress/Relief

Severe 2023 Stress – Stress Case – LIQUIDITY FORECAST (TOTAL FUNDS AVAILABLE)

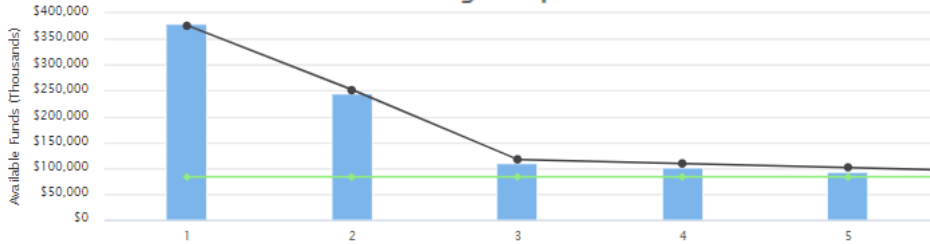


Severe 2023 Stress – Relief Case – LIQUIDITY FORECAST (TOTAL FUNDS AVAILABLE)



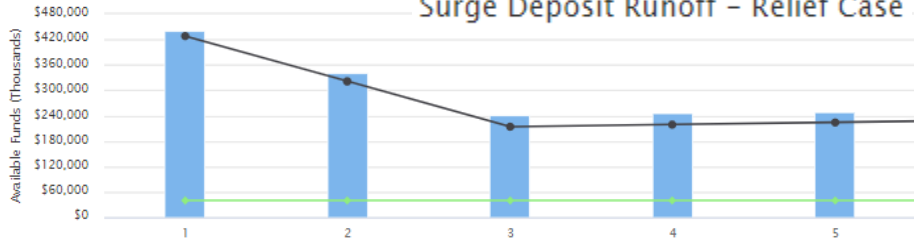
Liquidity Stress: Deposit Runoff

Surge Deposit Runoff – Stress Case



	1	2	3	4	5
Total Funds Available	\$378,622	\$243,913	\$109,204	\$101,670	\$94,136
Avail. Funds (% of Assets)	22.87%	15.09%	7.02%	6.55%	6.07%
Liquidity Minimum/Assets	5.00%	5.00%	5.00%	5.00%	5.00%

