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Bank Watch

ARTICLE

Strategic Benefits of Stress Testing in an Uncertain Economic Environment

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Strategic Benefits of Stress Testing in an Uncertain Economic Environment

Having gone on many a camping trip over the years, the only consistency between these trips into the woods is that there is no consistency. While some trips might have beautiful weather, others might be plagued with storms, cold fronts, heat waves, or strong winds. The campsite may or may not have amenities. And most importantly, contending with the wildlife adds another variable that can't be predicted. However, the key element of how the trip goes is how prepared we are. The trips where we assumed blue skies were by far the most stressful. If we prepared for different outcomes and weather based on the uncertainty of going into the woods, the trip could always be salvaged.

Banks and credit unions are currently facing a similar "into the woods" predicament, as the economic environment seems to grow more volatile and contradictory day by day. While hiring remains strong and unemployment continues to stay near historically low levels with the Bureau of Labor Statistics reporting 3.6% as of June 2022, other indicators are flashing warning signs. Inflation concerns continues to plague the economy after accelerating to **9.1%** in June 2022, the highest increase since November 1981. Drivers of inflation in the past several months include rising food and gas prices as global supply remains disrupted from Russia's invasion of Ukraine and the remnants of the pandemic. Economists are taking notice, with nearly **70%** of economists surveyed by the Financial Times and the Initiative on Global Markets believing that the National Bureau of Economic Research (NBER) will make a call at some point in 2023 identifying a recession.

These conflicting indicators are convoluting the economic forecast through the rest of 2022 and 2023, and the differing potential circumstances would have very different impacts on banks and credit unions. Though this uncertainty can certainly cause headaches and stress for banks and credit unions worried about their capital

positions in a severely adverse economic scenario, stress testing can help to prepare your bank or credit union in the face of uncertainty and help to optimize strategic decisions.

Stress Test Overview

A stress test is defined as a risk management tool that consists of estimating the bank's financial position over a time horizon – approximately two years – under different scenarios (typically a baseline and severely adverse scenario). The OCC's supervisory guidance in October 2012 stated "community banks, regardless of size, should have the capacity to analyze the potential impact of adverse outcomes on their financial conditions."¹ Further, the OCC's guidance considers "some form of stress testing or sensitivity analysis of loan portfolios on at least an annual basis to be a key part of sound risk management for community banks."² A stress test can be defined as "the evaluation of a bank's financial position under a severe but plausible scenario to assist in decision making with the bank."³

There are a few different types of stress tests that banks and credit unions can utilize in estimating their financial position:

Transaction Level Stress Testing: This method is a "bottom up" analysis that looks at key loan relationships individually, assesses the potential impact of adverse economic conditions on those borrowers, and estimates loan losses for each loan.

Portfolio Level Stress Testing: This method involves the determination of the potential financial impact on earnings and capital following the identification of key portfolio concentration issues and assessment of the impact of adverse events or economic conditions on credit quality. This method can be applied either "bottom

¹ OCC 2012-33 "Supervisory Guidance" on Community Bank Stress Testing dated October 18, 2012 and accessed at www.occ.gov/news-issuances/bulletins/2012/bulletin-2012-33.html.

² Ibid. ³ "Stress Testing for Community Banks" presentation by Robert C. Aaron, Arnold & Porter LLP, November 11, 2011.

up,” by assessing the results of individual transaction level stress tests and then aggregating the results, or “top down,” by estimating stress loss rates under different adverse scenarios on pools of loans with common characteristics.

Enterprise-Wide Level Stress Testing: This method attempts to take risk management out of the silo and consider the enterprise-wide impact of a stress scenario by analyzing “multiple types of risk and their interrelated effects on the overall financial impact.”⁴ The risks might include credit risk, counter-party credit risk, interest rate risk, and liquidity risk. In its simplest form, enterprise-wide stress testing can entail aggregating the transaction and/or portfolio level stress testing results to consider related impacts across the firm from the stressed scenario previously considered.

