Filene Research Institute

CREDIT UNION FINANCIAL PERFORMANCE INDICATORS, 2022 Q4

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What Is This Report About?

This report looks at six aspects of credit union performance over the prior 10 years, for perspective, and over the prior 4 quarters, for sensitivity to emerging trends. As a credit union leader, it is important to keep a forward-looking perspective to anticipate how change will affect your organization. NCUA 5300 data provides a way to look at financial trends and assess their potential impact. Traditional industry analysis has shortcomings due to GAAP (generally accepted accounting principles) that can lead to a distorted view of performance. Furthermore, the way financial information is presented is designed to satisfy a ledger style of reporting, not for managing the business.

Each section in the report starts with a summary of what is being measured and why it is important, with the objective of increasing business literacy and awareness. Several supporting charts are provided with commentary to help you understand why performance is what it is.

We hope you find the information useful and can apply some of the concepts to your credit union to evaluate your success, communicate results to others, and educate your board of directors.

Key Findings, 2022 Q4

- In Q4, Operating ROA fell by 0.05% to 0.95%, but is still above the 10-year average of 0.81%. **That's great news for financial sustainability** but read on.
- There was **another quarter of above average** loan growth. Loans held on the balance sheet grew at an annualized rate of 13.4% and the loan to asset ratio increased further to 69.5% which is above the 10-year average.
- Due to rate hikes, surplus funds yield improved by 0.49% this quarter. **Further rate hikes signaled by the Federal Reserve will help to extend this favorable trend**.
- Cost of funds is moving quickly, up by 0.32% this quarter. Deposit pricing tends to be inelastic early in a rate cycle, but the size of Fed hikes has pushed us into late-cycle movement in a just matter of months. **Expect sustained and intense competition for deposits**.
- The combination of a higher loan to asset ratio (improved asset mix) and rising surplus funds yield helped net interest margin **improve,** but only by 0.08%.
- Hidden in net interest margin is the fact that while loan yield improved 0.24% this quarter, cost of funds increased 0.08% faster, **causing the spread between loan yield and cost of funds to shrink**. Just over 53% of loan growth this quarter was in first mortgages and vehicles, which tend to be fixed rate. The implication: enough contractual yield today is necessary to cover **increasing funding costs in the future**.
- Relationship share balance **declined at a 13.5% annualized rate** this quarter.
- Rate sensitive funds grew at an annualized rate of 53.1% this quarter. Heavier reliance upon this funding source **will drive up overall cost of funds.**

Key Findings (continued)

- **Unrealized losses** on available for sale securities **represent 16.2% of total credit union net worth**. There is no loss if a security is held until maturity, but it **strains liquidity** as witnessed by what happened at **Silicon Valley Bank.**
- Operating non-interest income **grew** at an annualized rate of 5.5% this quarter, but now only represents 38.0% of non-interest expense—**lower than any point in the past 10 years.**
- Net charge-offs have **steadily risen** to 0.43% this quarter, approaching the 10-year average of 0.49%.
- Non-interest expense **increased faster than net revenue** (8.6% annualized versus 7.9% net revenue growth).
- Hidden in the numbers: **There was a $12.8 billion net outflow of credit union deposits**. Asset growth was due to non-member deposits and borrowings (rented funds).
- While inflation remains high and is above the Fed's 2% annual inflation target, it has climbed to 6% in February, slightly down from January's 6.4% increase. Nearly three-quarters of February's price increase was driven by housing costs.
- As a response to high levels of inflation, the Federal Reserve is raising the federal funds effective rate. With a current target range of 4.50-4.75%, the federal funds rate is 4.58% as of March.
- In the wake of the collapse of Silicon Valley Bank and Signature Bank, analysts are speculating about a pause on rate increases in the coming months.

Key Indicators Directory

1 Operating ROA

About Operating ROA

2 Net Revenue Growth

Net Interest Income Growth

Loan Growth

Relationship Share Growth Rate

Sensitive Funds Growth

Net Interest Margin

Loan Yield

Surplus Funds Yield

Cost of Funds

Operating Non-Interest Income

Growth

About Net Revenue Growth

3 Economy of Scale Ratio

Non-Interest Expense Growth

About Economy of Scale Ratio

4 Relationship per Member

About Relationship per Member

5 Product Mix

Overall Product Mix

Loan to Asset Ratio

Relationship Share to Asset Ratio

Non-Interest Income to
Non-Interest Expense

About Product Mix

6 Excess Reserves

Total Reserves Chart

Net Charge-Offs Chart

PCA Coverage Ratio Chart

About Excess Reserves

The Fine Print

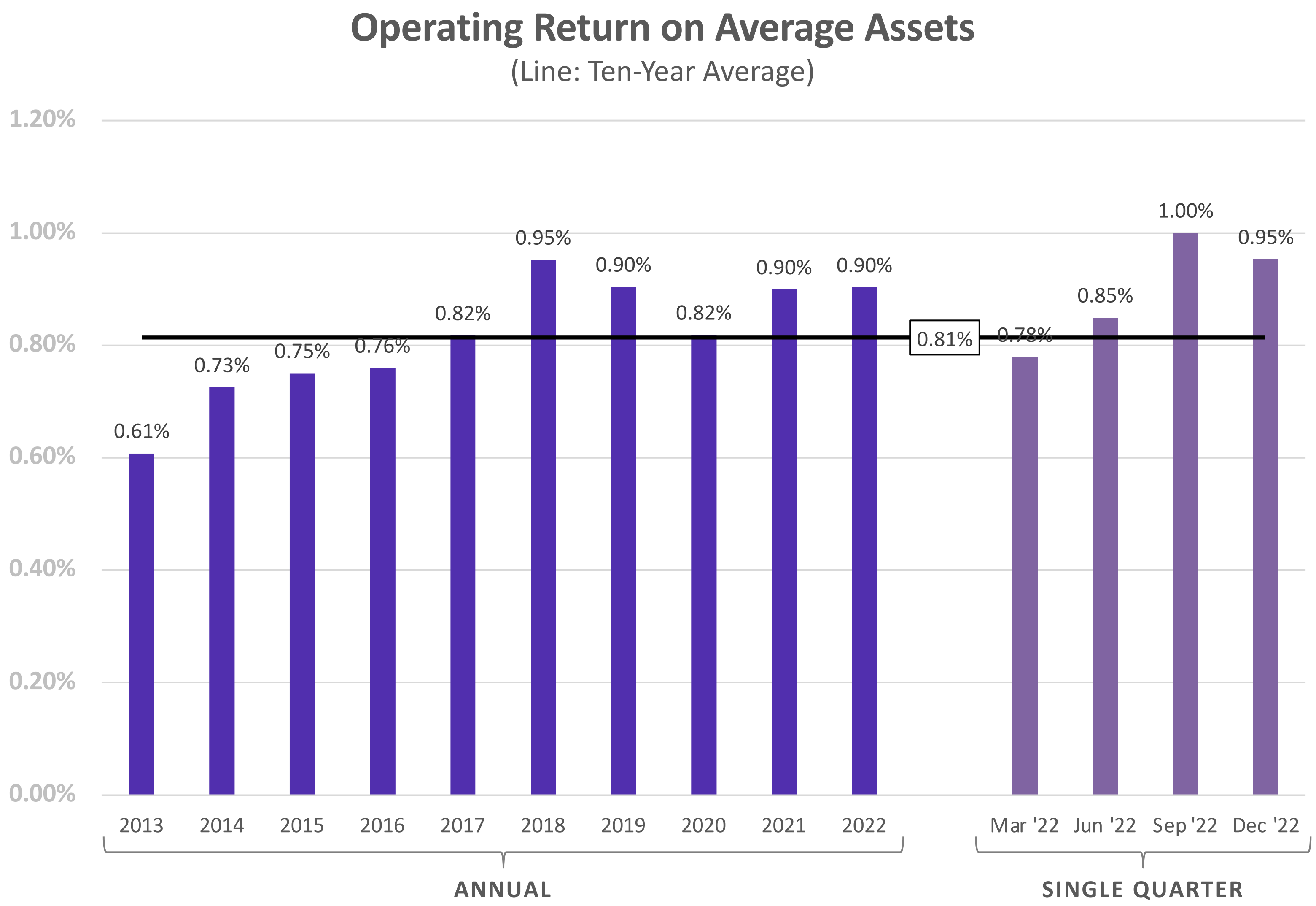
What Is This Report About?

Dive Deeper: Filene Resources

Six Key Indicators Vital to
Credit Union Performance

1.

OPERATING ROA



Source: NCUA 5300 FPR

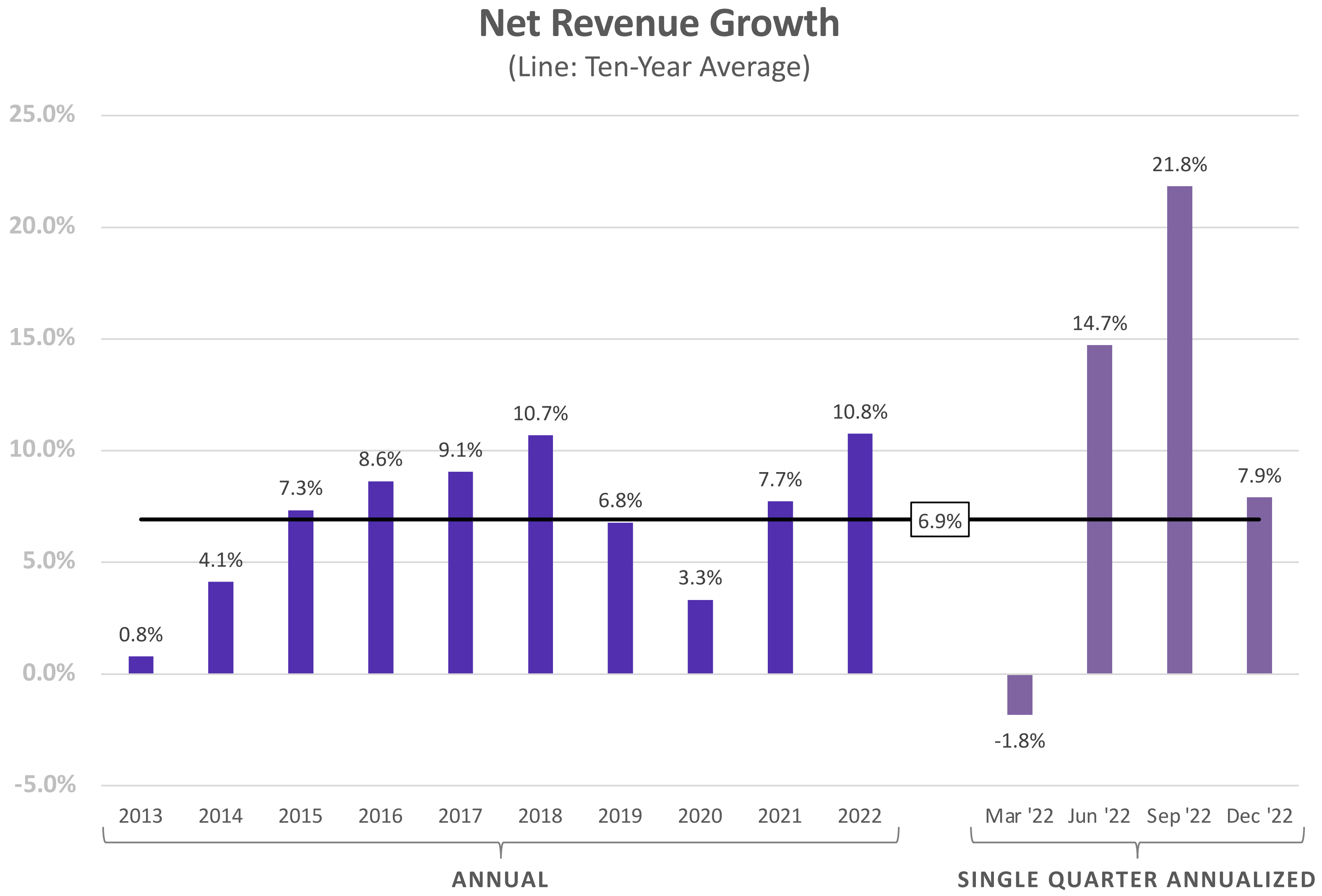
Comments and Observations

Operating ROA substitutes net charge-offs for provision expense to give a "real-time" read on financial performance.

In the fourth quarter of 2022, operating ROA was 0.95%, above the 10-year average of 0.81%.

2.