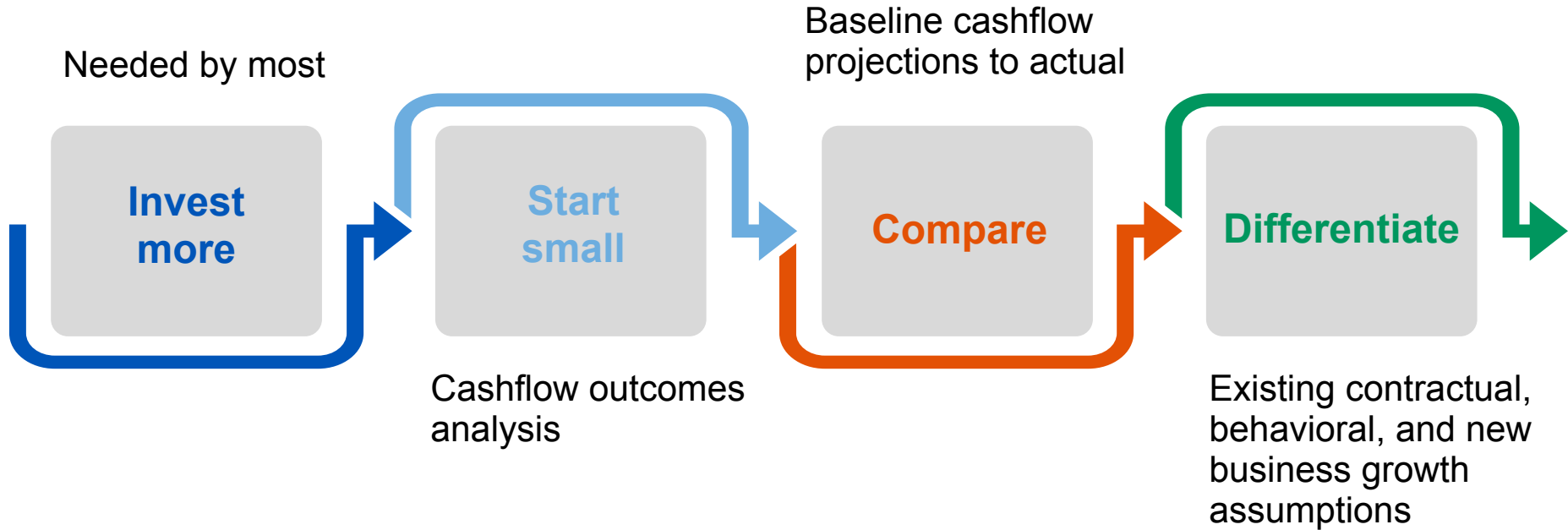
Surge Deposit Runoff – Relief Case



	1	2	3	4	5
Total Funds Available	\$441,249	\$340,423	\$241,778	\$245,087	\$248,165
Avail. Funds (% of Assets)	24.38%	19.05%	13.70%	13.96%	14.22%
Liquidity Minimum/Assets	5.00%	5.00%	5.00%	5.00%	5.00%

Liquidity Ratios	Min / Max	Current	Oct-22	Nov-22
Cash + Unencumbered Coll. / Assets		7.06%	11.25%	10.41%
Net Loans / Deposits	115.00	82.30%	80.71%	84.38%
Brokered Deposits / Assets	25.00	14.96%	20.80%	22.37%
Borrowings / Assets	15.00	1.15%	4.10%	7.19%

Performance Monitoring and Back Testing



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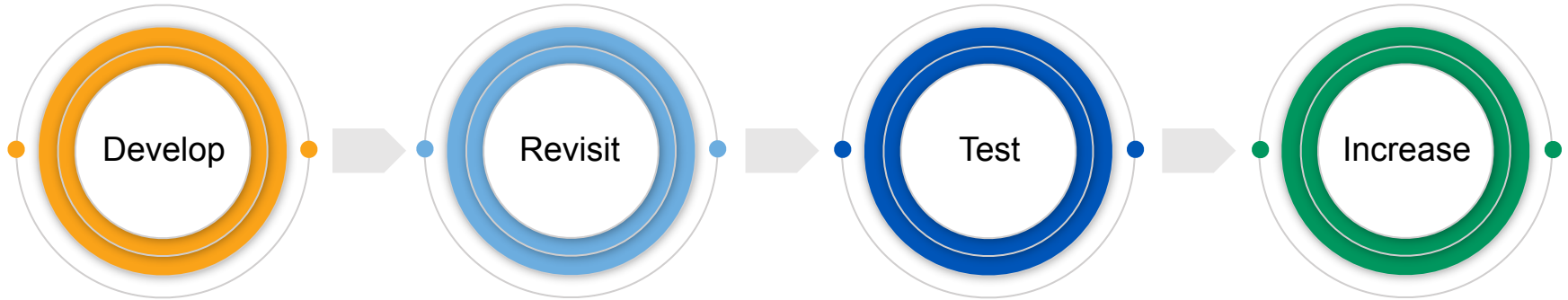
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Enhancing Policies



