CAPITAL MARKETS *monthly*

VOL 19 | SEPTEMBER 2024

GENERAL MARKET OVERVIEW

After a record two-plus years of inversion, and in anticipation of Federal Reserve rate cuts, the yield curve un-inverted after the longest stretch since 1929. We are witnessing history. The 10-year minus 2-year spread un-inverted while the 10-year minus 3-month spread remains inverted.

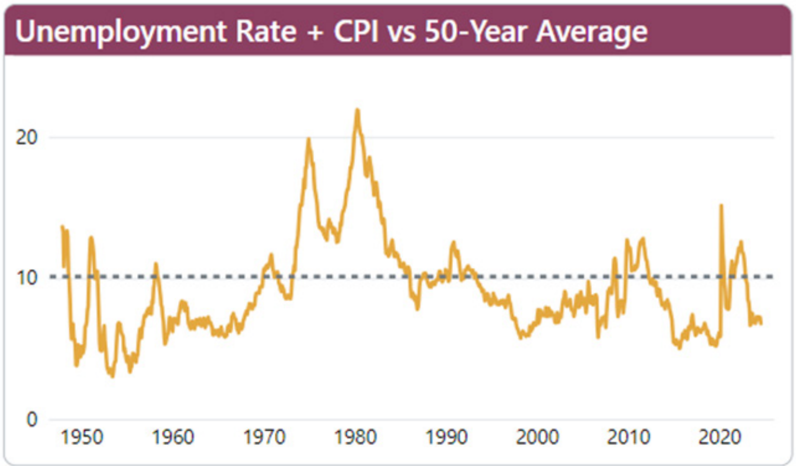
An inverted yield curve has been an accurate recession predictor since the mid-1950s, and, specifically, the un-inversion after a long period of yield curve inversion is a strong macro signal for anticipating weak growth. The debate continues as to when the recession will start in 2025. The timing between initial inversion and start of a recession varies considerably. In the 1980s and early aughts, the recessions began in as short as 12 months, while in 2008, the lag took over two years.

Continued on page 2

Treasury 10-Year/2-Year & 10-Year/3-Month Spread

Source: Federal Reserve Bank

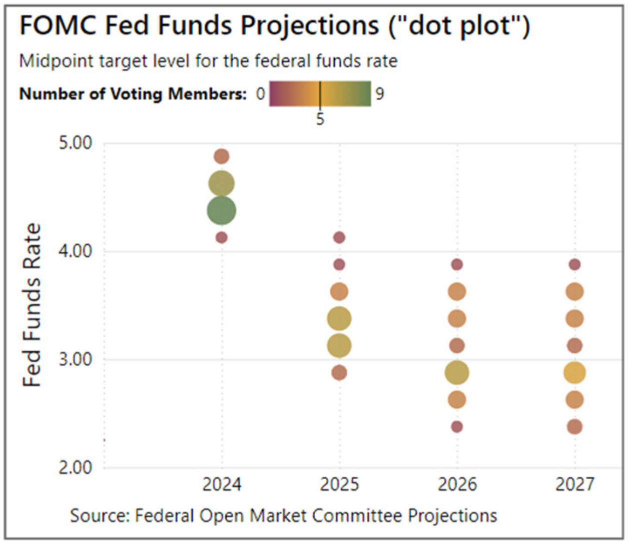
Coupled with the yield curve textbook recession indicator, the rise in unemployment rate from 3.4% to 4.2% typically proceeds a recession. However, the unemployment rate is still low by historical absolute level, and jobless claims remains low. The landscape of fiscal dominance, which we have discussed in prior publications, is atypical compared with standard credit cycles. A recession will remain at bay with the nation running deficits at 7% of GDP. The Fed is aiming for a no-to-soft-landing when combining inflation and unemployment together in the so-called "misery index". At 6.8, the index is comfortably below the 50-year average of 10.1.



