2023 | THE COST OF LIQUIDITY

THE COST OF LIQUIDITY

WHICH OPTION IS RIGHT FOR YOU?

Request a Consultation

The Cost of Liquidity

Tight liquidity conditions are a pendulum swing of challenges for many credit unions. Prior to 2022, credit unions had ample liquidity due to inflow of funds, and liquidity management mostly involved getting the funds deployed to earn a positive return. In 2022, the pendulum swung back the other way. Credit union managers were faced with the opposite challenge: retaining and raising funds to maintain sufficient liquidity at their credit union.

In our first article, we touched on three options for increasing liquidity: borrowing, selling securities and selling loan participations. All are valid ways to increase liquidity, but each option has costs that need to be considered before determining which solution is best for a credit union. How do we calculate the cost of liquidity?

Three Options for Managing a Tight Liquidity Situation

1. **Borrowings/Non-Member Deposits**
2. **Selling Securities**
3. **Selling Loans / Loan Participations**

For our analysis, we will use a representative $1 billion credit union that has been experiencing loan growth, but its liquidity position has tightened. The current loan portfolio sits at 83% of shares and 72% of assets, while on-balance-sheet liquidity (measured as cash & cash equivalents to assets), has fallen to 3% of total assets, as shown here in the summary balance sheet.

[Request a Consultation]

Balance Sheet - Initial Position			
	Balance		% of Assets
Cash & Cash Equivalents	$	30,000,000	3.0%
Investments	$	186,000,000	18.6%
Loans	$	720,000,000	72.0%
Other Assets	$	64,000,000	6.4%
Total Assets	$	1,000,000,000	100.0%
Shares & Deposits	$	864,000,000	86.4%
Other Liabilities	$	74,600,000	7.5%
Borrowings	$	-	0.0%
AFS G/L	$	(18,600,000)	-1.9%
Net Worth	$	80,000,000	8.0%
Total Liab, Shrs, & Equity	$	1,000,000,000	100.0%
Net Income	$	10,000,000.00	1.0%

As a starting point, our credit union has healthy earnings with a 1% ROA and is well capitalized with a net worth ratio of 8%. However, as with many other credit unions, the rise in interest rates has depressed the value of investment holdings for our sample credit union. In this example, we assume the total investment portfolio has a mark to market adjustment of 10% of the total investment portfolio.

We will evaluate the following key ratios through our liquidity strategy scenarios:

Key Ratios	
Net Worth	8.0%
Loans/Shares	83.3%
Loans/Assets	72.0%
Liquidity Ratio	3.0%
ROA	1.0%

Request a Consultation

1 Borrowings/Non-Member Deposits

Borrowings and/or raising non-member deposits are the most common and frequently used methods for accessing liquidity. Every credit union has a line of credit or term borrowing arrangement set up with their corporate credit union, FHLB, Federal Reserve or other institution. Tapping into borrowings provides virtually immediate balance sheet liquidity, which is the main advantage of accessing funds through this channel. However, borrowing can be expensive.

Another route credit unions pursue for liquidity is raising money through non-member deposits. This tool has seen a significant increase in usage since 2022 as liquidity grew tighter. However, depending on the amount of funding a credit union needs and the speed in which the funds are required, this avenue may not be the best path. Issuing non-member deposits may take time to reach the desired level, as most funds are raised in individual amounts of $250,000 or less. Adding to the challenge, when your credit union faces economic liquidity trials, other credit unions will be tight on liquidity as well, which could mean paying a premium to attract funds. While not as quick as borrowing from a line of credit, the funding cost for non-member deposits may be the best solution for your credit union.

Taking on borrowings and non-member deposits as the means of raising liquidity will increase the size of your balance sheet and, in turn, impact several key ratios. To illustrate, assume our $1 billion credit union borrows $100 million at a rate of 5.25% for one year. The impact of this transaction is shown below in the before and after positions of the credit union.