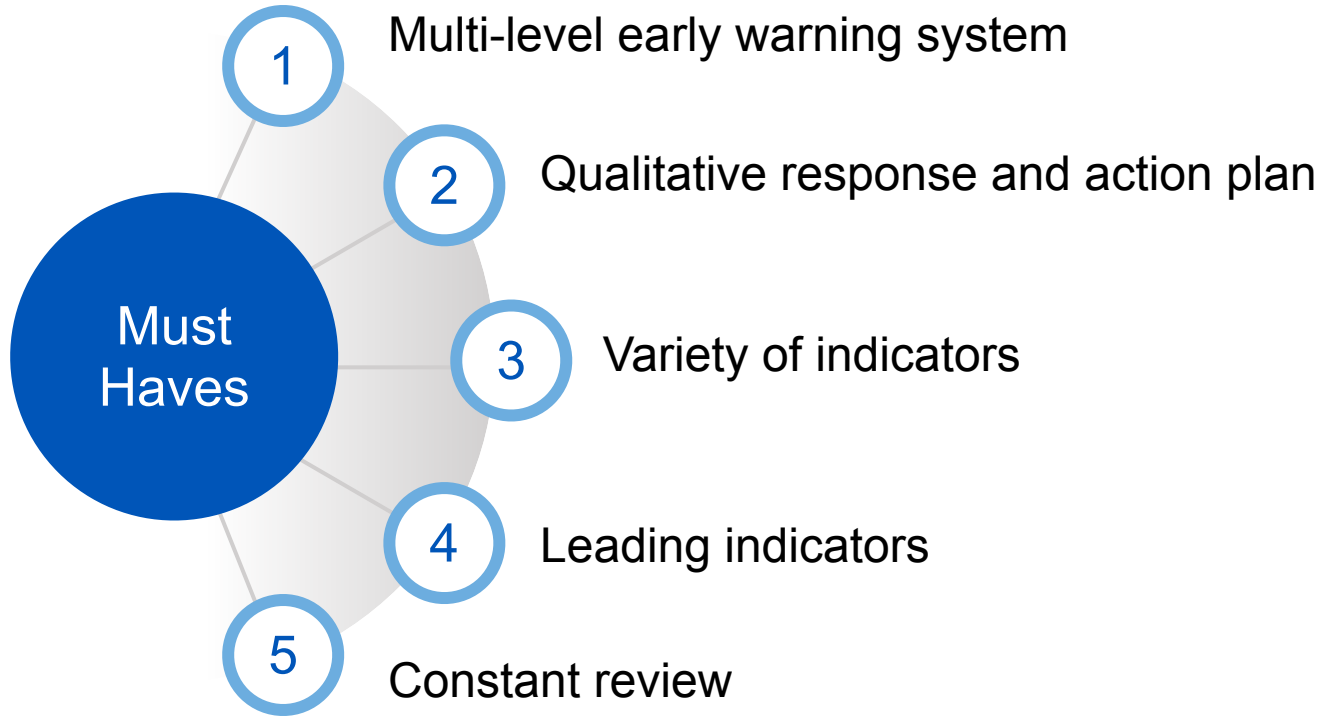
Develop/refine risk monitor, stress testing, comprehensive contingency funding plan

Revisit liquidity risk management policies (including CFP)

Test alternative funding sources routinely and confirm accessibility (and document success)

Increase liquidity discussions with stakeholders

Liquidity Risk Monitor



Liquidity Risk Monitor

	Risk Level 1	Risk Level 2	Risk Level 3	Current Value	03/31/2023 Value	Risk Level	Cons. Periods Triggered	Stress Level
Indicators - Heightened Funding Needs								
1. \$ Change in Loan Growth less Non-Brokered Deposit Growth (3 Months)	\$100,000	\$150,000	\$200,000	-\$65,017	\$149,396	N/A	N/A	N/A
2. % Change in Non-Maturity Deposit Balances (3 Months)	-3.00%	-5.00%	-10.00%	-2.78%	-3.98%	N/A	N/A	N/A
3. % Change of Loans / Deposits (3 Months)	2.00%	4.00%	6.00%	0.81%	2.44%	N/A	N/A	N/A
Indicators - Liquidity/Funding Ratios								
4. On Balance Sheet Liquidity ¹	15.00%	12.50%	10.00%	14.81%	15.26%	Level 1	1	Level A
5. Basic Surplus – Tier 1	5.00%	4.00%	3.00%	6.01%	9.36%	N/A	N/A	N/A
6. Basic Surplus – Tier 2	18.00%	14.00%	10.00%	25.23%	26.72%	N/A	N/A	N/A
7. Basic Surplus – Tier 3	25.00%	20.00%	15.00%	37.35%	37.70%	N/A	N/A	N/A
8. Borrowings / Assets	22.00%	26.00%	30.00%	18.68%	19.30%	N/A	N/A	N/A
9. Brokered Deposits / Assets	10.00%	12.50%	15.00%	7.88%	9.02%	N/A	N/A	N/A
10. Brokered Deposits / Total Deposits	10.00%	12.50%	15.00%	11.29%	12.97%	Level 1	5	Level A
11. Wholesale Funds / Assets ²	20.00%	25.00%	30.00%	26.63%	28.42%	Level 2	5	Level A
12. Free Investment Collateral & Short Term Inv.'s / Assets	10.00%	9.00%	8.00%	13.14%	13.56%	N/A	N/A	N/A
13. Free FHLE Loan Collateral / Assets	15.00%	12.50%	10.00%	19.22%	17.37%	N/A	N/A	N/A
14. Loans / Deposits	100.00%	112.50%	125.00%	102.86%	102.05%	Level 1	2	Level A
15. Pledged Securities / Investments ³	45.00%	55.00%	65.00%	52.91%	52.65%	Level 1	7	Level A
Indicators - Capital at Risk								
16. C&I Loans / Capital	25.00%	35.00%	50.00%	19.62%	21.71%	N/A	N/A	N/A
17. Non-Agency Bonds / Capital	75.00%	100.00%	125.00%	90.33%	92.72%	Level 1	11	Level A
18. Commercial RE Loans / Capital	450.00%	525.00%	600.00%	506.71%	519.34%	Level 1	5	Level A
19. Construction Loans / Capital	30.00%	40.00%	50.00%	27.87%	26.25%	N/A	N/A	N/A
20. Tier One Leverage Capital Ratio ⁴	11.00%	9.50%	8.50%	9.07%	9.18%	Level 2	5	Level A
21. Total Risk Based Capital Ratio ⁵	16.50%	15.50%	14.50%	14.75%	13.78%	Level 2	5	Level A