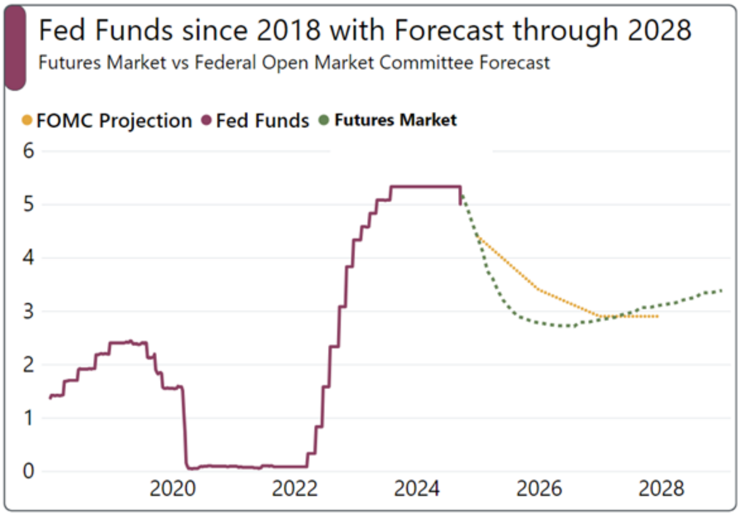
Where does the Federal Reserve and the Treasury market go from here? At this month's Federal Open Market Committee (FOMC) meeting, the Federal Reserve cut the fed funds rate by 50 basis points to a new target of 4.75% to 5.00%. The primary reason given in their statement was due to their concerns over a deteriorating job market. However, the following day, the Labor Department reported that initial jobless claims in the previous week of September 9 were lower than expectations, signaling a still-healthy job market. The Treasury market sold off and yields rose. Perplexed? Absolutely! Remember, all markets are built upon future expectations. The Fed's September dot plot and the future's swaps market (even more aggressive for rate cuts) still point to additional interest rate cuts this year and in 2025 and beyond. The Fed's dot plot represents each of the Fed officials' individual estimates of future interest rate projections, 19 officials in all. Interestingly, there were only 12 votes on the FOMC interest rate decision. If it is "data appropriate", the Fed is expected by their dot plot to cut interest rates by 25 basis points at their November meeting and another 25 at their December meeting, putting the fed funds target at a 4.25% to 4.75% (median 4.375%) by year end. Yes, there will be another updated quarterly dot plot for their December meeting; it's a moving target. Regarding the Treasury curve, the more interest rate cuts there are, the more the Treasury yield curve will steepen, becoming a normal curve and thereby providing much-needed help to the margins of financial institutions. *Continued on page 3*

Year-End Forecasts

Projection	12/31/2024	12/31/2025	12/31/2026	12/31/2027
Futures Market	4.38	2.78	2.83	3.11
FOMC	4.40	3.40	2.90	2.90

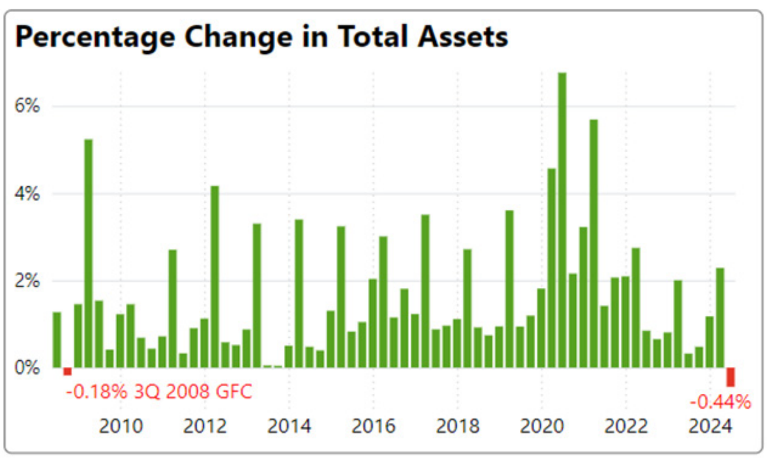


All this conjecture and uncertainty continues to weigh on investment decisions for credit unions' investment and loan portfolios. Therefore, it is important to continue to closely evaluate your liquidity needs, ladder both your loan and investment portfolios appropriately, and purchase assets that show strong relative value that aligns with your strategic plan. Along with offerings in Treasuries, agencies, mortgage-backed securities (MBS) and SimpliCDs, Alloya's Capital Markets team will be providing multiple opportunities for short-term investing in Alloya certificates of deposit and, on the longer side, sub-debt investment offerings now and into 2025. Please feel free to reach out to us if you have questions on the Treasury market, economic trends or investing, or if you need additional details for your board reviews.



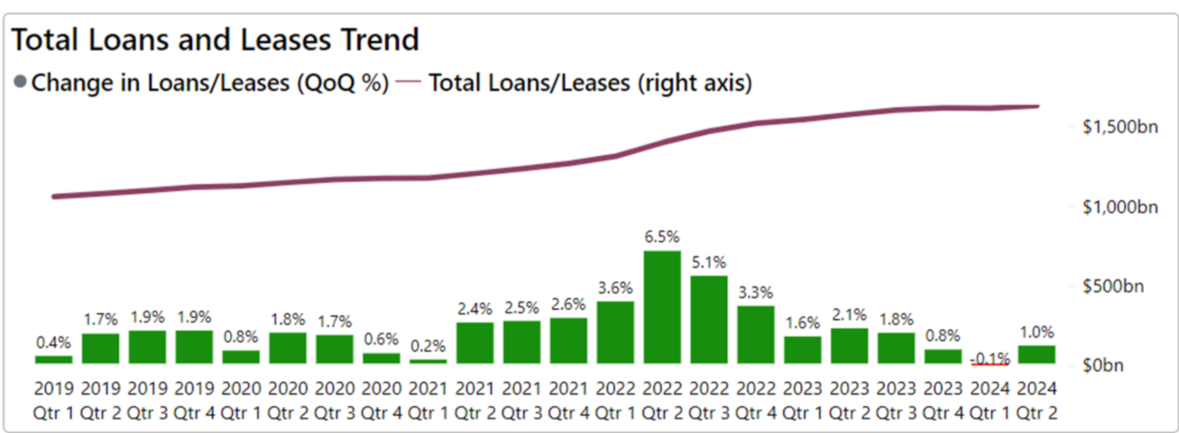
Source: Federal Reserve, Chicago Mercantile Exchange