Request a Consultation

Balance Sheet – Initial Position

	Balance	% of Assets
Cash & Cash Equivalents	$ 30,000,000	3.00%
Investments	$ 186,000,000	18.60%
Loans	$ 720,000,000	72.00%
Other Assets	$ 64,000,000	6.40%
Total Assets	$ 1,000,000,000	100.00%
Shares & Deposits	$ 864,000,000	86.40%
Other Liabilities	$ 74,600,000	7.46%
Borrowings	$ -	0.00%
AFS G/L	$ (18,600,000)	-1.86%
Net Worth	$ 80,000,000	8.00%
Total Liab, Shrs, & Equity	$ 1,000,000,000	100.00%
Net Income	$ 10,000,000.00	1.00%

Borrowings

Cash & Cash Equivalents	$ 100,000,000
Borrowings	$ 100,000,000

Balance Sheet – Ending Position

	Balance	% of Assets
Cash & Cash Equivalents	$ 130,000,000	11.82%
Investments	$ 186,000,000	16.91%
Loans	$ 720,000,000	65.45%
Other Assets	$ 64,000,000	5.82%
Total Assets	$ 1,100,000,000	100.00%
Shares & Deposits	$ 864,000,000	78.55%
Other Liabilities	$ 74,600,000	6.78%
Borrowings	$ 100,000,000	9.09%
AFS G/L	$ (18,600,000)	-1.69%
Net Worth	$ 80,000,000	7.27%
Total Liab, Shrs, & Equity	$ 1,100,000,000	100.00%
Net Income	$ 8,250,000.00	0.75%

Scenario Assumptions

Borrowing Amount	$ 100,000,000
Borrowing Rate	5.25%
Cash Earnings Rate	3.50%

The proceeds from the borrowing improved the credit union's cash position and strengthened the liquidity situation. As shown here, the cash & cash equivalents ratio improved from 3% to 11.82% of assets; however, this liquidity comes at a "cost." The added interest expense of the borrowing is only partially offset by income earned from the increased cash position, resulting in lower net income. The lower income combined with the larger balance sheet size drove down ROA from 1% to 0.75%. Similarly, the larger balance sheet size pushed the net worth ratio down to 7.27% from 8%.

Key Ratios

	Initial Position	Post Strategy	Change
Net Worth	8.00%	7.27%	-0.73%
Loans/Shares	83.33%	83.33%	0.00%
Loans/Assets	72.00%	65.45%	-6.55%
Liquidity Ratio	3.00%	11.82%	8.82%
ROA	1.00%	0.75%	-0.25%

[Request a Consultation]

Borrowing arrangements and non-member deposits are easy and relatively fast tools for credit union managers to use for adding liquidity onto the balance sheet. However, the broader impact on the credit union's balance sheet and ratios should also be considered.

2 Selling Securities

Investment portfolios are important components of credit union balance sheets. They serve several critical functions. Individual securities can be pledged as collateral to support borrowing capacity, and the interest income they generate provides support for earnings. In some situations, investment portfolios serve as a liquidity reserve that credit unions can turn to when they need liquidity quickly. Unfortunately, rising interest rates in 2022 have credit unions sitting on portfolios that are significantly under water from a valuation perspective, and since selling securities would result in booking a loss, most credit unions have ruled out this option altogether.

While realizing any losses is undesirable, selling securities should not be completely ruled out as an option simply to avoid a loss on the sale. Using a more comprehensive approach, where the loss is evaluated as the "cost" of liquidity, is appropriate. There are often situations where the loss realized, when compared to the total cost of borrowings (or non-member deposits), can be the less expensive path to take.

There are also benefits to selling securities as opposed to assuming borrowings. Security sales to raise liquidity do not inflate the size of your balance sheet like borrowings or the issuance of non-member deposits. To demonstrate, assume our $1 billion sample credit union sells $100 million par value of securities at a price of 93.00, meaning a 7% loss. The impact of this transaction is shown here.

Request a Consultation

Balance Sheet – Initial Position / **Securities Sale** / **Balance Sheet – Ending Position**

	Initial Balance		Initial % of Assets	Securities Sale		Ending Balance		Ending % of Assets
Cash & Cash Equivalents	$	30,000,000	3.00%	$	93,000,000	$	123,000,000	12.30%
Investments	$	186,000,000	18.60%	$	(93,000,000)	$	93,000,000	9.30%
Loans	$	720,000,000	72.00%			$	720,000,000	72.00%
Other Assets	$	64,000,000	6.40%			$	64,000,000	6.40%
Total Assets	$	1,000,000,000	100.00%			$	1,000,000,000	100.00%
Shares & Deposits	$	864,000,000	86.40%			$	864,000,000	86.40%
Other Liabilities	$	74,600,000	7.46%			$	74,600,000	7.46%
Borrowings	$	-	0.00%			$	-	0.00%
AFS G/L	$	(18,600,000)	-1.86%	$	7,000,000	$	(11,600,000)	-1.16%
Net Worth	$	80,000,000	8.00%	$	(7,000,000)	$	73,000,000	7.30%
Total Liab, Shrs, & Equity	$	1,000,000,000	100.00%			$	1,000,000,000	100.00%
Net Income	$	10,000,000.00	1.00%			$	11,755,000.00	1.18%