NET REVENUE GROWTH



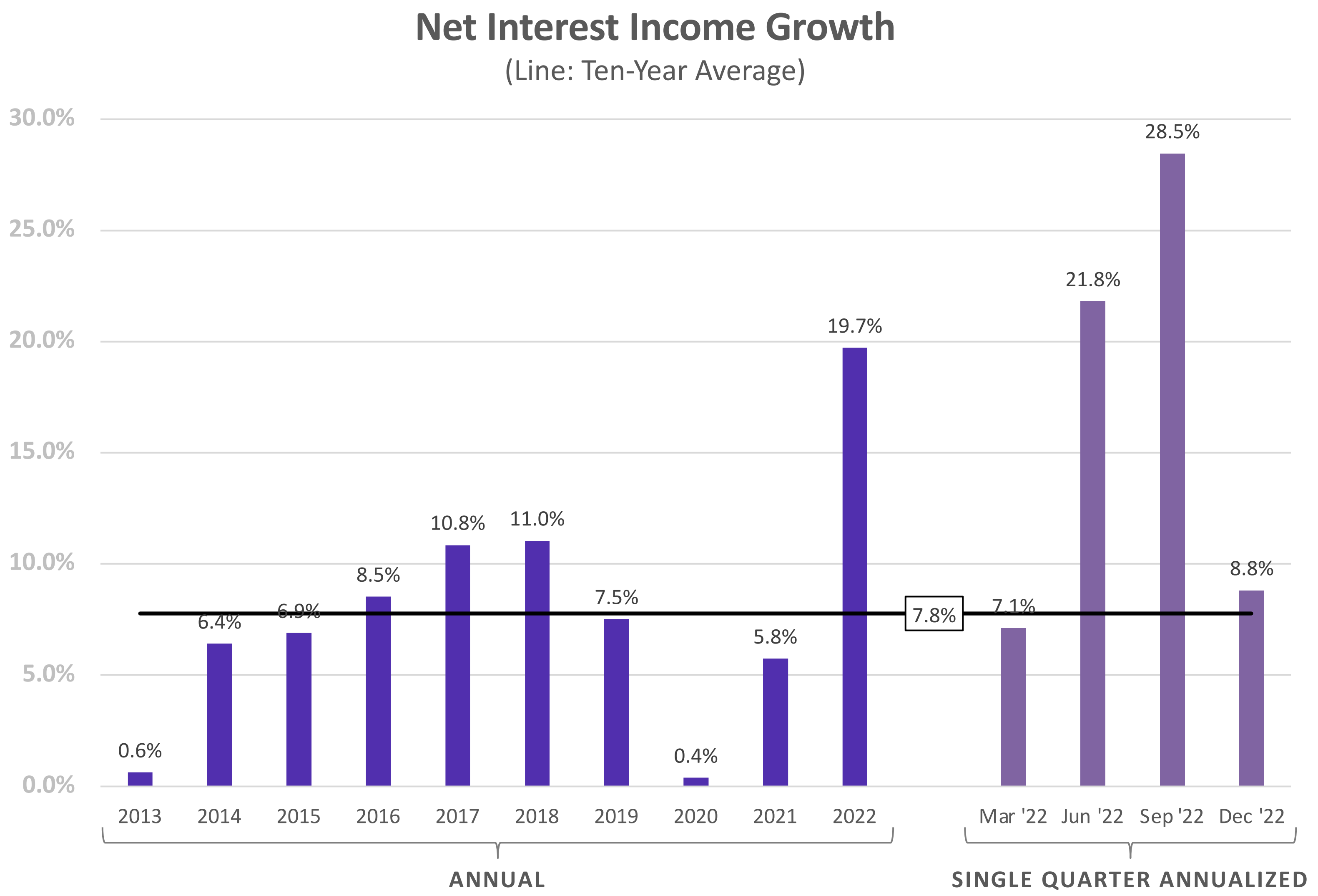
Source: NCUA 5300 FPR

Comments and Observations

Net revenue is the sum of net interest income and non-interest income. It excludes provision for loan loss expense. Think of net revenue as “top line” sales.

In the last quarter, net revenue grew at an annualized rate of 7.9% but failed to keep pace with non-interest expense growth at 8.6% .

Why is this important? In a fixed-cost and capital constrained industry, the first sign of trouble shows up on the top line, not the bottom line. It is important that net revenue outpace the rate of non-interest expense growth.



Source: NCUA 5300 FPR

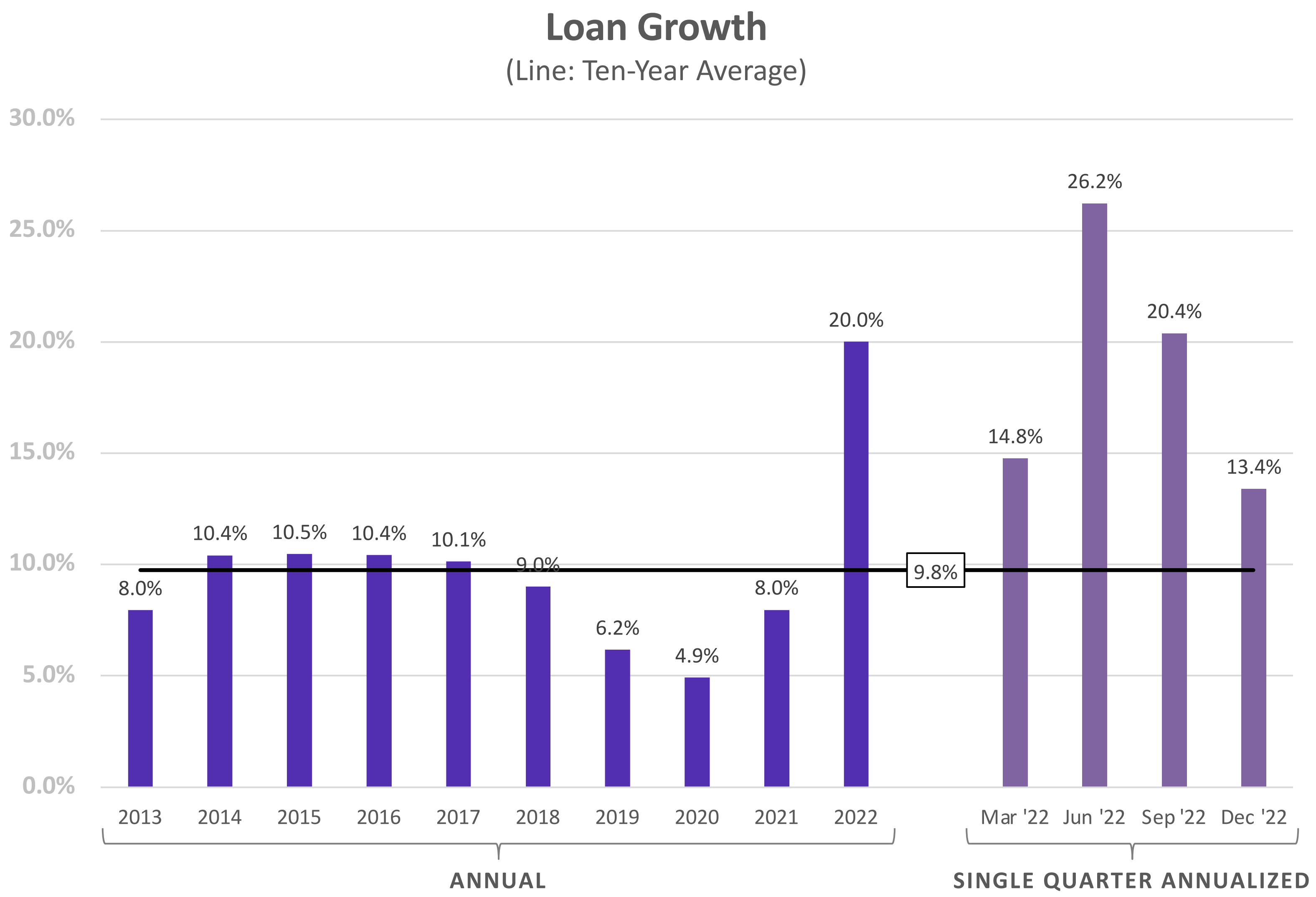
Comments and Observations

Net interest income, in dollars, is the largest component of net revenue.

There are two components to net interest income: balance and interest rates.

The next three slides address how balance is impacting net interest income (loan growth, relationship share growth, and rate sensitive funds growth).

The four after that address how rates are impacting net interest income (net interest margin, loan yield, surplus funds yield, and cost of funds).



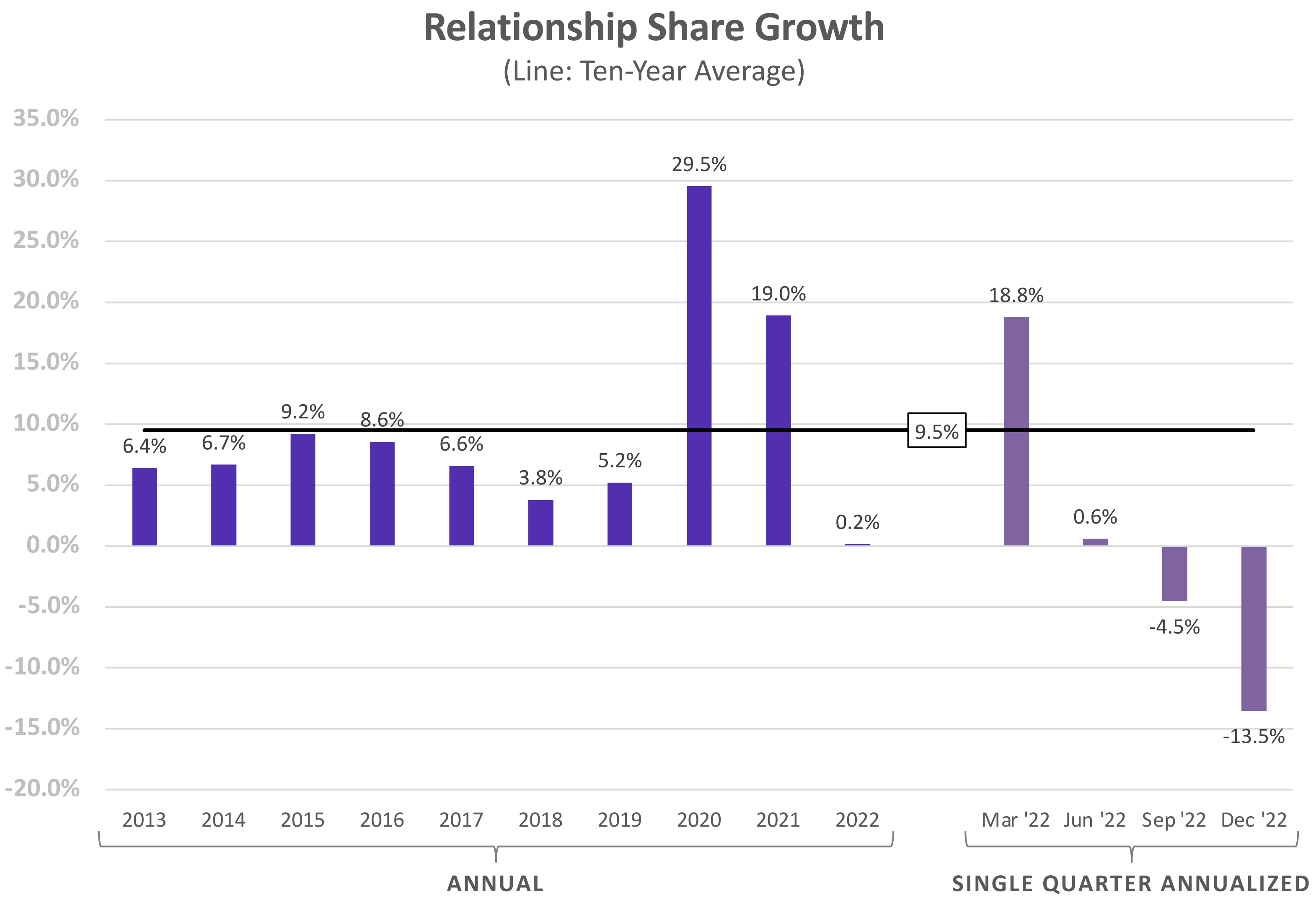
Source: NCUA 5300 FPR

Comments and Observations

Loan growth remained elevated, while the rate of growth declined, it was still 13.4% annualized in Q4 2022, well above the 10-year average.