CALL REPORT UPDATE

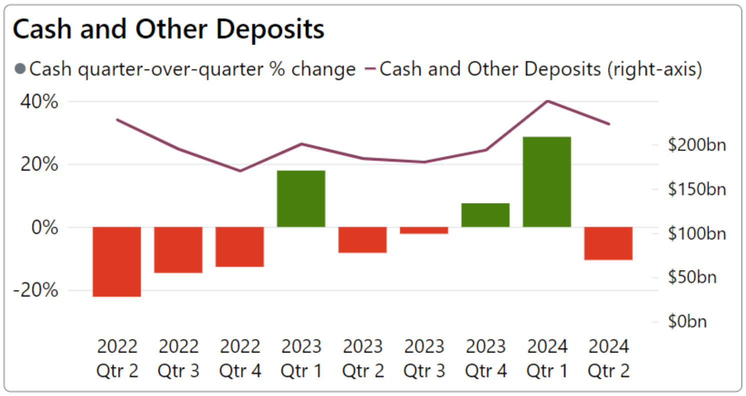


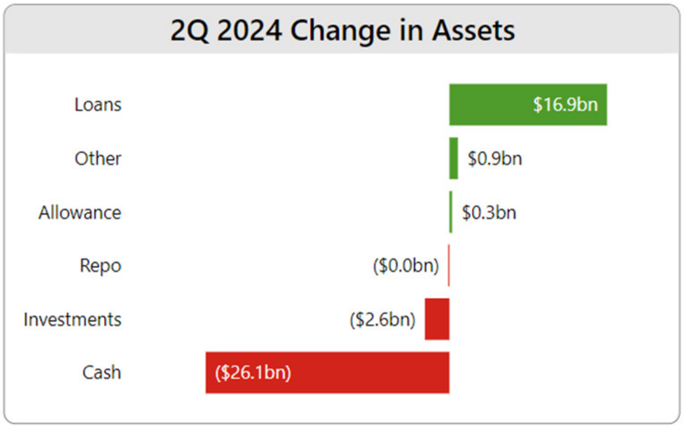
The credit union industry, as measured by aggregate assets, shrunk for the first time since the 2008 Global Financial Crisis (GFC). Assets decreased 44 basis points from Q1 2024. The last time assets fell was by 18 basis points in Q3 2008. Near the top of the interest rate cycle, one would predict a fall in loan demand. However, loans increased by 1% ($16.9 billion) from the first quarter.

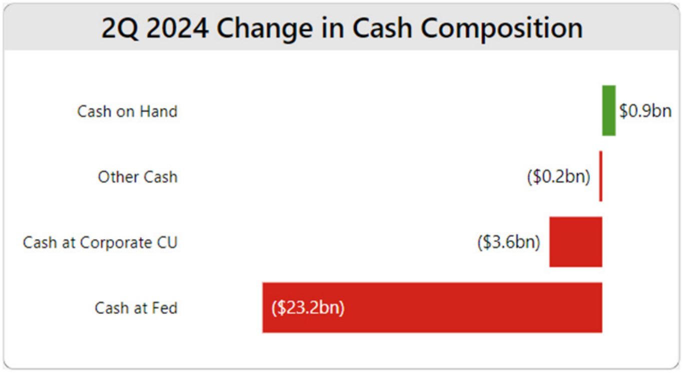
The driver behind the drop in assets was cash. Cash decreased by 10.5%, or $26 billion, quarter-over-quarter. Investments decreased slightly, while the allowance, other, and foreclosed and repossessed assets were flat. *Continued on page 4*



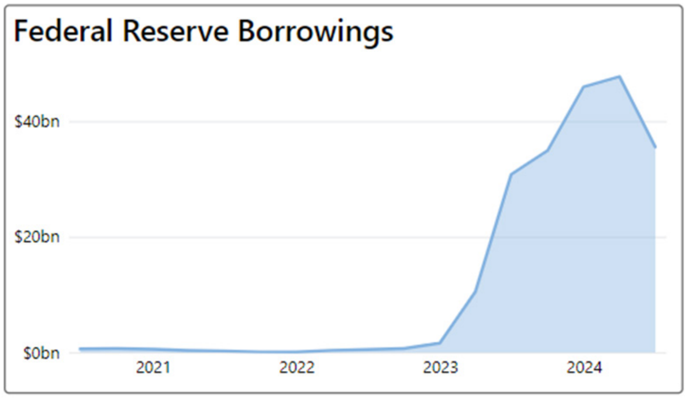
Delving deeper into cash, here are graphs depicting the change in cash composition by category, as well as an overall cash trend since 2022. Credit unions pulled a significant amount of cash from deposit at the Federal Reserve between March and June 2024. While cash levels have declined, they are still above 2023 levels.





