LIQUIDITY EXERCISE – PLANNING FOR A STRESS EVENT

Example Bank
City, State

Because it is a collateralized funding source, FHLBank advances may be available to fund the balance sheet after other sources of near-core and non-core funding have dried up, making advances an important contingency funding source. It is generally believed FHLBank borrowings will be one of the last to terminate in stress conditions, so **FHLBank advances should be a key ingredient in a contingency funding plan.** Contingency funding plans include early warning indicators and triggers, the identification of contingency funding sources and the testing and documentation of those contingency funding sources. Ongoing measuring, monitoring and analysis of liquidity and liquidity stress events are essential elements of liquidity planning and management. A comprehensive contingency funding plan should sufficiently address potential adverse events and emergency cash flow requirements.

Planning for contingent liquidity stress events includes the following:

- Identify potential events
- Evaluate probability and impact
- Determine stress event time horizon
- Document stress scenarios and assessment
- Review potential events and scenarios annually and update

Proactively managing potential challenges that may arise should take into consideration the impact on future earnings, liquidity risk and deposit migration. A liquidity crisis or shortfall can result in lost business opportunity, a competitive disadvantage, lost revenue from increased costs associated with paying up for deposits or emergency funding facilities or your charter? It is imperative to validate your liquidity and funding strategies through documentation of stress test results.

Ask your Regional Account Manager for example near- and non-core funding sources and limits worksheets and/or stress scenario worksheets to build documentation and support for your liquidity and funding strategy.

Stress Scenario Assumptions

Adjusted Liquid Assets and Scenario Balances ($000s)

	Current	Low	Moderate	High
Cash and Interest-bearing Deposits	$ 10,500	$ 10,500	$ 10,500	$ 10,500
Fed Funds Sold & Reverse Repo Agreements	-	-	-	-
Trading Assets	-	-	-	-
AFS Securities (Market Value)	70,000	70,000	70,000	70,000
HTM Securities (Cost Basis)	-	-	-	-
Less: Pledged Securities	30,000	30,000	30,000	30,000
Less: Securities & ST Invest. Maturities (< 12 mos)		4,000	4,000	4,000
Plus: Loans Held for Sale	-	-	-	-
Total Adjusted Liquid Assets	$ 50,500	$ 46,500	$ 46,500	$ 46,500

Stress Scenario Assumptions - Growth/Retention/Runoff (within 12 months)

	Balance	Low	Moderate	High
Sources/Inflows of Funds				
Maturing Time Deposits Renew %	$ 35,000	80.0%	40.0%	20.0%
(excludes maturing brokered deposits)				
Uses/Outflows of Funds				
Non-Maturity Deposits	$ 120,000	0.0%	5.0%	10.0%
Total Brokered Deposits Runoff	500	0.0%	10.0%	20.0%
Listing Service Deposits Runoff	500	0.0%	10.0%	20.0%
Loan Growth - Last Twelve Months %	2.5%	2.5%	2.5%	2.5%
Maturing Loan Renewal % (< 12 mos)	$ 12,000	70.0%	75.0%	80.0%
Total Off BS Commitments - Draws	17,500	0.0%	10.0%	20.0%

Stress Scenario Cash Flow Analysis & Ratio Impact

Cash Flow (within 12 months) ($000s)

	Low	Moderate	High
Sources/Inflows of Funds			
Investment Maturities:			
Securities Maturing	$ 4,000	$ 4,000	$ 4,000
Fed Funds Sold + Reverse Repo Agreements	-	-	-
Loans Maturing	12,000	12,000	12,000
Total Investments Maturing	$ 16,000	$ 16,000	$ 16,000
Deposit Inflows:			
Maturing Time Deposit Renewals	$ 28,000	$ 14,000	$ 7,000
Total Sources/Inflows of Funds	$ 44,000	$ 30,000	$ 23,000
Uses/Outflows of Funds			
Deposit Outflows (Maturing/Runoff):			
Non-Maturity Deposit Runoff	$ -	$ 6,000	$ 12,000
Time Deposits Maturing	35,000	35,000	35,000
Brokered Deposits Runoff	-	50	100
Listing Service Deposits Runoff	-	50	100
Total Deposit Outflow	$ 35,000	$ 41,100	$ 47,200
Borrowings Maturities:			
FHLBank Advance Maturities	$ -	$ -	$ -
Other Borrowing Maturities	-	-	-
Fed Funds Purch + Repos Maturing	-	-	-
Total Borrowings Maturing	$ -	$ -	$ -
Other Outflows:			
Loan Renewals	$ 8,400	$ 9,000	$ 9,600
Loan Growth	2,750	2,750	2,750
Advances on Unused Commitments	-	1,750	3,500
Total Other Outflows	$ 11,150	$ 13,500	$ 15,850
Total Uses/Outflows of Funds	$ 46,150	$ 54,600	$ 63,050
Net Scenario Cash Flow	**$ (2,150)**	**$ (24,600)**	**$ (40,050)**