During the past quarter, the annualized rate of growth was:

- 32.3% for 2nd Mortgage/Credit Line
- 24.7% for Unsecured Credit Card
- 19.7% for Commercial Loans
- 15.9% for New Vehicle Loans
- 9.4% for First Mortgage Loans
- 8.9% for Used Vehicle Loans



Source: NCUA 5300 FPR

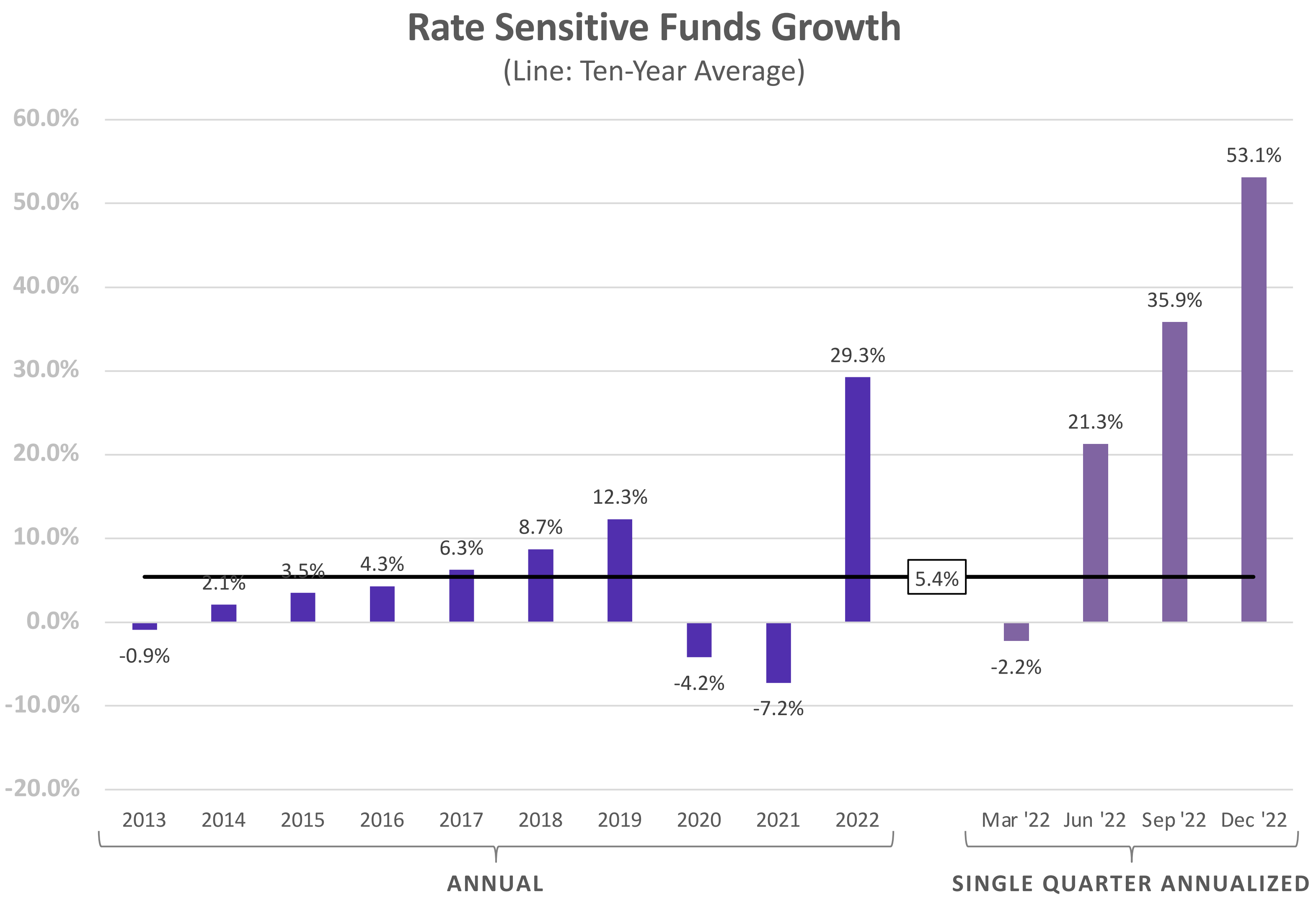
Comments and Observations

Relationship shares are draft, regular, money market, and health savings accounts.

The impact of stimulus dollars flowing into the financial system and cash conservation can be seen in the unprecedented growth rates in 2020 and 2021, but the trend has reversed itself.

In Q4 2022, relationship share balance *declined* at a 13.5% annualized rate–the first time since 2007 (15 years ago).

Loss of this low-cost funding source means competition for funding will be based more upon price.



Source: NCUA 5300 FPR

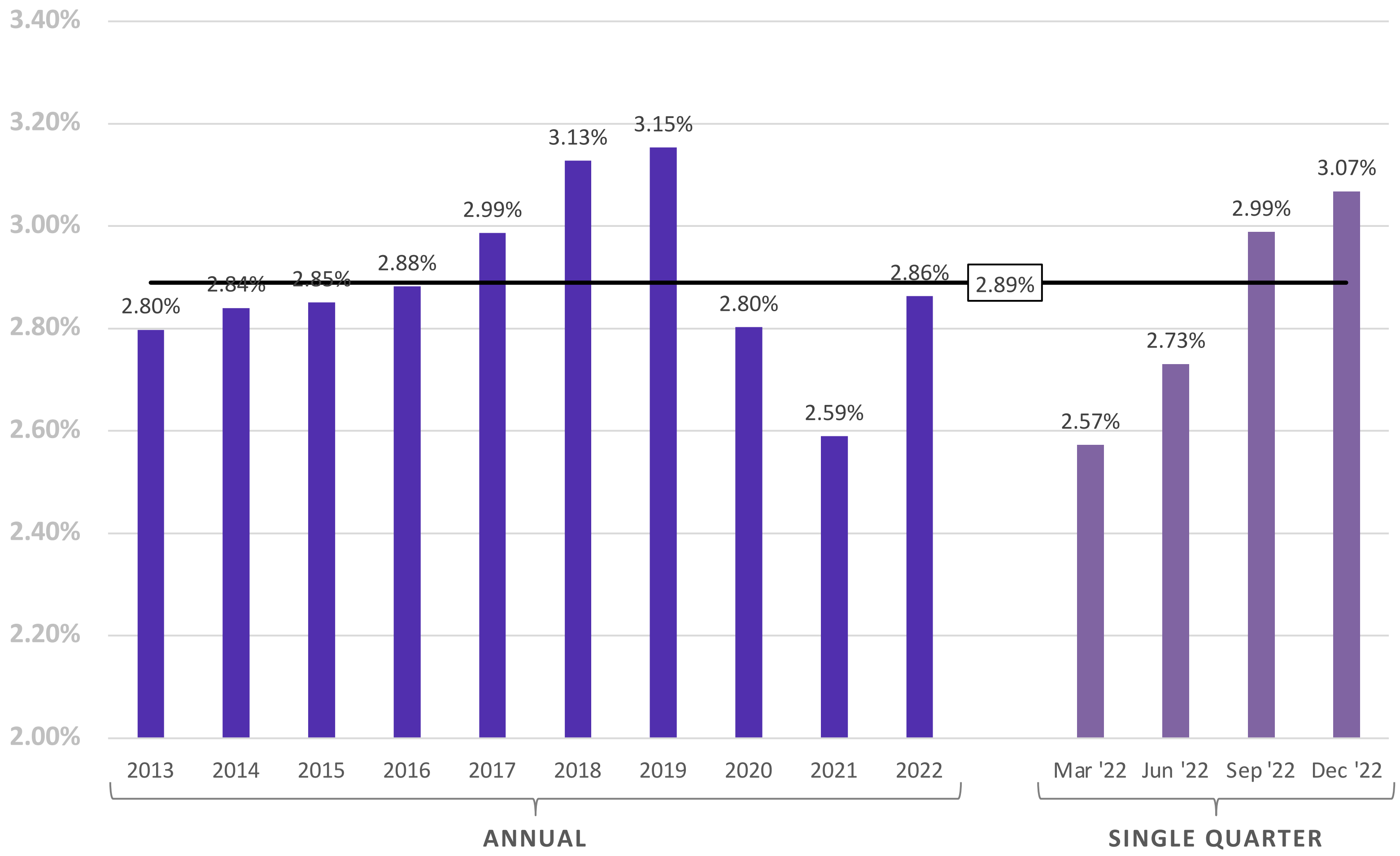
Comments and Observations

Rate sensitive funds are certificates, IRAs, non-member deposits, and borrowings.

Growth in Q4 2022 is staggering at an annualized rate of 53.1% as this category of funding is becoming more important to support loan growth and ease strain on liquidity due to unrealized losses on AFS securities.

Net Interest Margin (% Average Assets)

(Line: Ten-Year Average)



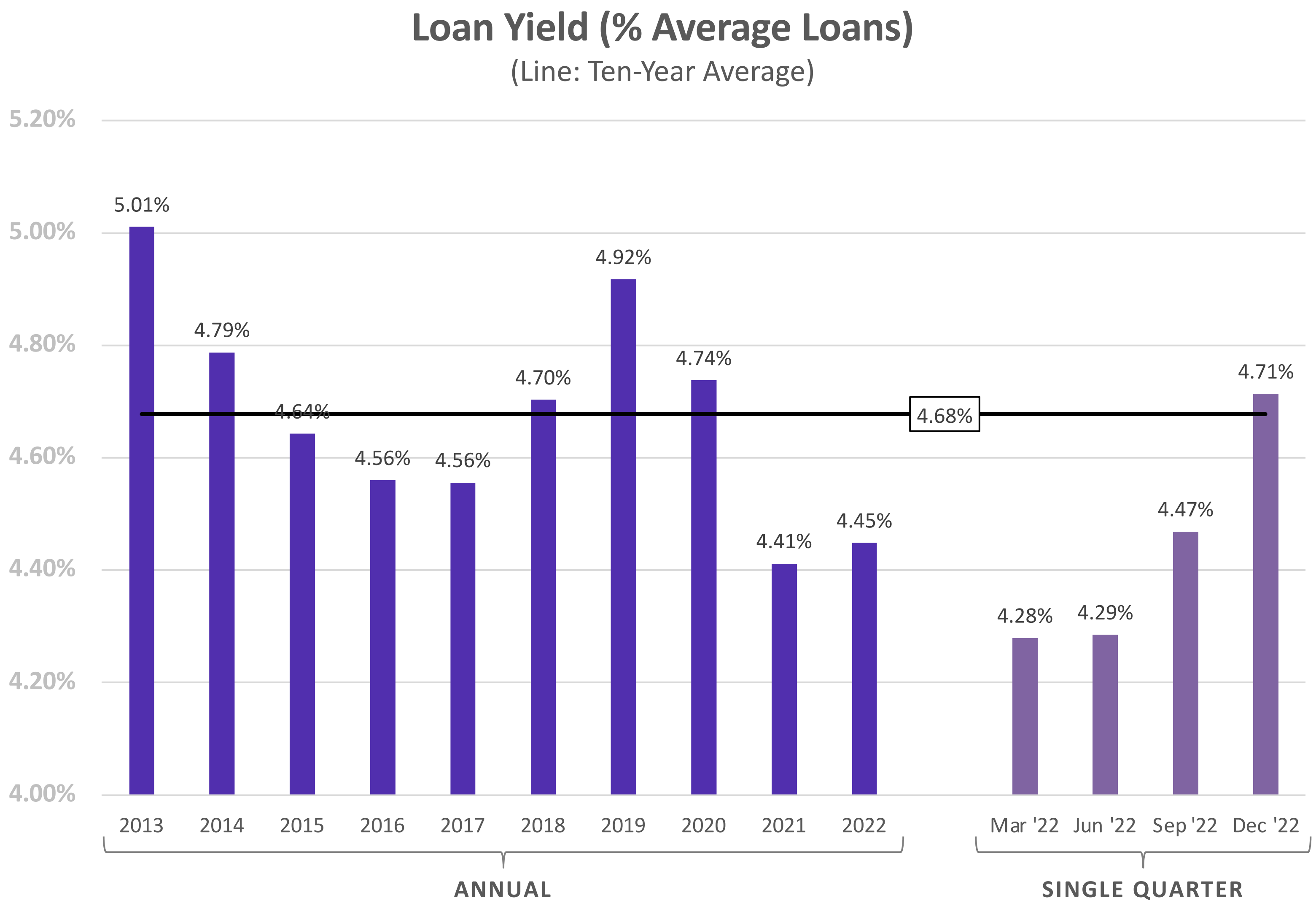
Source: NCUA 5300 FPR

Comments and Observations

Net interest margin, the rate of return on the balance sheet, improved a tepid 0.08% in Q4 2022, buoyed by a large increase in surplus funds yield, while cost of funds increased faster than loan yield.