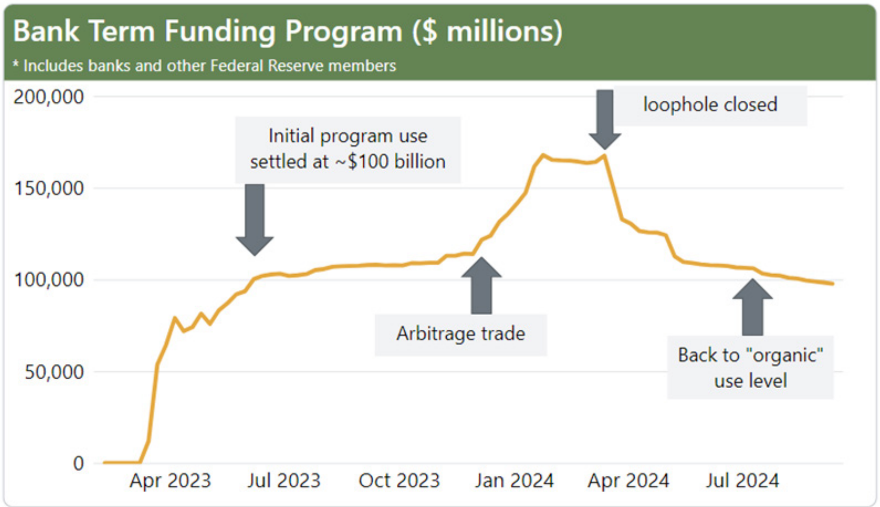


Not only did credit unions pull cash assets parked at the Federal Reserve, but they also reduced wholesale borrowings. Borrowings from the Fed decreased sharply in Q2 2024 to $35.6 billion from $47.7 billion three months prior. The drop in both assets and liabilities at the Fed was likely caused by an unwind of the arbitrage trade created by the Fed's Bank Term Funding Program (BTFP).

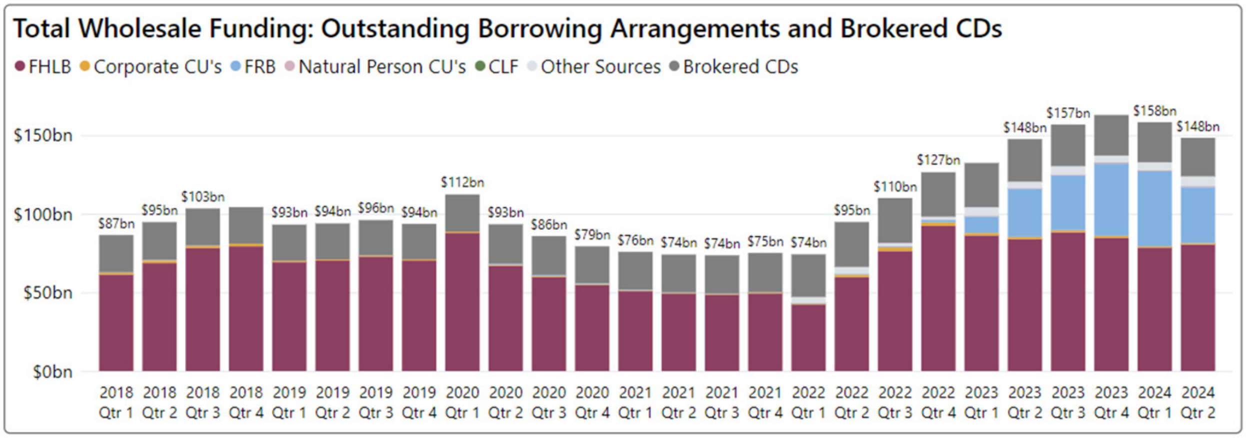


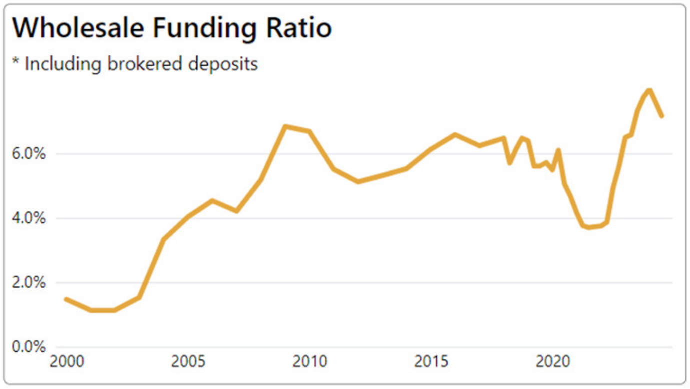
Recall that the BTFP's fixed terms of 1-year OIS+10 created an arbitrage opportunity in November 2023 when rates fell on Fed pivot speculations. Institutions could borrow at 12-month overnight index swap (OIS) +10 and then just hold the reserves and get paid at interest on reserves (IOR). By late January, the arbitrage spread closed in on 50 basis points and public perception rumored on "another bailout for Wall Street." On January 24, the Fed closed the loophole, and to nobody's surprise, that was when program usage peaked.

