



*Weekly Post: Contingency Funding Plan – Quantitative Assessment*

**Dear Clients:**

Last week, I discussed the importance of using the Liquidity Coverage Ratio to manage the liquidity risk of our institution as an ongoing concern ( a dynamic approach) as opposed to managing the balance sheet on a run-off basis ( a static approach). This week's discussion focuses on two additional considerations regarding the management of your liquidity risk

- Liquidity risk cannot be managed in isolation from interest rate risk.
- Liquidity adequacy has to be evaluated under multiple stress scenarios.

**Challenges:**

A contingency Funding Plan describes your plan in managing liquidity under moderate, severe and crisis scenarios for your institution. Measuring your liquidity under these scenarios based on your plan is called “quantitative assessment.”

- How to specify the stress scenarios to determine your liquidity adequacy?
- How to measure and monitor liquidity adequacy for moderate, severe and crisis stress scenarios?

**Solution:**

Last week we discussed how the sources and uses of fund model is used to generate the inflows and outflows of funds under each stress scenario in moderate, severe and crisis scenarios. These scenarios should capture the main liquidity risk drivers. The table below provides an illustration of some of the drivers.

Stress Test Scenario		Liquidity Moderate	Liquidity Severe	Liquidity Crisis
Liquidity Crisis / Plan	Net Withdrawal of Demand Deposits	5.00%	15.00%	35.00%
	Net Withdrawal of CDs	10.00%	20.00%	25.00%
	Net pay down of Loans	5.00%	15.00%	20.00%
Funding Sources	Unpledged Investments	25,000	25,000	25,000
	Unsecured Federal Funds Lines	7,200	6,000	4,000
	Brokered CD Subject to Policy Limits	5,000	0	0
	FHLB and Other Borrowings Line	5,625	5,625	3,750
Risk Drivers	Prepayment Speeds	Unchanged	-25%	-50%
	Conditional Default Rate	Unchanged	50%	100%

This example shows that your depositors would increase the withdrawal rate of demand deposit and CD and we need to lower the origination of loans resulting in negative net loan volume growth. Meanwhile, your credit lines and liquidity buffer may also shrink as your credit risk



exposure rises. The sources and uses of funds model projects the liquidity measures under these scenarios over a 12 month horizon. The projected cash flows are then used to determine the following liquidity measures:

- Wholesale Funding Coverage (= wholesale funding book/ net cash flow deficit) measures the coverage of short fall by line of credits
- Coverage after Liquidity Crisis Action Plan initiation (= wholesale funding coverage + asset-based funding sources /net deficit) measures the coverage based on your plan, particularly the sale of assets

**Numerical Example:**

Using a hypothetical bank, the quantitative assessment of the contingency funding plan is provided below. First, the table shows the relationships between the liquidity coverage ratios and the contingency funding plan risk measures. In the Contingency Funding Plan section, the results show that the bank has sufficient liquid funds under the crisis scenario as the LCAP coverage is 2.70, exceeding 1.0. However, the bank will require sale of assets as the wholesale funding coverage is only 0.53 in this scenario. The result shows that the bank may consider establishing higher credit lines in the liquidity crisis scenario, to avoid relying on the sale of assets in an adverse market scenario.

Liquidity scenario		Base Case	Liquidity Moderate	Liquidity Severe	Liquidity Crisis
Dynamic Gap	Total Sources of Funds (A)	17,395	12,741	9,712	(916)
	Total Uses of Funds (B)	10,451	9,496	7,912	6,876
	Project Cash Flow (C = A -B)	6,945	3,245	1,800	(7,791)
	Liquidity Coverage Ratio (A/B)	1.66	1.34	1.23	(0.13)
	Total Secondary Sources (D)	45,369	42,694	36,501	32,633
	Capacity Coverage Ratio (D / C)	N/A	N/A	N/A	4.19
	Total Liquidity (C+D)	52,314	45,939	38,301	24,842
	Total Liquidity to Asset	33.35%	29.29%	24.42%	15.84%
Contingency Funding Plan	Earnings (I)	(24)	(75)	(219)	(401)
	Net Surplus /Deficit (J)= C - Cash	107	(3,593)	(5,044)	(14,643)
	Wholesale Book (K)	20,500	17,825	11,625	7,750
	Wholesale Funding Coverage (L = K / J)	N/A	4.96	2.30	0.53
	Asset-based Funding Sources (M)	31,838	31,838	31,844	31,852
	Coverage after LCAP Initialization (L + M / J)	N/A	13.82	8.62	2.70

**Conclusions:**

The quantitative assessment of your contingency funding plan is important because your operational capital level may not be raised high enough to cover the worst case scenario. You need to create plans to operate in stress scenarios using multiple funding sources to maintain your liquidity. This Contingency Funding Plan-Quantitative Assessment uses your Contingent Plan Policy and demonstrates the viability of the plan. The analysis can also enable you to design your plan by establishing adequate lines of credits and liquidity buffers.



*Please do not hesitate to contact us if you have any questions about your Contingency Funding Plan - Quantitative Assessment Report and how it relates to the measuring, monitoring and managing of your liquidity risk.*

Regards,

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