During the past quarter:

- Surplus funds yield increased 0.49%
- Cost of funds increased 0.32%.
- Loan yield increased 0.24%

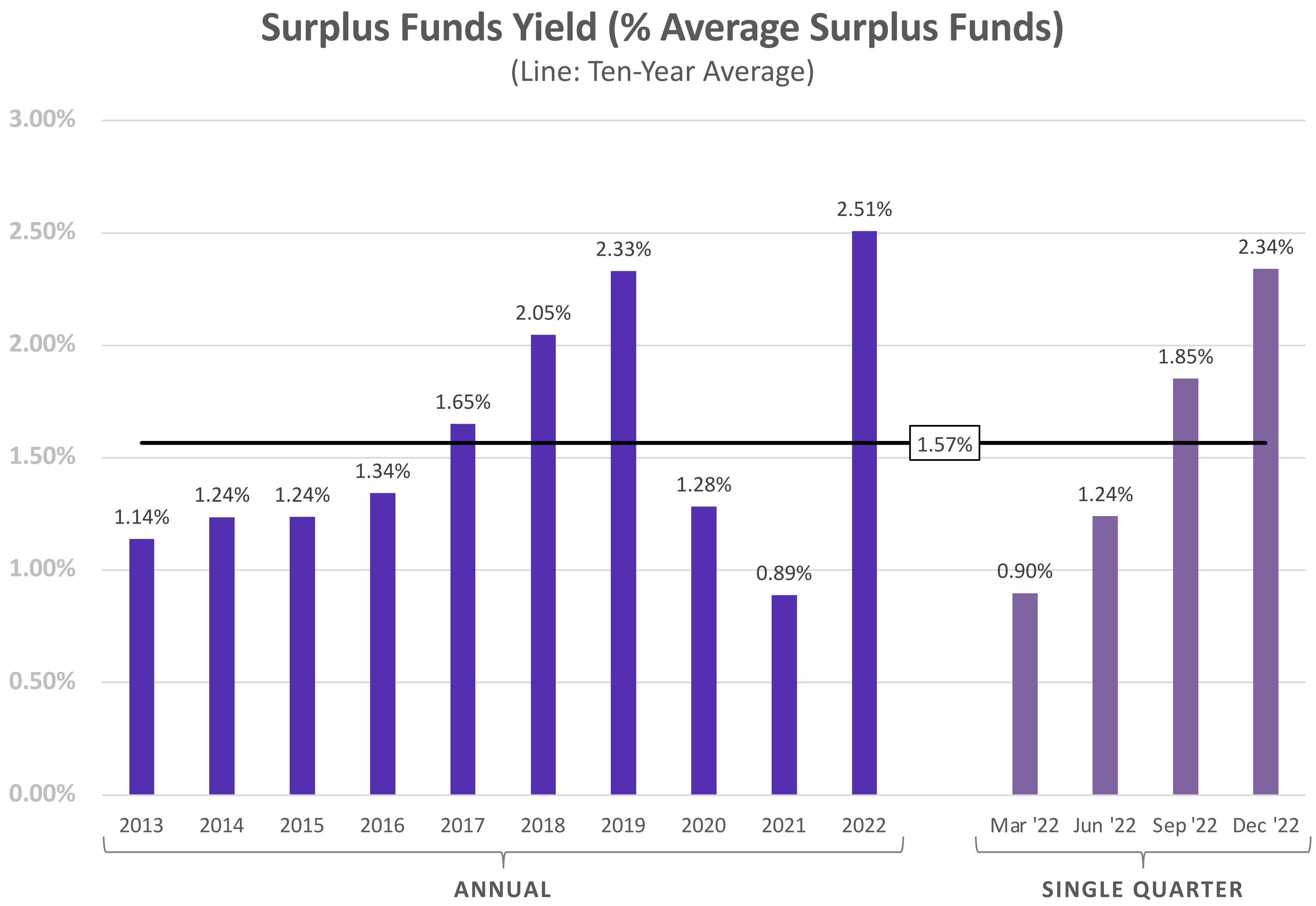


Source: NCUA 5300 FPR

Comments and Observations

Loan yield increased by 0.24% this quarter. This is important because cost of funds is starting to move quickly now. In fact, cost of funds increased *faster* than loan yield this past quarter (0.32% vs. 0.24%).

Loan demand was strong again this quarter and it is important that loans booked today, especially fixed rate, carry enough yield to cover continued increases in funding costs in future quarters and years.



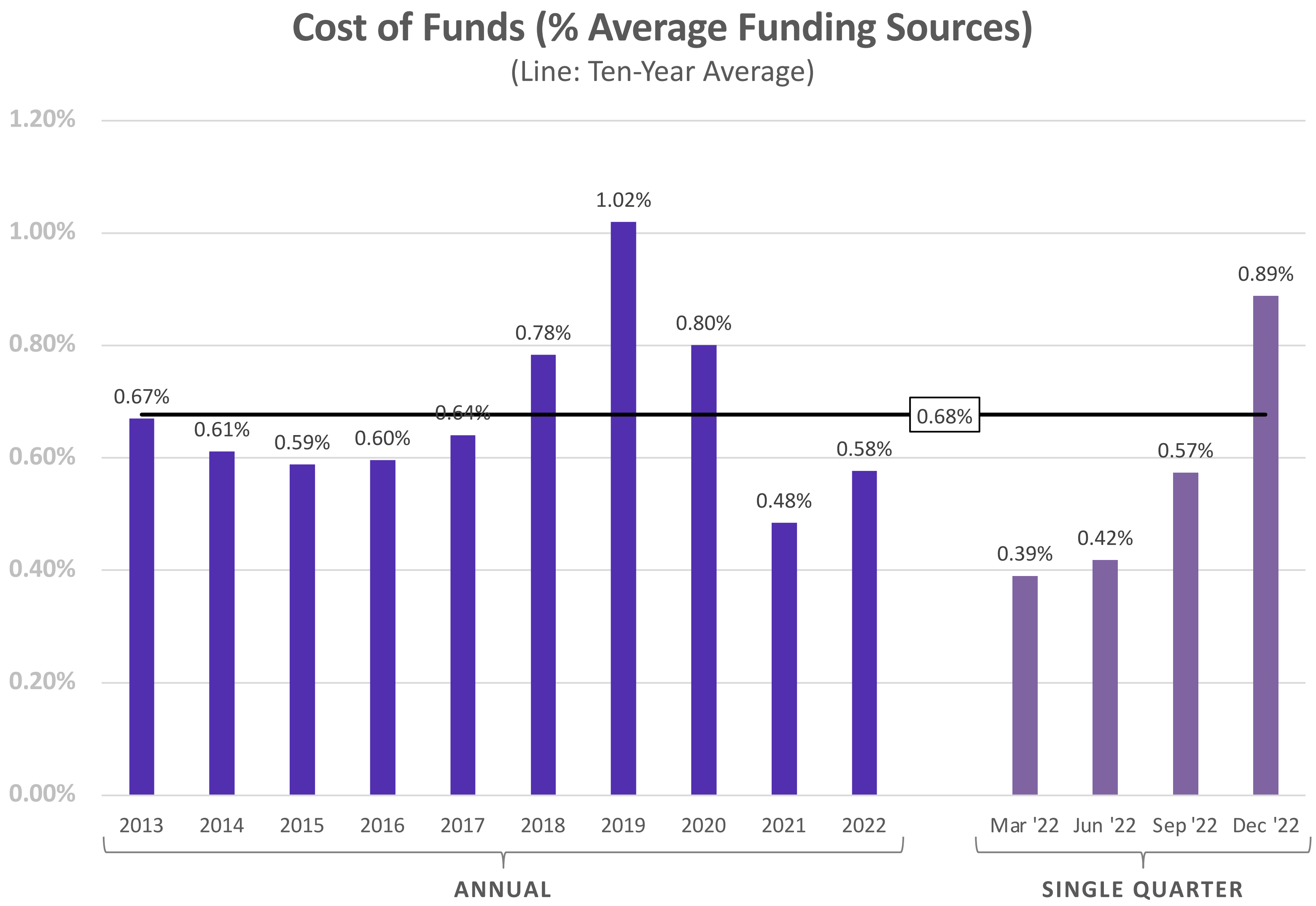
Source: NCUA 5300 FPR

Comments and Observations

Overall surplus funds yield increased 0.49% in the quarter just ended.

The Federal Reserve continues to signal rate hikes on the short-end of the yield curve which will help credit unions holding large amounts of liquid funds.

Deposits are now becoming valuable again. In a low-rate environment there is very little spread between deposit cost and surplus funds yield. That is all changing. Savers will start to be rewarded and credit unions that lack strong lending skills will make a larger spread on funding sources now.



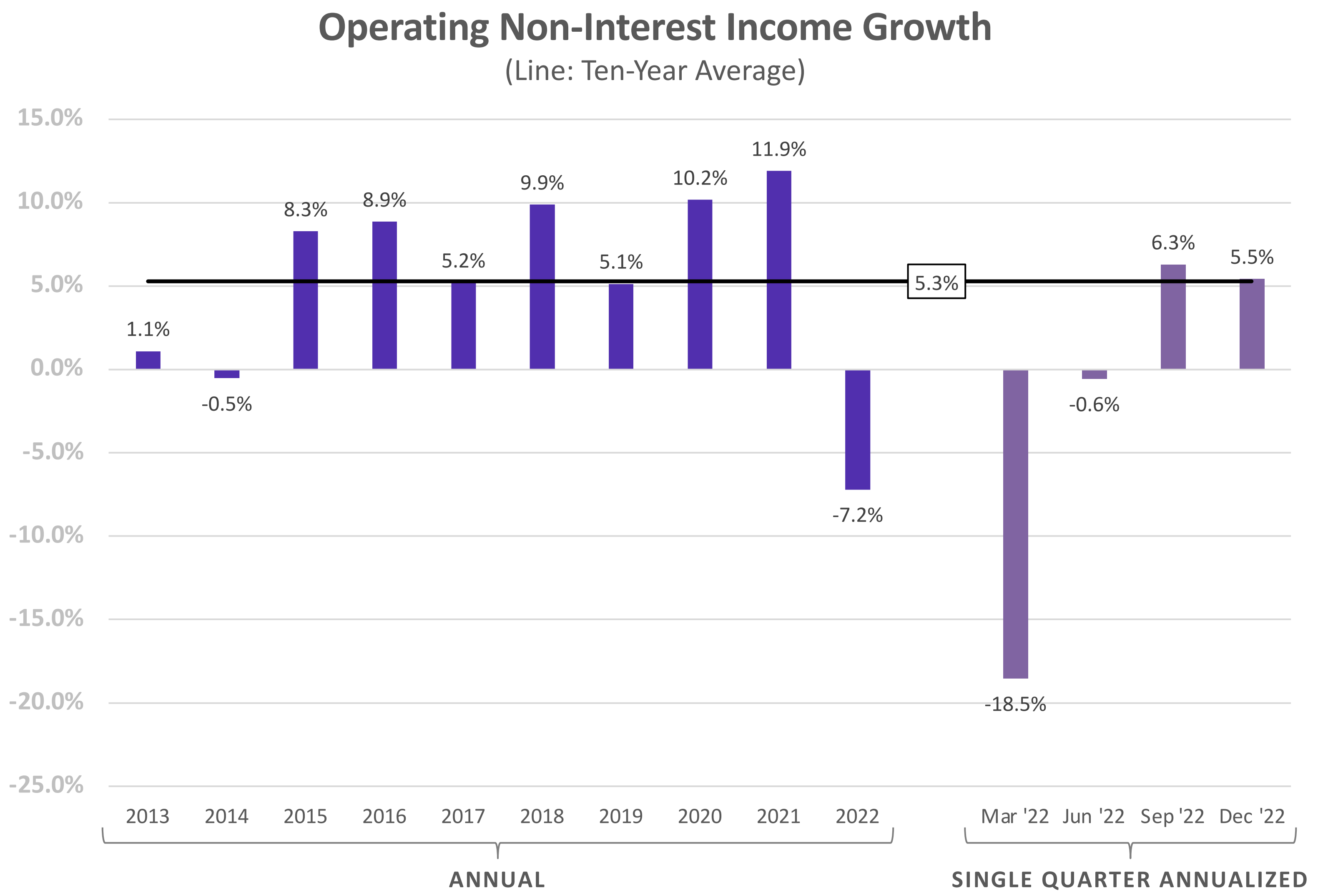
Source: NCUA 5300 FPR

Comments and Observations

Cost of funds is starting to move rapidly, increasing 0.32% versus last quarter. Recall, deposit costs tend to lag early in upward rate cycles and move more quickly later.