Scenario Assumptions

Portfolio Sale Amount	$	100,000,000
Portfolio Yield		1.50%
Sales Price		93.00%
Cash Earnings Rate		3.5%

The proceeds bolster the cash position, improving the cash and cash equivalents ratio to 12.3% of assets, up from 3%, while the sale of securities has maintained a consistent balance sheet size when compared to accepting borrowings. The "cost" of this liquidity comes in the form of the $7 million "realized" loss. However, the earnings profile benefits from the reinvestment of the proceeds into earning cash balances, which exceed the yield on the sold securities.

	Initial Position	Post Strategy	Change
Net Worth	8.00%	7.30%	-0.70%
Loans/Shares	83.33%	83.33%	0.00%
Loans/Assets	72.00%	72.00%	0.00%
Liquidity Ratio	3.00%	12.30%	9.30%
ROA	1.00%	1.18%	0.18%

Upon the sale of the securities, the credit union recognizes the loss within net worth, and cash is increased by the fair value of the securities. As a result, the net worth ratio declines from 8% to 7.3%. However, ROA increases from 1% to 1.18% as the redeployment of funds into higher earning cash accounts improves bottom line net income.

3 Selling Loans / Loan Participations

Credit union loan participations have experienced an explosion in activity over the past few years. As activity has grown, credit unions of all sizes have become more familiar and involved – to the point that loan participations have become a widely used solution for both buyers and sellers. For buyers, loan participations can offer attractive income-producing assets. For sellers, loan participations have become an important source of liquidity, as well as a balance sheet management tool. Selling loan participations enables sellers to maintain loan originations, while providing a channel to offload some volume to other credit unions. This offers sellers the opportunity to meet member loan demands, capture loan origination fees, retain member servicing relationships and potentially capture gains from the sales process; that is, until the rate rise in 2022 pushed loan portfolio valuations lower.

In the same vein as with underwater security portfolios, when pricing of a loan participation would result in a loss on the sale, the idea of selling a loan participation as a funding alternative gets almost immediately dismissed as an option. But by summarily dismissing this alternative, you may be omitting a less costly strategy for generating liquidity.

In most loan participation sales, the seller retains a 10% interest in the loan pool – selling 90% of the loan pool. To illustrate a loan participation transaction, we will assume a $100 million loan participation with 90% sold. With the current interest rate level, let's assume the price of this loan pool is 96.00 – meaning a 4% loss on the sale. The impact of this transaction is shown below.

Request a Consultation

Balance Sheet – Initial Position / **LP Sale** / **Balance Sheet – Ending Position**

	Balance	% of Assets	LP Sale		Balance	% of Assets
Cash & Cash Equivalents	$ 30,000,000	3.00%	$ 86,400,000	Cash & Cash Equivalents	$ 116,400,000	11.68%
Investments	$ 186,000,000	18.60%		Investments	$ 186,000,000	18.67%
Loans	$ 720,000,000	72.00%	$ (90,000,000)	Loans	$ 630,000,000	63.23%
Other Assets	$ 64,000,000	6.40%		Other Assets	$ 64,000,000	6.42%
Total Assets	$ 1,000,000,000	100.00%		Total Assets	$ 996,400,000	100.00%
Shares & Deposits	$ 864,000,000	86.40%		Shares & Deposits	$ 864,000,000	86.71%
Other Liabilities	$ 74,600,000	7.46%		Other Liabilities	$ 74,600,000	7.49%
Borrowings	$ -	0.00%		Borrowings	$ -	0.00%
AFS G/L	$ (18,600,000)	-1.86%		AFS G/L	$ (18,600,000)	-1.87%
Net Worth	$ 80,000,000	8.00%	$ (3,600,000)	Net Worth	$ 76,400,000	7.67%
Total Liab, Shrs, & Equity	$ 1,000,000,000	100.00%		Total Liab, Shrs, & Equity	$ 996,400,000	100.00%
Net Income	$ 10,000,000.00	1.00%		Net Income	$ 8,074,000.00	0.81%