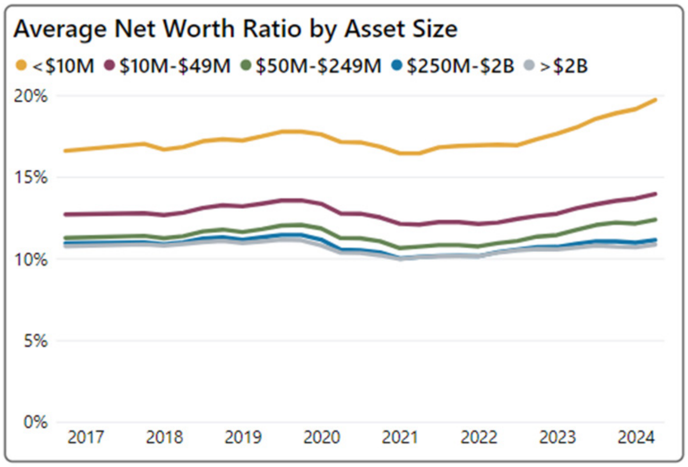
Some, but not all, of the decrease in Fed borrowings returned to the Federal Home Loan Banks (FHLB) system. While overall wholesale borrowing declined quarter-over-quarter, the FHLB saw a modest uptick in credit union advance borrowings. *Continued on page 5*



Wholesale funding usage decreased for two consecutive quarters. The wholesale funding ratio, the percentage of funding from wholesale sources, declined further to 7.2% from a record high of 8% at the end of 2023.