Expect pressure on cost of funds to continue. Banks, neo-banks, and brokerage houses want deposits because a sizeable investment spread now exists.

Tightening liquidity will also play a role in competition for funds (loan to asset ratio, unrealized losses on AFS securities).



Source: NCUA 5300 FPR

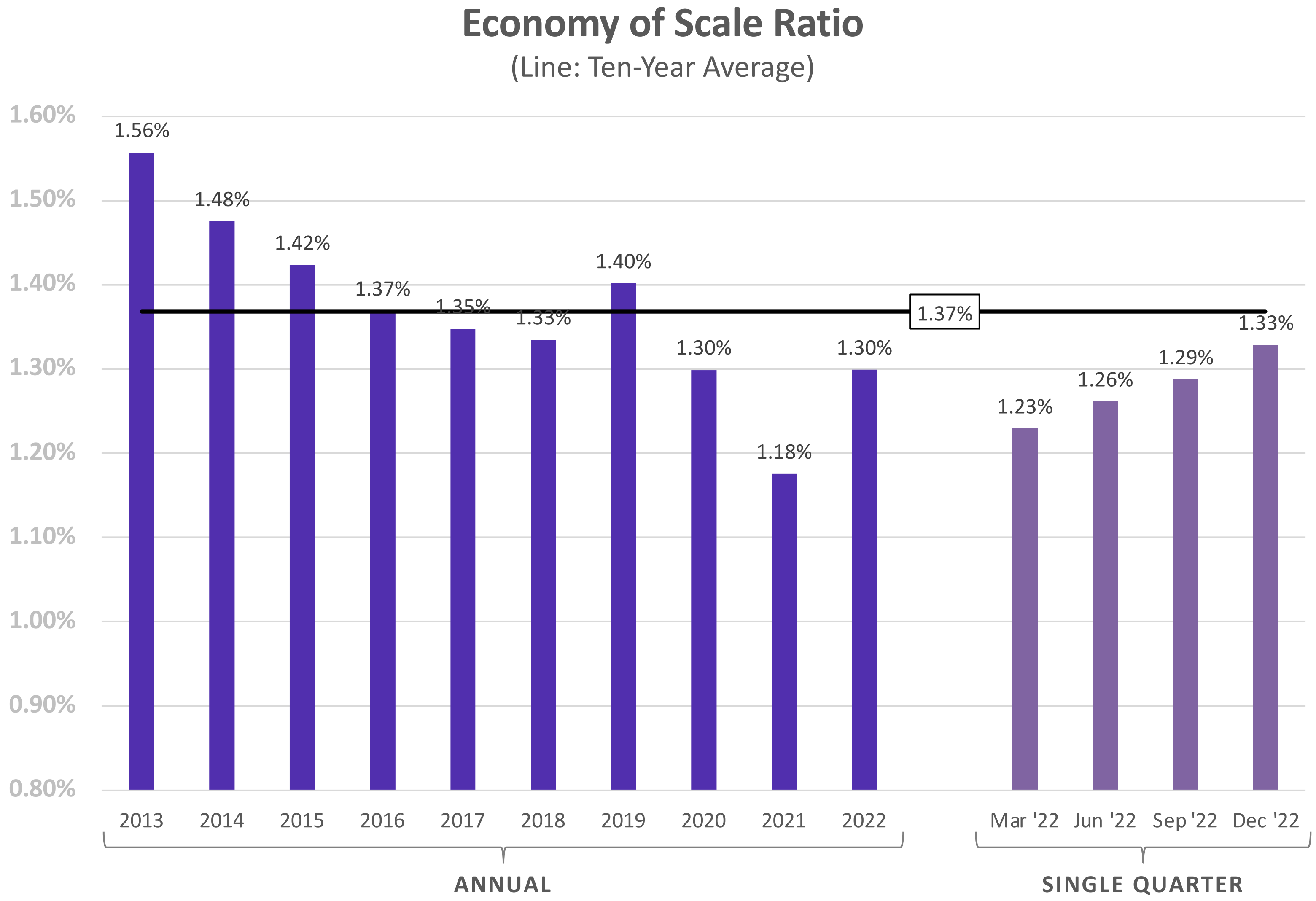
Comments and Observations

Operating non-interest income is the sum of fee income and other income as recorded on the call report.

In Q4 2022, total operating non-interest income grew at a 5.5% annualized rate but it was a mixed bag—fee income *declined* at a 3.3% annualized rate and other income grew at a 12.2% annualized rate.

3.

ECONOMY OF SCALE RATIO

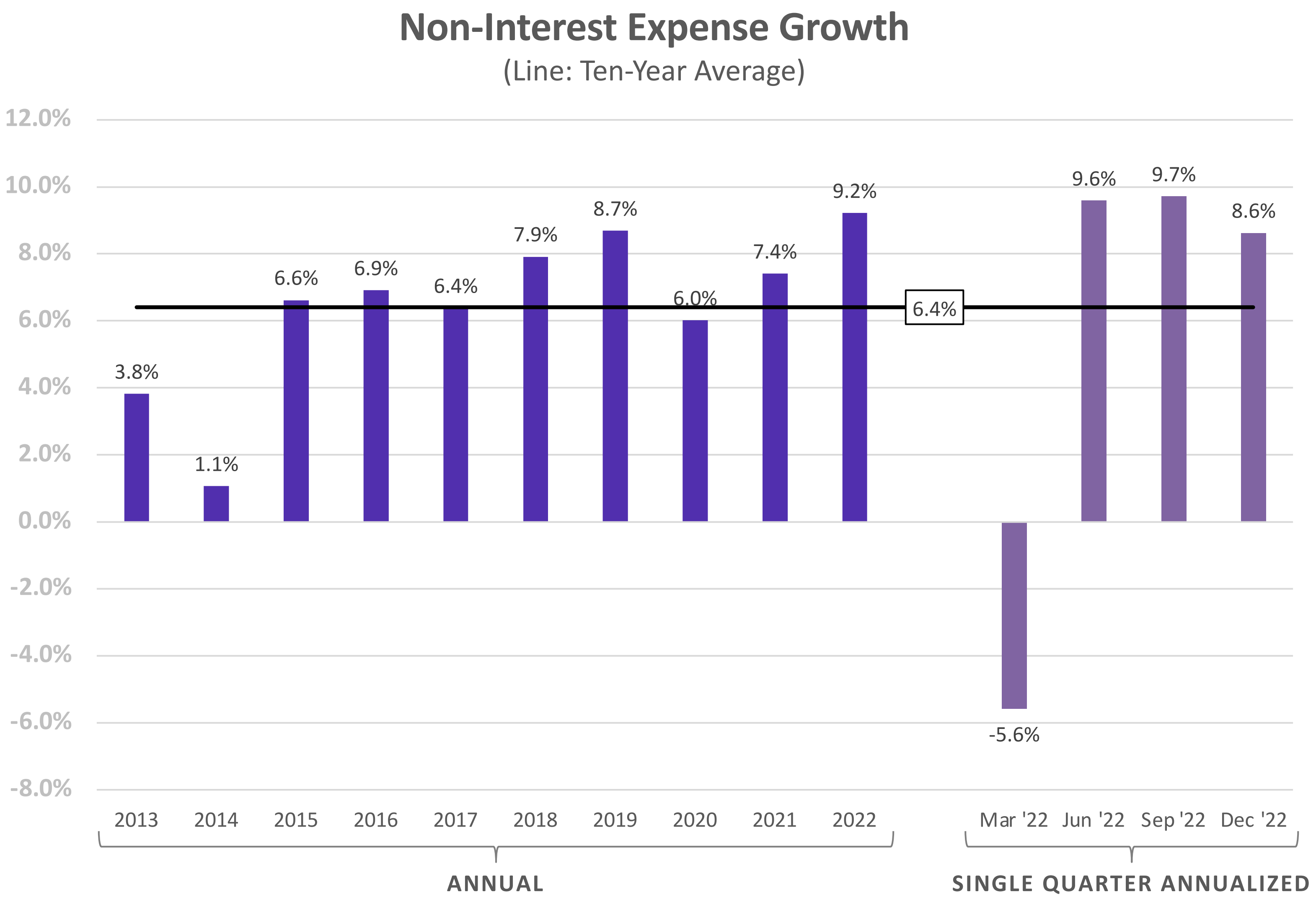


Source: NCUA 5300 FPR

Comments and Observations

During 2020 and 2021, output grew much faster than input leading to gains in economy of scale, but some of those gains appear to be temporary due to stimulus activity, as noted by the decline in performance each of the last four quarters compared (smaller numbers indicate greater economy of scale).

Over the past ten years, credit union performance has shown a trend of improvement, which helps to increase overall competitiveness.



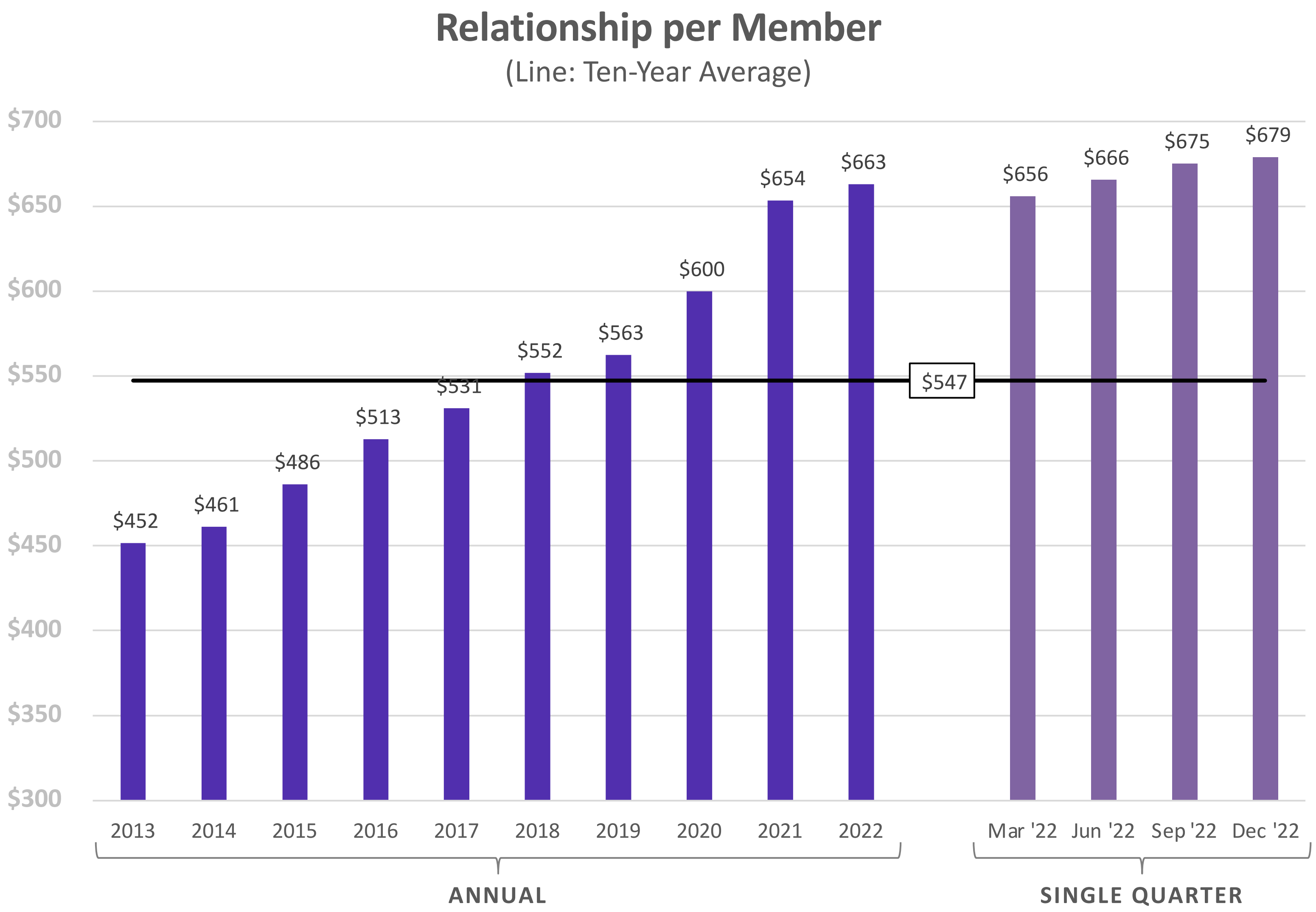
Source: NCUA 5300 FPR

Comments and Observations

Non-interest expense grew in Q4 2022 at an 8.6% annualized rate—higher than the 10-year average of 6.4%.