Source: Liquidity360®

Early warning system (3 levels)

Stress Level and Response / Action Plan

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Contingency Funding Plan

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Must-Dos:

-  **1 Document** crisis roles and responsibilities
-  **2 Define** risk tolerance and action
-  **3 Highlight** KRIs and stress testing
-  **4 Review** constantly
-  **5 Capture** emergency contacts and execution details

CFP - Process Documentation

Document

- Playbook for all funding sources
- Settlement times
- Contact info
- Risks

Line Testing

- Revisit periodically with each alternative funding provider
- Confirm line is active and available

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NMD Industry Rate Forecast (Deposits360®)

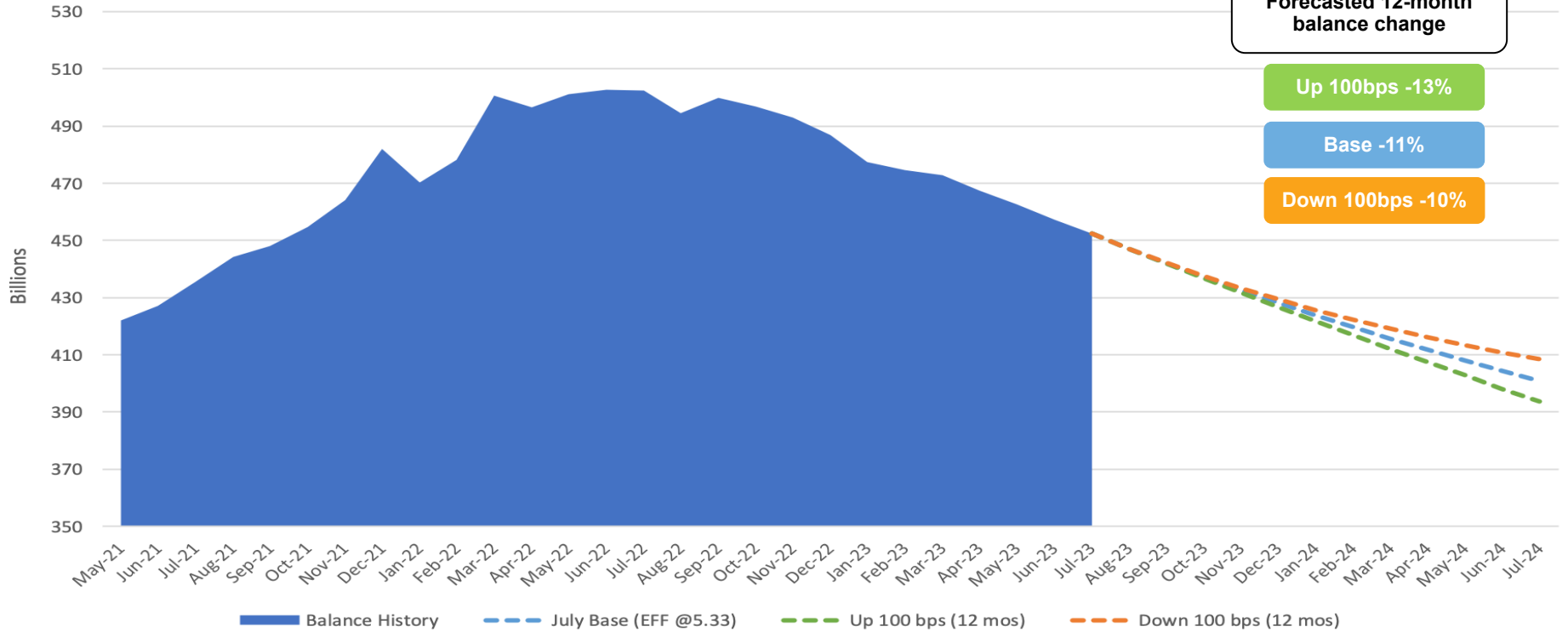
	NMD Avg Int Rate (End Rate)			
	8/31/2023	11/30/2023	2/29/2024	8/31/2024
Actual	1.16	-	-	-
August Base (EFF @5.33)	-	1.23	1.28	1.34
Up 100 bps (12 mos)	-	1.25	1.35	1.53
Down 100 bps (12 mos)	-	1.21	1.23	1.20