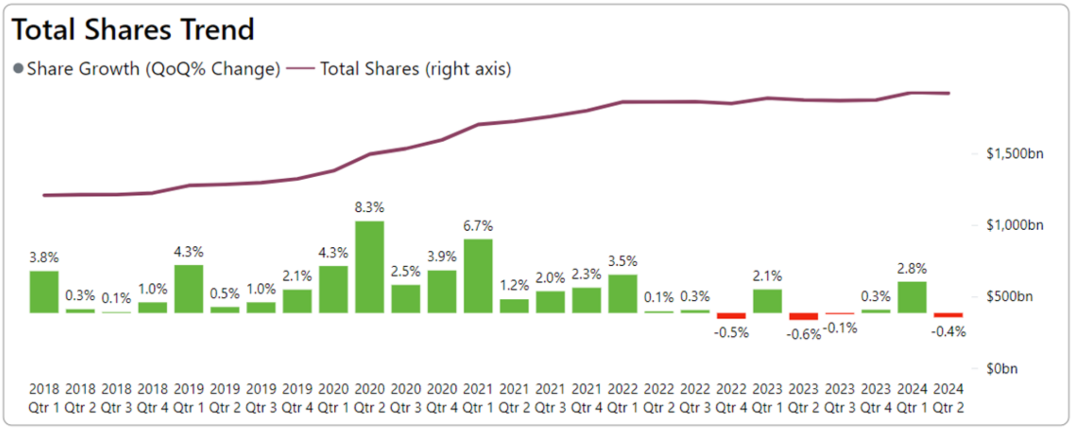


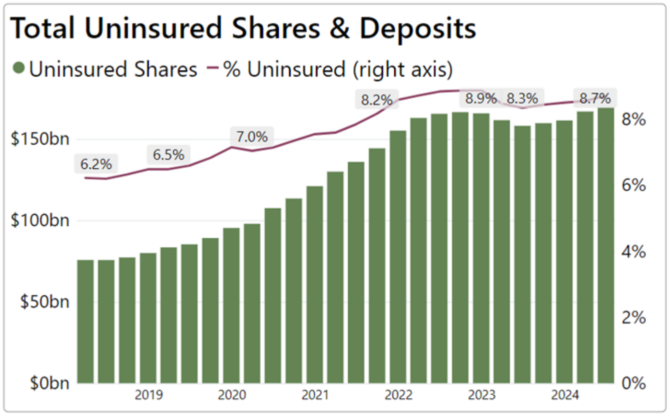


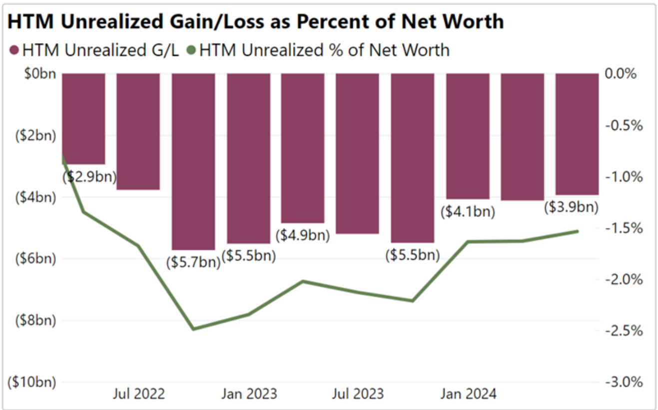
Importantly, credit unions protected capital during the balance sheet contraction. Net worth increased by $4 billion to over $256 billion as of June 30, 2024 in the face of shrinking balance sheets. Post-GFC, net worth declined for two consecutive quarters in Q4 2008 and Q1 2009. In December 2024, we will check in to see if this pattern repeats. For Q2 2024, the net worth ratio increased across all asset size categories.

Back to the liability side of the balance sheet, total shares decreased by 0.4% in Q2 2024. The quarterly change in shares has been volatile over the last eight quarters.

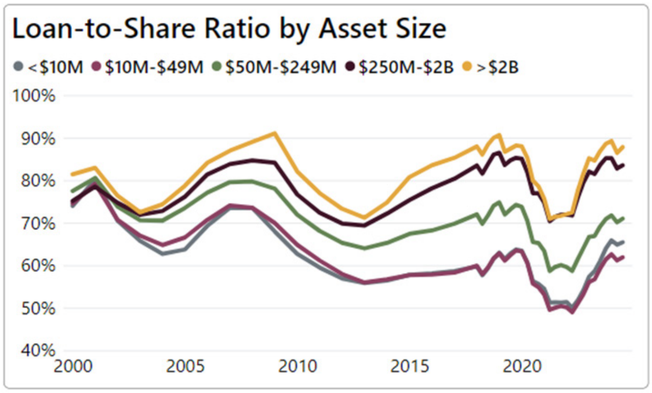
Total uninsured shares continued to increase to over $169 billion, or 8.7% of shares. Recall that uninsured deposits became relevant in March 2023 in the wake of high-profile bank failures triggered by high uninsured deposits coupled with large unrealized losses on held-to-maturity (HTM) investment securities. Credit unions' unrealized losses on HTM securities continue to improve, now at $3.9 billion or 1.5% of net worth. We will continue to monitor this important dynamic for the reader. *Continued on page 6*