4.

RELATIONSHIP PER MEMBER



Source: NCUA 5300 FPR

Comments and Observations

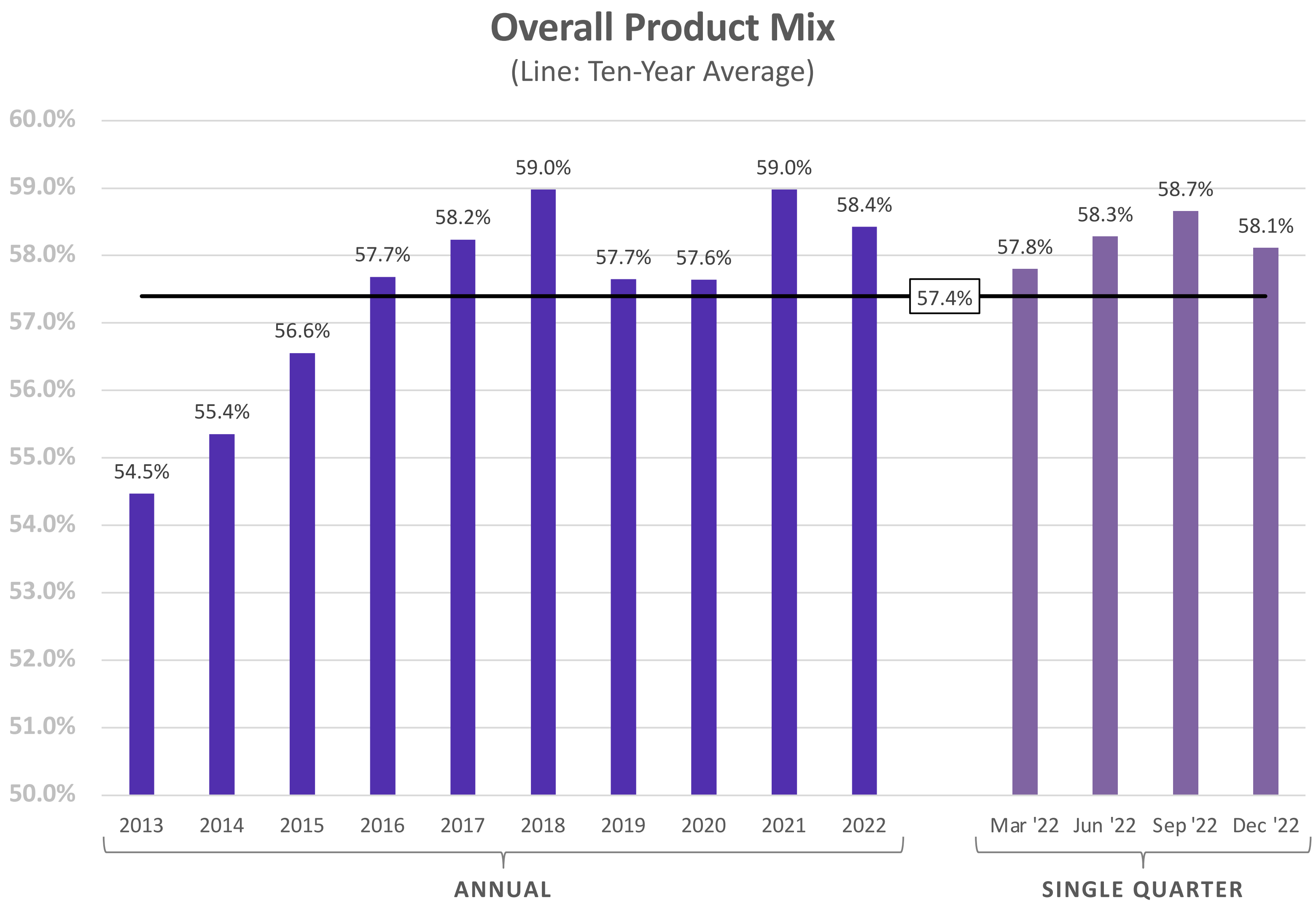
Relationship per member holds interest rates constant over time to ensure a clean read on depth of relationship is presented.

Over the past 10 years, relationship per member has been steadily increasing. It has accelerated recently due to stimulus activity.

Relationship per member has remained steady over the prior four quarters as loan growth has offset the recent decline in non-interest income.

5.

PRODUCT MIX

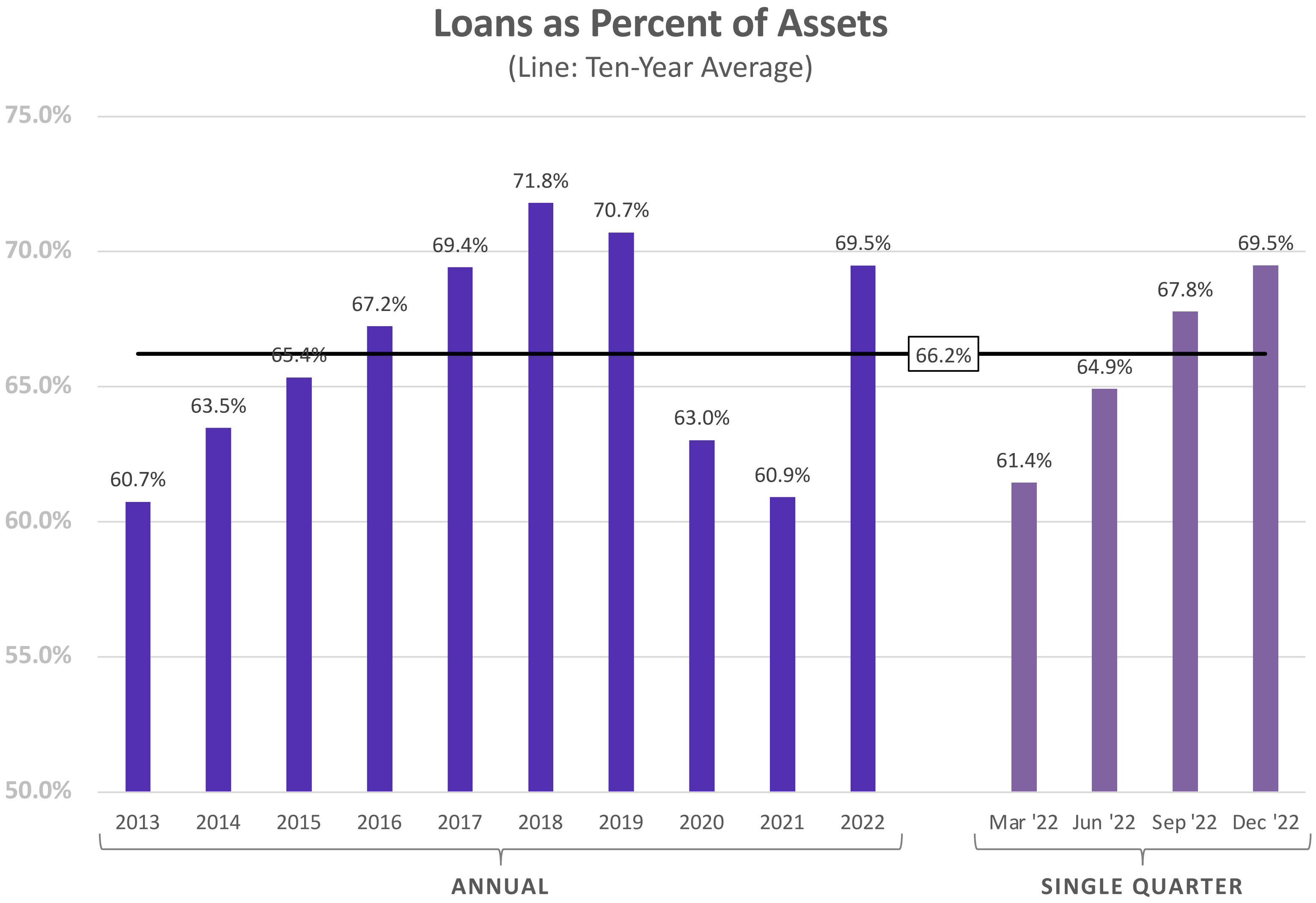


Source: NCUA 5300 FPR

Comments and Observations

Overall product mix is a composite of the following: loan to asset ratio, relationship share (draft, regular, money market, health savings accounts) to asset ratio, and non-interest income as a percent of non-interest expense.

The composite score is showing an upward trend coming out of the great recession years as loan to asset ratios improved and non-interest income has become a larger portion of total net revenue.



Source: NCUA 5300 FPR

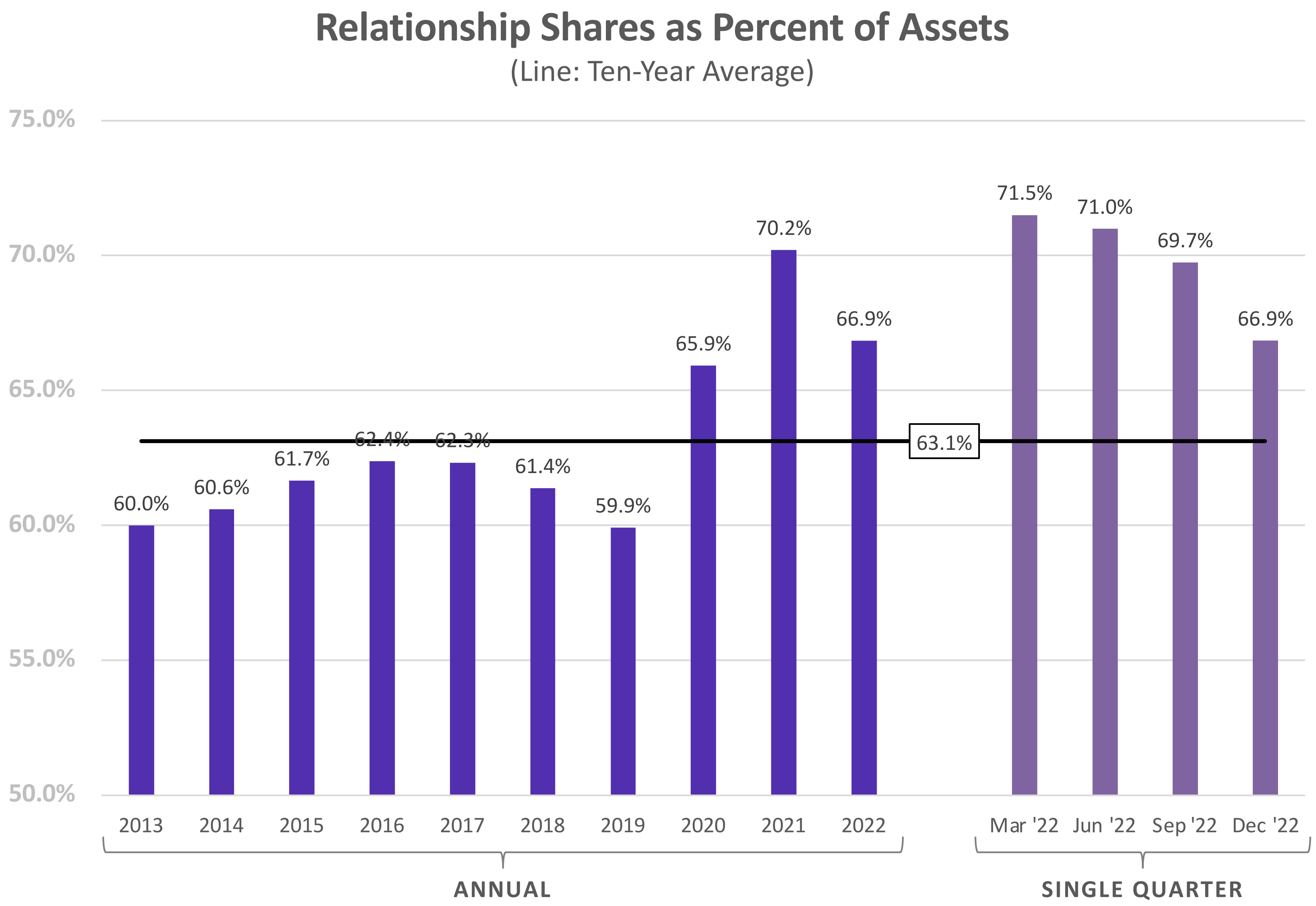
Comments and Observations

A high ratio shows knowledge, skill, and ability in lending which is important for three reasons.

First, a credit union that performs poorly here must rely upon surplus funds for income; placing its destiny in the hands of the yield curve.

Second, because loans produce a higher rate of return than surplus funds, the higher the ratio, the greater the return on assets.