08/31/23 to 08/31/24
Bps Δ From Starting Rate
-
+19 bps
+38 bps
+4 bps

- ◆ Deposit betas still playing “catch up”
- ◆ Balances likely to decline, mixes to change
- ◆ “Surge” balances still elevated and expected to go lower

NMD Balance Forecast (Deposits360®)

NMD Balance History & Forecast



Forecasted 12-month balance change

Up 100bps -13%

Base -11%

Down 100bps -10%

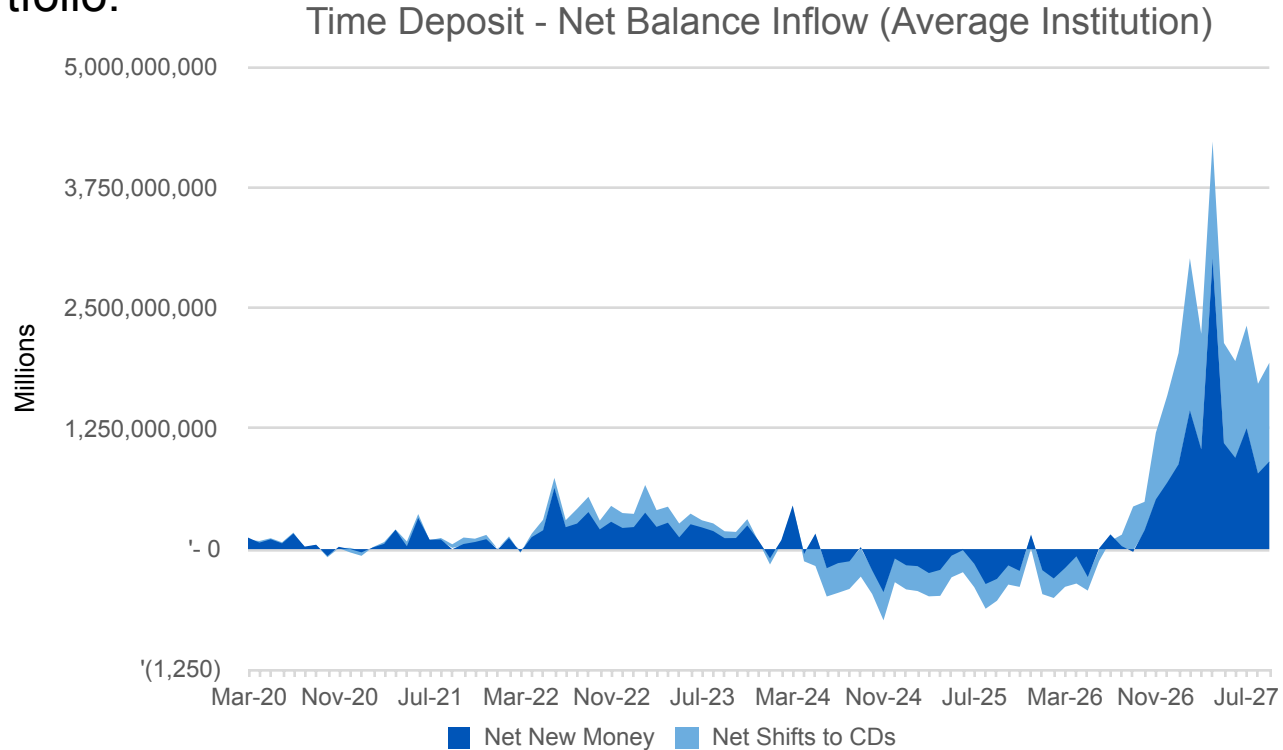
Balance History July Base (EFF @5.33) Up 100 bps (12 mos) Down 100 bps (12 mos)

Forecast derived from Deposits360®

45% of CD Growth Is Cannibalized NMDs (Deposits360®)

Average Institution CD Portfolio:
12/31/22 – 8/31/23

Total Growth: 38%
Cannibalization: 45%
Spread: +372bps



Deposit Action Items

Attrition?