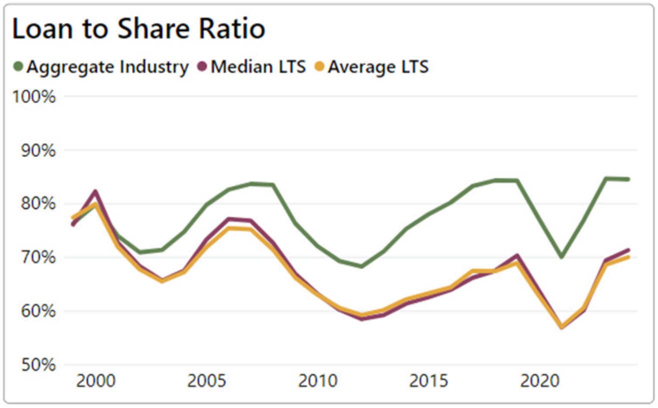


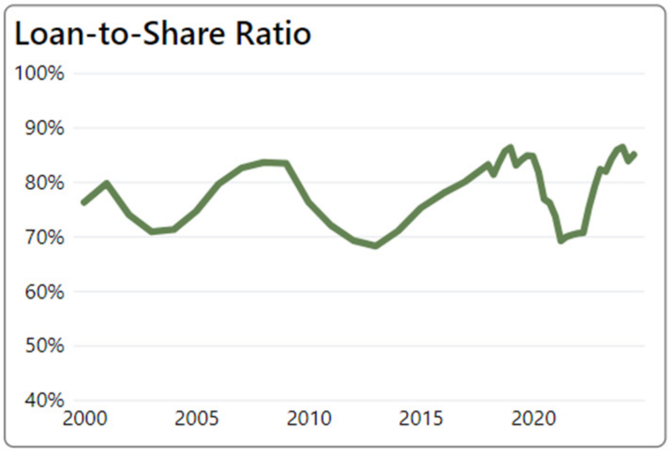


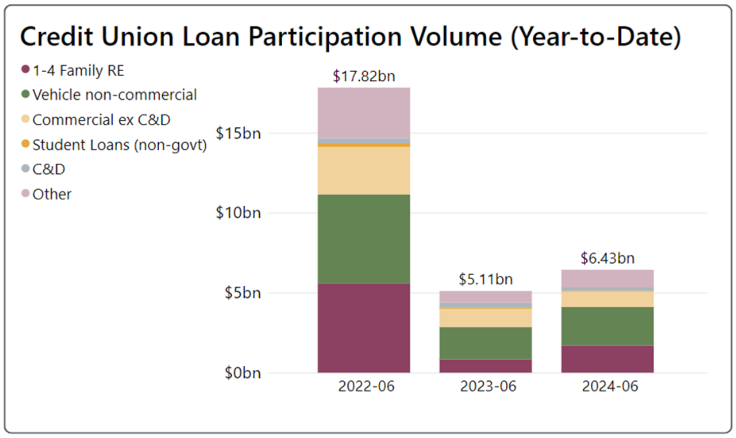


The decrease in shares, coupled with an expanding loan book, led to higher loan-to-share (LTS) ratios. The industry LTS increased to 85%, one point from the all-time high of 86% reached at year-end 2023. Larger credit unions over $250 million run higher LTS than those under $250 million by a material margin. Share growth has largely accrued to the larger credit unions who pay up for those shares with higher deposit rates. It is worth viewing LTS not just as an aggregate but also using averages and medians. The median credit union is running with an LTS just over 71% as of Q2 2024, up 200 basis points from year-end 2023.

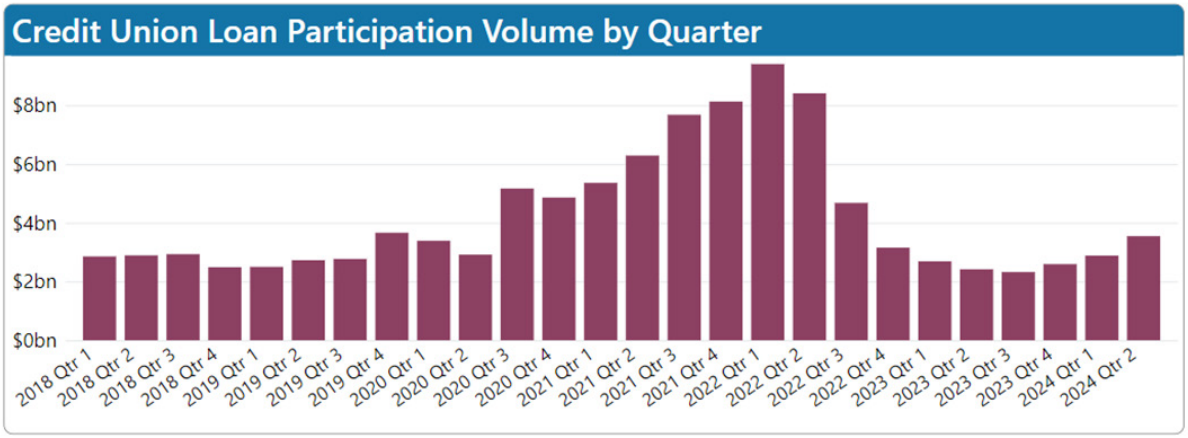


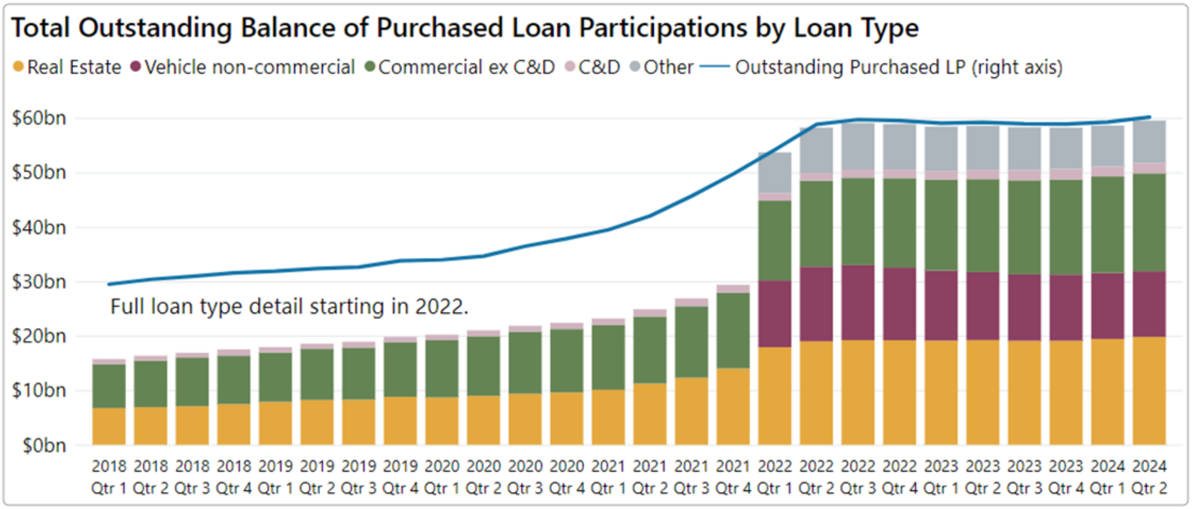






Loan participation (LP) volume in Q2 2024 increased for the third consecutive quarter. Over $3.5 billion in Q2 brings year-to-date volume to $6.4 billion, similar to annual volume in 2020. The allocation of LP volume by loan type remains consistent with previous years, with some additional activity in 1-4 family real estate. Over the last few quarters, new volume kept pace with run-off, leading to flat LP outstanding. In Q2 2024, LP outstanding bumped up 1.5%, the largest quarterly change in outstanding balances since Q3 2022.