Third, a high ratio is an efficient use of net worth. Grow loans first, then grow assets only when funding is needed.



Source: NCUA 5300 FPR

Comments and Observations

A high ratio shows knowledge, skill, and ability in funding which is important for three reasons.

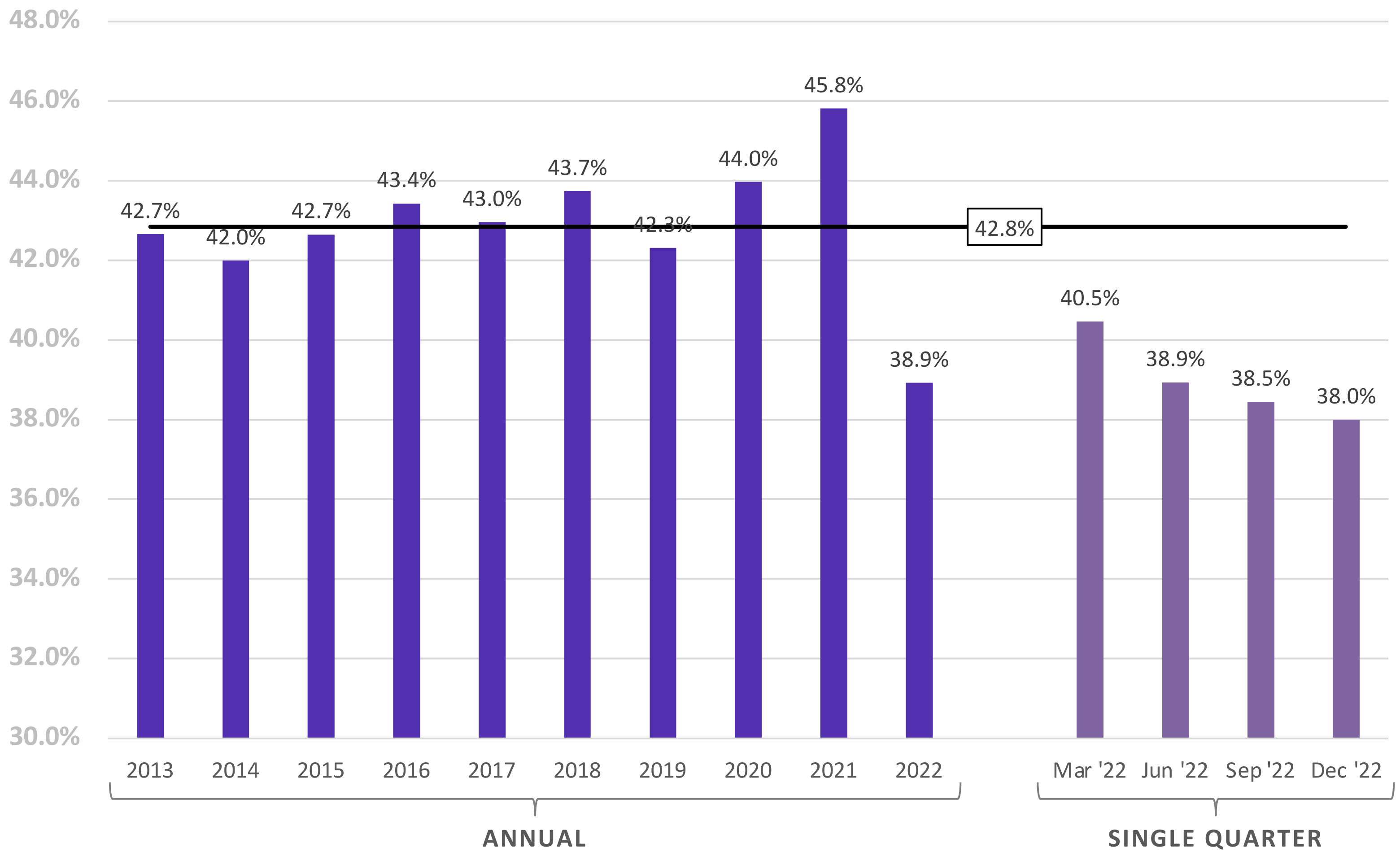
First, it reduces reliance upon "rate-shoppers" for funding.

Second, relationship shares have a long average life, thus reducing interest rate risk.

Third, because this funding source is transactional in nature, a wealth of data on member spending and saving exists, which can be used to deepen relationships, making it difficult for competitors to steal members away.

Non-Interest Income as Percent of Non-Interest Expense

(Line: Ten-Year Average)



Source: NCUA 5300 FPR

Comments and Observations

A high ratio shows knowledge, skill, and ability in non-interest income generation which is important for three reasons.

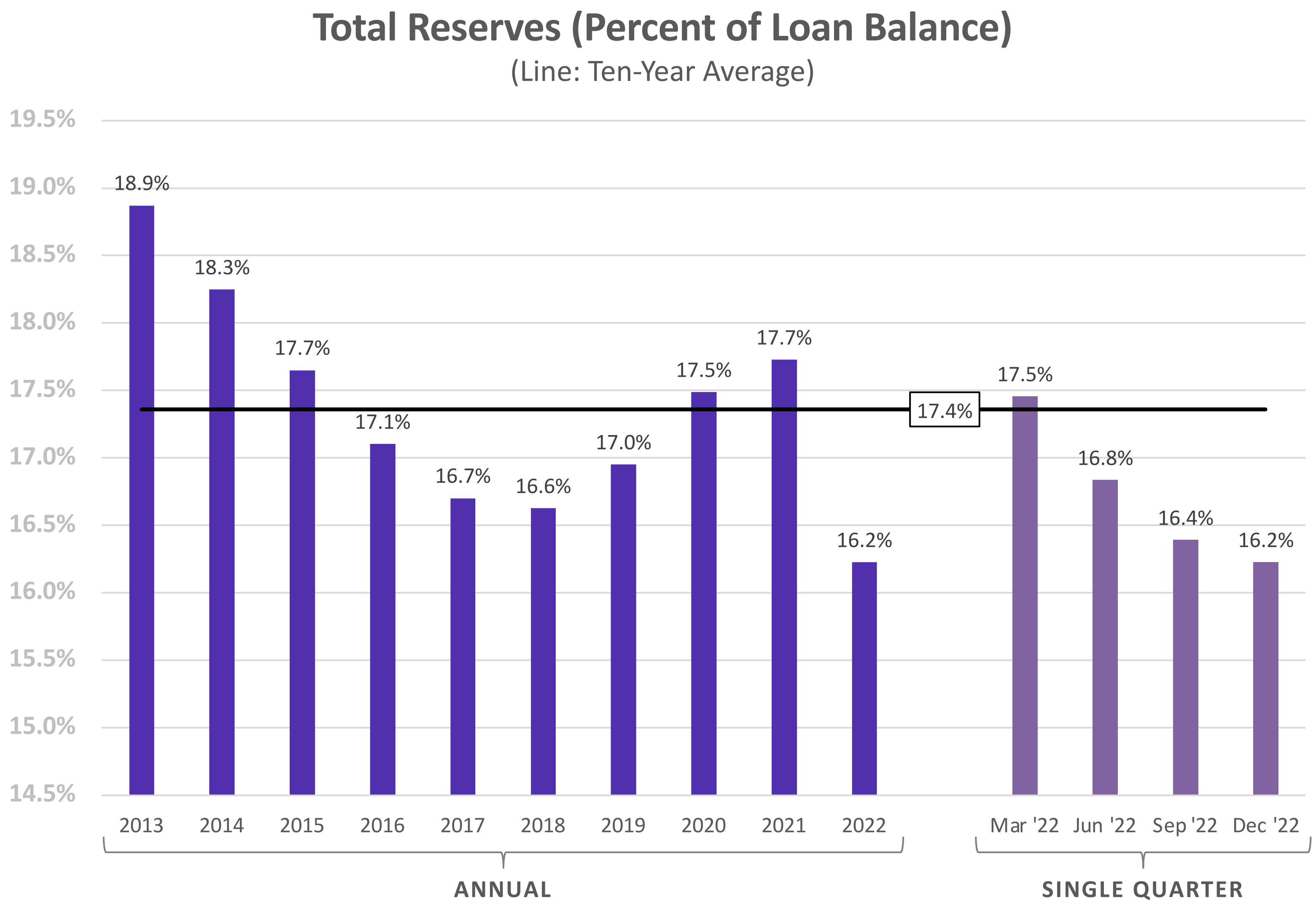
First, it's important for sustainability. Many non-interest income sources are recurring, so each year begins with a pipeline of revenue.

Second, it reduces reliance upon net interest income (and the yield curve).

Third, most sources of income require no regulatory capital. It's a way to grow without straining net worth; instead, it improves it.

6.

EXCESS RESERVES



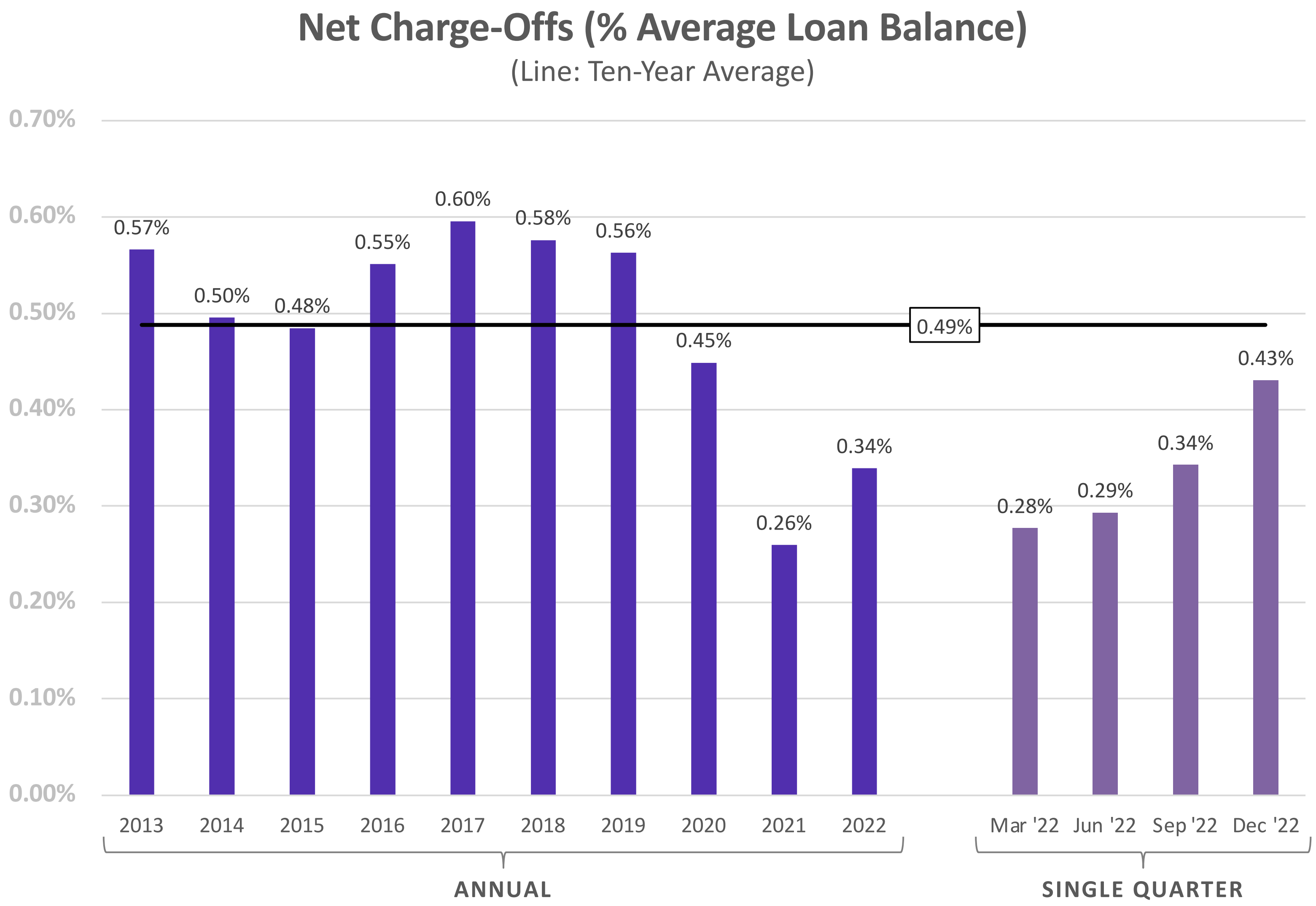
Source: NCUA 5300 FPR

Comments and Observations

Total reserves are the summation of balance sheet items: net worth and loan loss reserve.