Scenario Assumptions

LP Sale Amount	$ 90,000,000
Loan Pool Yield	5.50%
Sales Price	96.00%
Cash Earnings Rate	3.5%

Key Ratios

	Initial Position	Post Strategy	Change
Net Worth	8.00%	7.67%	-0.33%
Loans/Shares	83.33%	72.92%	-10.42%
Loans/Assets	72.00%	63.23%	-8.77%
Liquidity Ratio	3.00%	11.68%	8.68%
ROA	1.00%	0.81%	-0.19%

Again, the liquidity position is improved through this strategy. The liquidity ratio improves to 12.6% of assets after the sale, and the loan-to-share ratio drops from 83% to 73%. The lower loan-to-share ratio may also benefit the credit union by enabling additional loan production and earnings channels through loan origination fees, booking of higher yielding loans, and facilitating additional sales at likely improved pricing levels. On the flip side, the cost of this strategy is reflected within net worth, net income and a smaller balance sheet. The sale reduces net worth by 33 basis points to 7.67%, reduces ROA by 19 bps to 0.81%, lowers the loan-to-share ratio to 73%, but increases the liquidity ratio to 11.7%.

Comparing the Alternative Strategies

Determining the “right” path for your credit union should always be based on the optimal bottom line benefit to the credit union. Which strategy will produce the required increase in liquidity at the lowest total cost? As laid out above, each option for accessing liquidity has a cost associated with it. Also shown above, each strategy produces similar, but varying, impacts on the sample credit union. By lining up the results of the various strategies, you can clearly compare the net benefit and bottom-line cost of each strategy on the ratios we evaluated.

	Initial Position	Borrowing Strategy	Securities Sale Strategy	LP Sales Strategy
Net Worth	8.0%	7.27%	7.30%	**7.67%**
Loans/Shares	83.3%	83.33%	83.33%	72.92%
Loans/Assets	72.0%	65.45%	72.00%	63.23%
Liquidity Ratio	3.0%	11.82%	12.30%	**11.68%**
ROA	1.0%	0.75%	1.18%	**0.81%**

Net Worth: Selling loan participations gave the credit union the highest resulting net worth ratio. Though the loan participation strategy shrank the balance sheet slightly, the borrowing strategy depressed the net worth ratio by increasing the size of the balance sheet. The sale of securities did not impact the balance sheet size and fell between the borrowing and loan participation sale strategies.

Loan/Share: Neither borrowing nor selling securities impacted the loan-to-share ratio. Only the loan participation strategy brought down the ratio, while possibly resulting in additional benefits of relief in concentration levels or other limits.

Liquidity: All three strategies achieved their objective of improving the credit union’s liquidity situation. The loan participation strategy resulted in the highest level of liquidity measured as a ratio of cash and cash equivalents to total assets. The borrowing strategy, even though it resulted in the lowest liquidity ratio, produced the highest dollar amount of liquidity.

ROA: Increased interest expenses and realized losses weighed heavily on ROA in each scenario. A direct reflection of the "cost of liquidity," the magnitude of the loss on the securities was the highest cost with the lowest ROA. The loan participation sale had the lowest total "cost" of the three scenarios and the highest ending ROA.

Overall, while the loan participation sale strategy did result in a realized "loss," it offered the lowest total cost. This is evident, as this strategy illustrates the highest net worth ratio, liquidity ratio, and ROA.

"Every credit union has access to the same set of tools, but individual circumstances may dictate which one of those tools is right for the moment."

Although all options for increasing liquidity carry some form of cost, determining the "right" path for your credit union should be based on the total economics of each strategy. Excluding certain strategies to avoid realizing a "loss" through the transaction may very well eliminate the least expensive and "best" strategy. When you apply a cost/benefit approach, one option will always be less expensive than the others, and we strongly recommend a path that minimizes costs while maximizing performance.

Are You Looking for Serious Solutions to Liquidity Challenges?

If you are on the fence about selling a loan participation, issuing non-member deposits, taking on borrowings or selling securities, Catalyst will help you review your alternatives, discuss the pros and cons and help guide you to the lowest total-cost solution. Let's talk strategically and find the best option for your credit union.

For more information, contact us today:

Request a consultation