In recent months, we have focused on the benefits of issuing subordinated debt and how your credit union can benefit from accessing more capital. This month we are going to shift our focus to the investment side of things!

The sub debt market is shaping up to be a busy one for Alloya in 2025, and we are expecting to have multiple attractive issuances in Q1 and Q2 of 2025. We are encouraging all credit unions that have an interest in investing in these offerings to take the necessary steps NOW to be in a position to invest as these opportunities hit the market. These offerings usually go fast, and we expect next year to be no exception to this.

Interested in learning more about this opportunity? Please contact your Alloya Investment Services representative for more details or email **subdebtinvestments@alloyacorp.org**.

WHAT IS SUBORDINATED DEBT?

Subordinated debt is a borrowing designed to receive favorable regulatory capital treatment by the NCUA:

- Eligible to count towards net worth and risk-based capital ratios for issuers
- NCUA approval required
- Business plan and financials must be able to support growth plan and service debt to obtain NCUA approval.
- Credit unions investing in credit unions to support the credit union movement!

HOW DO I INVEST?

Gaining access to view available offerings is simple:

- Broker dealer agreement signed
- NDA signed (one time)
- Sub debt policy (can be included in investment policy)

Be mindful of investment limits:

- 15% of net worth to one borrower (issuer)
- 25% of net worth in aggregate investment in sub debt

RECENT MARKET FOR SUBORDINATED DEBT

- Most credit unions will likely be in the 7.50% - 8.50% range. NCUA approval required.
- Yields will be dependent on the size and financial strength of the issuing credit union.
- Larger subordinated debt issuances may consider a rating by a rating agency (>$40 million).

Issuance Size	IG Egan Jones	Kroll BBB-	Kroll BBB	Kroll BBB+	Unrated
50MM	8.000% +/-	8.000% +/-	8.000% +/-	8.000% +/-	**7.500%- 8.500% +/-**
50MM-100MM	8.000% +/-	8.000% +/-	8.000% +/-	8.000% +/-	
100MM+	8.000% +/-	8.000% +/-	8.000% +/-	8.000% +/-	

ABS MARKET & SECURITIZATION

Congratulations to Pentagon Federal Credit Union (PenFed) on their second successful asset-backed security (ABS) issuance. PenFed previously issued $460 million in their inaugural ABS in August 2022. This new $425 million deal is the third largest credit union-issued ABS. The ABS offers investors yields ranging from 5.04% to 5.78%, depending on the risk tranche, with spreads ranging from 19 to 215 basis points above comparable tenured Treasuries. The weighted-average FICO score of the deal is 760 with a minimum individual FICO of 640.

PenFed CU (PNFED 2024-A)

Class	Size ($M)	WAL	Rating	Spread	Coupon	Yield	Price
A1	68.7	0.26	A-1+	19	5.37%	5.37%	100
A2	140.3	1.01	AAA	70	5.04%	5.10%	99.99363
A3	140.3	2.23	AAA	85	4.70%	4.75%	99.99034
A4	63.31	3.44	AAA	105	4.75%	4.80%	99.99782
B	12.06	4.1	AA	130	4.97%	5.02%	99.99923
C	13.64	4.4	A	155	5.20%	5.26%	99.98733
D	9.09	4.48	BBB	215	5.78%	5.86%	99.97348

FINAL THOUGHTS

September marked the tenth anniversary of Alloya's Credit Union Leadership Symposium. This year, over 300 professionals made their way to Nashville, TN for an action-packed experience. As always, the Symposium delivered remarkable speakers and networking opportunities for attendees. Peyton Manning started the event off with an incredible fireside chat, giving us details and leadership tactics never-before discussed off the gridiron. Additional speakers delivered on topics that included capital markets and how they relate to member experience, why credit unions need to have real-time payments on their strategic roadmap, and the future of artificial intelligence. And maybe the most impactful presentation was listening to credit union executives share what they're doing to serve their communities.

What is a Symposium without some fun? And this Symposium packed it in. Attendees got the opportunity to visit the Country Music Hall of Fame and were provided with a private concert by Grammy Award-winning band LoCash. As always, Alloya's signature event "Football Night with Alloya" was something to behold as it was held on the private SkyDeck on Broadway. While Nashville was one we'll always remember, Alloya is already getting things ready for next year's event in Boston, MA, where we know credit unions will have an experience like no other.

MARK YOUR CALENDAR TO JOIN US NEXT YEAR!

Credit Union Leadership SYMPOSIUM

SEPTEMBER 3-5, 2025 | BOSTON, MA

SESSION RECORDINGS

Enjoy a glimpse of what the Leadership Symposium has to offer!

WATCH NOW

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