Rather than measure total reserves as a percent of assets, it is measured as a percent of *loans* on the chart to the left to demonstrate how much is present to secure the riskiest asset on the balance sheet.

In the prior quarter, total reserves grew by $5.5 billion while loans grew by $49 billion. The trend of loans (risk) growing faster than reserves continues.



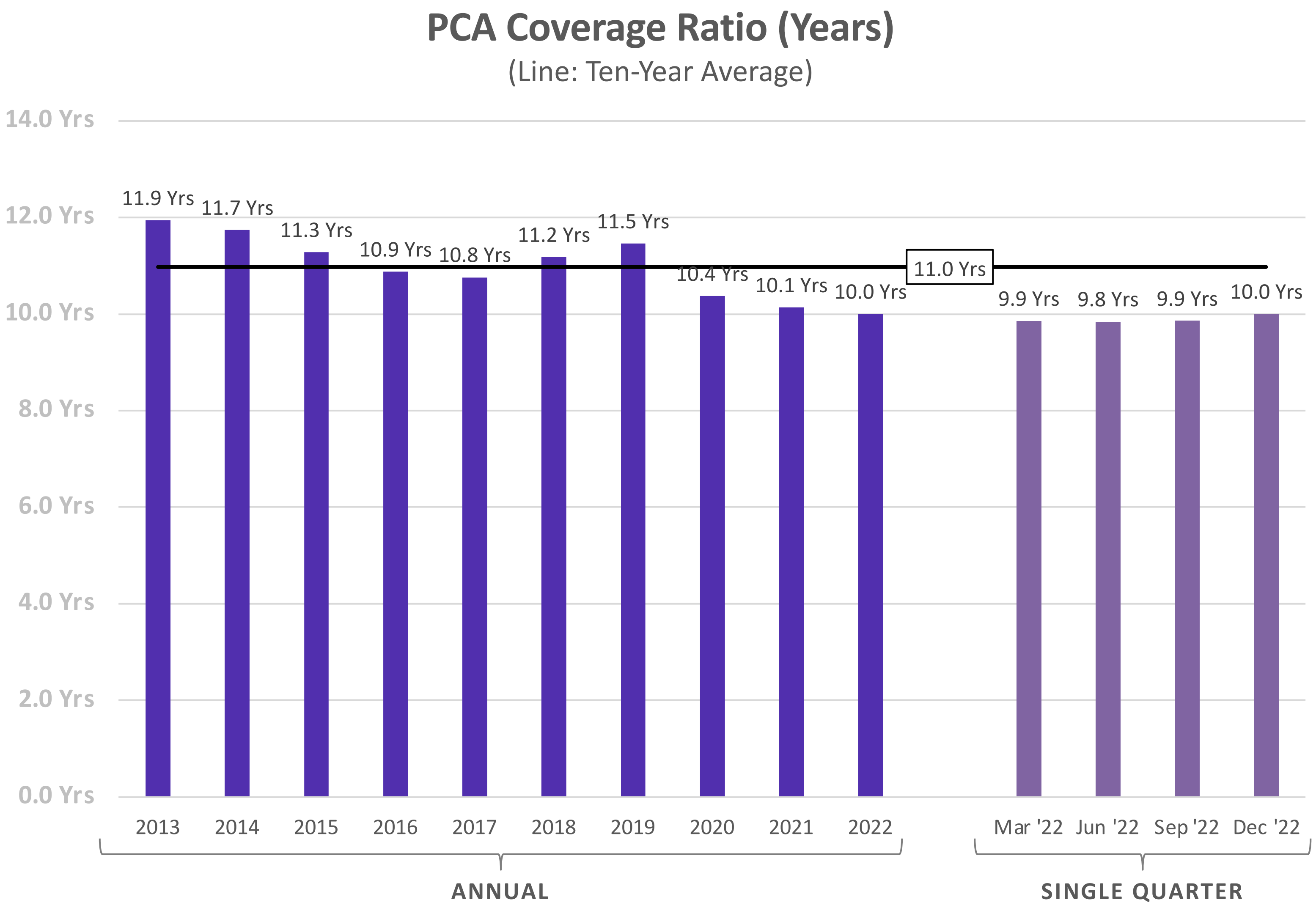
Source: NCUA 5300 FPR

Comments and Observations

Net charge-offs are still below the 10-year average but have increased steadily in each of the prior five quarters, jumping 0.11% to 0.43% this past quarter.

In hard dollars, net charge-offs increased 31% for the quarter that just ended.

Credit unions took loan loss provision expense at an annualized rate of 0.53% of loans in Q4 2022, a *seven-fold increase* versus the same quarter a year ago.



Source: NCUA 5300 FPR

<u>Comments and Observations</u>

The PCA (prompt corrective action) coverage ratio measures the excess reserve buffer in number of years.

Since 2003, average credit union loan losses are 0.62% of loans; equal to $9.3 billion if applied to current loan balance system-wide.

Total reserves in excess of 7% PCA is currently $92.7 billion.

Dividing excess reserves by the historic credit loss rate means that 10 years of <u>*excess*</u> reserves exist to protect against 7% PCA.

THE FINE PRINT

Filene Resources

To dive deeper, check out some of Filene's cutting-edge research on:

RESEARCH BRIEF | NO. 578

Who Moved My Cheddar? The Sudden War for Deposits

A hike in the federal funds rate, along with an increased money supply brought on by the early pandemic years, have led to a tightening of liquidity and a demand for deposits. Credit unions are advised to closely monitor deposit outflows, evaluate borrowing capacity, scan the market for what competitors are doing, and be prepared to modify loan and growth strategies.

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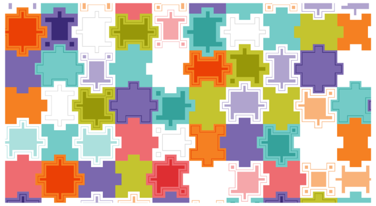

RESEARCH REPORT | NO. 571

The Puzzle-Solving Approach That Enables Small Credit Unions to Thrive

Successful small credit unions offer lessons that credit unions of all sizes can apply. This report reviews trends in performance and the puzzle-solving approach used by leaders of thriving small credit unions. A puzzle-solving mindset helps credit unions generate the right fit between their specific membership and market, identity, stakeholders, strategy, and balance sheet.

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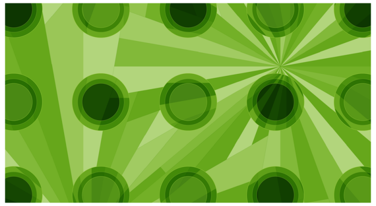

RESEARCH REPORT | NO. 573

Credit Union Innovation: The Member Perspective

As consumer expectations and competitors' ability to meet those expectations continue to rise, credit unions must now be more willing than ever to explore new ideas, such as in product development and digital tools and security. This report provides pathways credit unions are taking to boost innovation efforts in order to compete with fintech disrupters and attract new members.

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Six Areas Vital to Credit Union Performance

1 **Operating Return on Assets** provides a real-time view of performance because it replaces provision expense with net loan charge-offs.

2 **Net Revenue** is where the first sign of trouble shows up but is not reported on traditional financial statements. The largest section of this report resides here.

3 **Economy of Scale** measures productivity while avoiding the pitfalls of traditional measures.

4 **Relationship per Member** evaluates the depth of member relationship in a more robust manner than share of wallet.

5 **Product Mix** is used to assess how effectively member capital is being deployed and the level of institutional knowledge, skill, and ability relative to income generation.

6 **Excess Reserves** measures the buffer present to protect against prompt corrective action.

1. Operating Return on Average Assets

What is Operating ROA?

Operating ROA is interest income, plus non-interest income, less interest expense, less non-interest expense, less *net charge-offs*.

It replaces provision for loan loss expense (PLL) with net charge-offs (NCO) because PLL is unrealized losses—an estimate of future loan losses yet to materialize. NCO, on the other hand, is the exact amount of the loss, when it occurs. It provides a “real-time” view of operating performance.

Why is it important?

Operating ROA is important for three reasons:

1. Profitable organizations do not fail.
2. It determines how fast the credit union can grow because operating profit is either directed to net worth or loan loss reserve, both of which must be maintained relative to the balance they support.
3. It determines how much the credit union can invest in operations to maintain market relevance and capture market share.

Filene Research Institute

2. Net Revenue Growth

What is Net Revenue?

Net revenue is net interest income plus non-interest income. It does not include provision for loan loss expense.

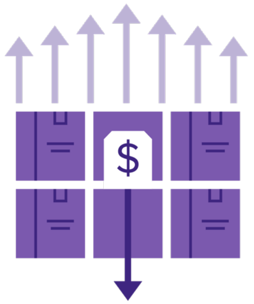
Why is it important?

Net revenue is “top line” sales. It is important because the first sign of trouble shows up here.

Financial services is a fixed cost industry. When revenue wanes, profit immediately falls. The response is often to cut expenses in order to prop up the bottom line in the short-run, but this is not sustainable in the long-run because lack of continuous investment in the cooperative, leads to outdated products, services, and delivery channels, which make it difficult to maintain market relevance.

When all cost cutting avenues have been exhausted, risk-taking ensues—lowering underwriting standards, reaching for return though risker lending concentration, interest rate risk, etc.—the consequences of which do not show up for several quarters.

3. Economy of Scale Ratio



What is Economy of Scale?

Economy of scale is realized when output grows faster than input. The economy of scale ratio compares growth in non-interest expense to growth in loans, relationship shares (draft, regular, money market, and health savings accounts), and non-interest income. A smaller ratio is better.

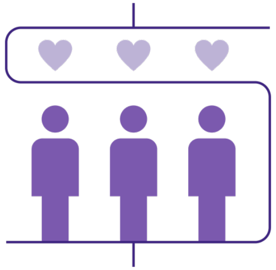
Why is it important?

Economy of scale is important because larger competitors hold a cost advantage that allows them to price more competitively, invest more in the organization for market relevance, pay its staff better for attraction/retention, and accrete capital faster to fuel growth.

It’s also important to understand what economy of scale is not. Economy of scale is not the expense to assets ratio. Why? Because it counts expense but ignores non-interest income generated as a result of that expense.

Economy of scale is not the efficiency ratio. Why? Because interest rates have nothing to do with economy of scale—a widening net interest margin will hide a decline in productivity.

4. Relationship per Member



What is Relationship per Member?

Relationship per member measures how much net revenue contribution members are bringing to the credit union. When trended over time, it is possible to see how depth of member relationship is changing.

Why is it important?

Studies have shown the cost of acquiring a new member is high. Making sure you are getting all you can from existing relationships is a cost-effective way of growing.

Many credit unions look at “share of wallet” as a proxy for depth of member relationship.

It’s a good start but has a few shortcomings, specifically: it fails to recognize that loan balance, transaction share balance, and time deposit balance make vastly different contributions to profitability, and it ignores non-interest income, which has become a significant source of revenue.

Relationship per member values loans and shares relative to their contribution to profitability and includes non-interest income, making it a robust measure of depth of relationship.

5. Product Mix

What is Product Mix?

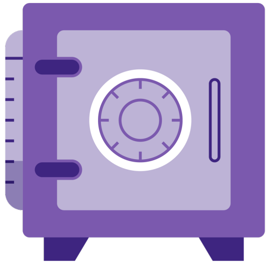
Product mix measures how effectively a credit union is deploying the net worth members have entrusted the leadership team with. It is also a good barometer of overall knowledge, skill, and ability in the credit union as is relates to lending, funding, and non-interest income generation.

Why is it important?

Credit unions with weak product mix will find it difficult to grow because they are not generating enough profit margin to maintain net worth as they scale. Their only path to prosperity is via high net interest margin, extremely efficient operations (low-cost operations), few loan losses, or some combination of the three.

On the other hand, credit unions with strong product mix will find it easier to scale because they produce a strong net interest margin on *smaller* spreads, making them more price competitive. Maintaining net worth is much easier for credit unions with strong product mix.

6. Excess Reserves



What is Excess Reserves?

Your regulator defines the minimum level of reserves that must be maintained. Excess reserves are the buffer to avoid prompt corrective action (PCA).

Why is it Important?

Net worth is profit taken from members and held on the balance sheet. The goal of any cooperative should be to hold enough but avoid keeping too much. How much is enough of a buffer to hold?

One way to look at the necessary buffer is by measuring the years of reserves needed to cover a certain level of net charge-offs. The level of net charge-offs could be a historic loss ratio, or an elevated ratio, to serve as a stress test.

The PCA coverage ratio provides a logical way to establish a buffer, rather than using an arbitrary amount.

Acknowledgments

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