Losing entire relationships?
Across Common Demographics?

Tiers?

Develop early warning systems, execute "comeback" campaigns

Need to Be Agile

Allow data analytics to guide strategies

Defining the next MMDA move

Exception pricing vs. rack rates...
Where do I have to be priced?

Review tier structure

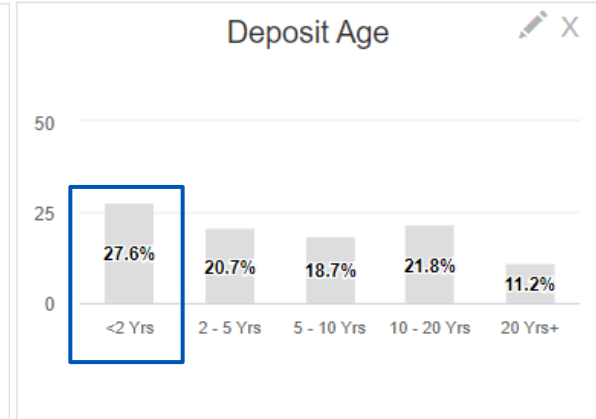
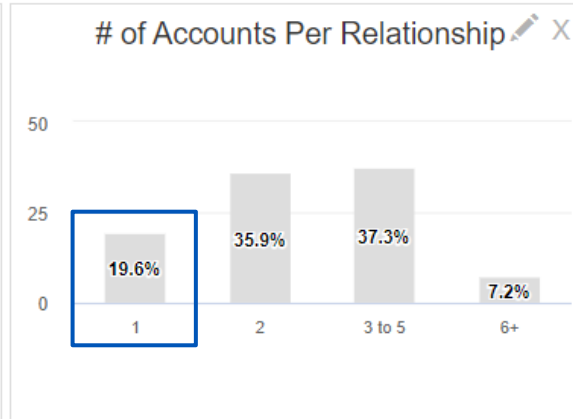
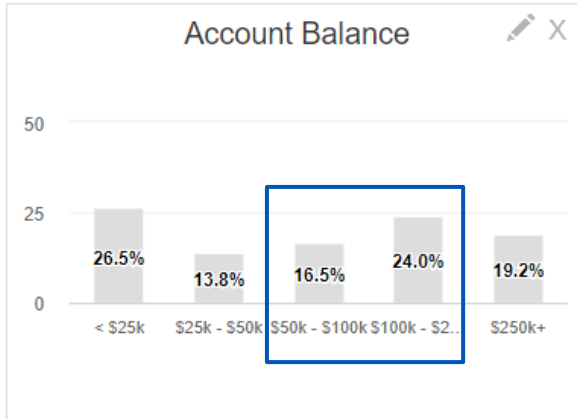
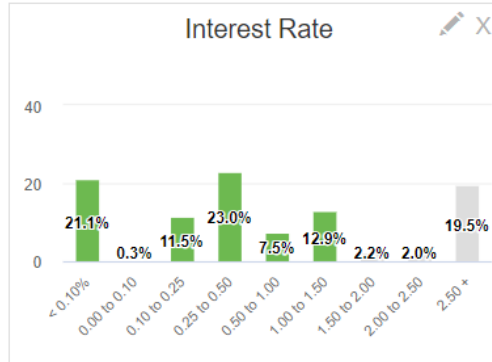
CD Gameplan?

Retention strategy; new money component?

Understand cannibalization cost



Early Warning Systems



Source: Deposits360®

Your Leaders Are Now Up to the Challenge!

Kristin Dupuis,
Chief Financial Officer



Understanding regulatory expectations makes me more prepared for my upcoming exam

Bigger and faster stress testing will help me and my stakeholders better prepare for the unexpected – and have a plan to respond

Updated policies allow me to have better control over my liquidity management - contributions from the team help with taking ownership of liquidity management

The world changes fast! My team needs to be prepared at all times and my CFP will be the playbook to follow in a crisis!

I can more effectively manage my funding costs and cost of liquidity by better understanding the stability of my deposit base

Final Thoughts

Enhance

Ensure your **early warning system** can detect issues before they become problems.

Liquidity stress-testing must **illustrate your ability to withstand** various liquidity events.

Elevate

Optimize

Invest the needed time on your wholesale funding and collateral management programs.

Prepare

Arm your institution to **tell your liquidity story.**

And finally. . . .



Don't confuse
strong liquidity
with **sound**
liquidity risk
management!

Questions & Answers

Thank You!



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