Net Adjusted Liquid Assets - Stressed ($000s)

	Low	Moderate	High
Adjusted Liquid Assets Before Stress	$ 46,500	$ 46,500	$ 46,500
Accumulated Other Comprehensive Income	(2,000)	(2,000)	(2,000)
Net Scenario Cash Flow	(2,150)	(24,600)	(40,050)
Adjusted Liquid Assets After Stress	**42,350**	**19,900**	**4,450**

FHLBank Borrowing Capacity ($000s)

	Low	Moderate	High	
Current FHLBank Credit Obligations	$ 2,000	$ 2,000	$ 2,000	
Less: FHLBank Advance Maturities	-	-	-	
Projected FHLBank Credit Obligations	$ 2,000	$ 2,000	$ 2,000	A
Plus: Stressed Liquidity Need (Net Scenario Cash Flow)	2,150	24,600	40,050	B
Required FHLBank Borrowing Capacity	4,150	26,600	42,050	C = A + B
Current Pledged Collateral (Lending Value)	20,000	20,000	20,000	D
Current Excess Collateral (Shortfall)	**$ 15,850**	**$ (6,600)**	**$ (22,050)**	**E = D - C**
FHLBank Borrowing Capacity:				
Percent of Assets Limit (40%)	$ 80,000	$ 80,000	$ 80,000	F
Additional Collateral to Pledge	60,000	60,000	60,000	G = F - D
Stressed FHLBank Collateral Utilization	20.75%	133.00%	210.25%	H = C / D
Additional Collateral Required to Fill Need	**$ -**	**$ 6,600**	**$ 22,050**	**I = C - D**
Collateral Available to Cover Need?	**Yes**	**Yes**	**Yes**	**G > E or E > 0**
Excess Collateral (Shortfall)	**$ 15,850**	**$ 53,400**	**$ 37,950**	**J = G - I or E**

Indicates how much additional collateral may be required to meet contingency liquidity needs in a stressed environment.

May also be used to identify what portion of current borrowing capacity could be used for operational needs vs. "dry powder."

It takes time to pledge additional collateral – make this part of your near-term contingency process.

Current and Stress Scenario Impact to Liquidity and Funding Ratios

	Current			Low		Moderate		High	
	Ratio	Benchmark	Within?	Ratio	Within?	Ratio	Within?	Ratio	Within?
Liquid Assets / Assets	26.97%	> = 10%	✓	24.72%	✓	14.40%	✓	5.72%	✗
Net Loans and Leases / Deposits	66.09%	< = 75%	✓	68.13%	✓	79.69%	✗	89.87%	✗
Reliance on Wholesale Funding	1.50%	< 15%	✓	1.55%	✓	1.74%	✓	1.88%	✓
Brokered Deposits / Deposits	0.30%	< = 10%	✓	0.31%	✓	0.32%	✓	0.32%	✓
Advances / Assets	1.07%	< = 20%	✓	1.11%	✓	1.25%	✓	1.35%	✓

Source: S&P Global Market Intelligence.

Benchmarks represent a composition of examiner preferences and industry guidelines, they can be adjusted to better reflect an institution's risk appetite and internal limits.

Reliance on Wholesale Funding = (Total Borrowings + Brokered Deposits) / (Total Borrowings + Total Deposits)

FHLBank Topeka

Liquidity Exercise – Planning for a Stress Event

Perform stress test analysis during good times to be prepared when contingency funding need arises!

Recent events in the banking industry have proven the ability to access cash quickly – and at a reasonable cost – is critical. Liquidity will remain at the forefront of examinations, therefore, building reliable access to liquidity is essential to effective liquidity management.

The identification of additional collateral available to pledge to FHLBank, along with other funding sources, will allow you to build a sufficient collateral base to utilize in times of stress. Take time to arrange access to additional funding facilities if not already established. We suggest that you have a secondary review of loans by your credit analysis/underwriting and/or loan review departments for FHLBank eligibility as part of your loan approval or ongoing review process.

- Review our Member Products and Services Guide for a description of which securities/loans are eligible for pledging and the related underwriting requirements. We can help you identify the assets that may be eligible for pledging.
- Eligible loans should be documented in the file and coded on your systems using a predefined or user-defined field to ensure they are easily identified.
- This review process would also help assure that our collateral verification process does not identify any exceptions that may increase the haircut on loans pledged as collateral.
- **Eligible/pledgeable loans are more valuable due to their ability to convert to liquidity via collateral – consider incorporating this factor in your loan pricing process?**

An improved total liquidity position through the evaluation, identification and pledging of additional collateral will help reduce examiner concern regarding liquidity. Optimizing your FHLBank collateral position will provide greater operating flexibility and strengthen your contingency funding plan. Additionally, allocate time to ensure your policies allow for meaningful borrowing flexibility, with outlets and collateral pledged to secure funding if needed.

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