By utilizing one or more of these stress testing exercises, banks and credit unions can better position themselves for multiple different economic scenarios in order to assure they have sufficient capital and financial strength to withstand an economic downturn if there is one.

Economic Scenarios Overview

One question that often arises is: Given the uncertainty, what economic scenarios should we consider in our stress testing? While it is difficult to answer this question, the most recent Stress Test scenarios prepared by the Federal Reserve are described in a February 2022 report, 2022 Supervisory Scenarios for Annual Stress Tests Required under the Dodd-Frank Act Stress Testing Rules and the Capital Plan Rule, and provide some guidance to assist with this decision. The scenarios start in the first quarter of 2022 and extend through the first quarter of 2025. Each scenario includes 28 variables, nineteen of which are related to domestic variables in the U.S.

While the more global economic conditions detailed in the Fed’s supervisory scenarios may not be applicable to community banks or credit unions, certain

domestic variables within the scenarios could be useful when determining the economic scenarios to consider. The domestic variables include six measures of real economic activity and inflation, six measures of interest rates, and four measures of asset prices. The baseline scenario includes an economic expansion over the 13-quarter scenario period, while the severely adverse scenario is a hypothetical scenario that includes a severe global recession, accompanied by heightened stress in commercial real estate and corporate debt markets. Below, we have included charts of some of the more relevant domestic variables (GDP, unemployment rates, the Prime Rate, and commercial/residential real estate prices) and their historical levels through year-end 2021 as well as the Fed’s assumptions for those variables in the baseline and severely adverse scenarios.

WHAT WE’RE READING

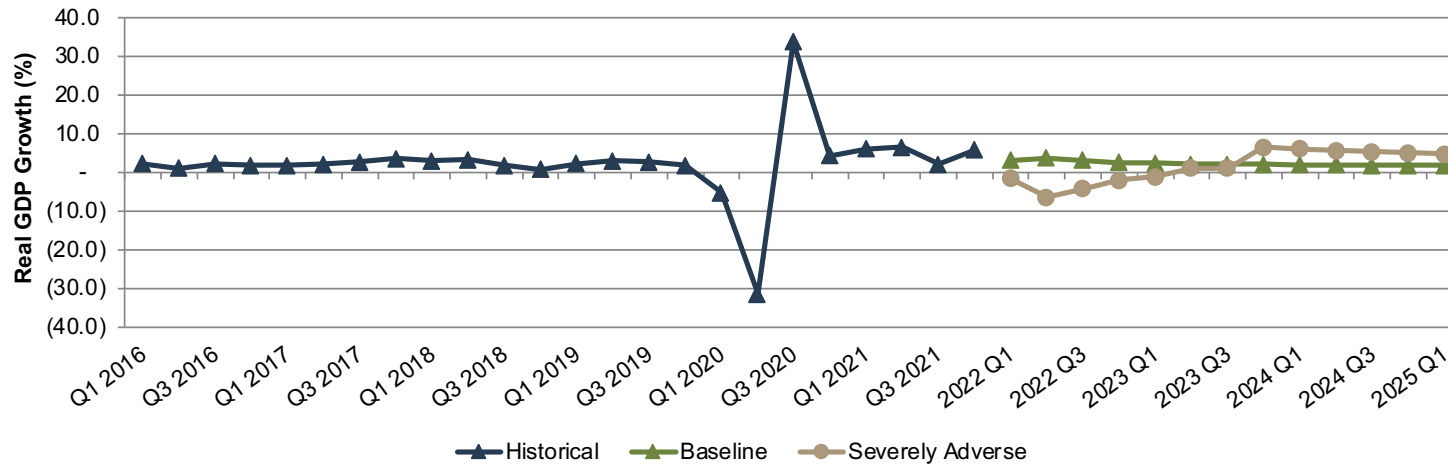
The Federal Reserve **increased** its benchmark interest rate by **75 basis points** to a range of 2.25% to 2.50%, marking the fourth consecutive policy meeting resulting in a rate increase.

A recent **survey** showed that community bank leaders increasingly expect a recession in 2022 or 2023, with most respondents casting blame on the Fed.

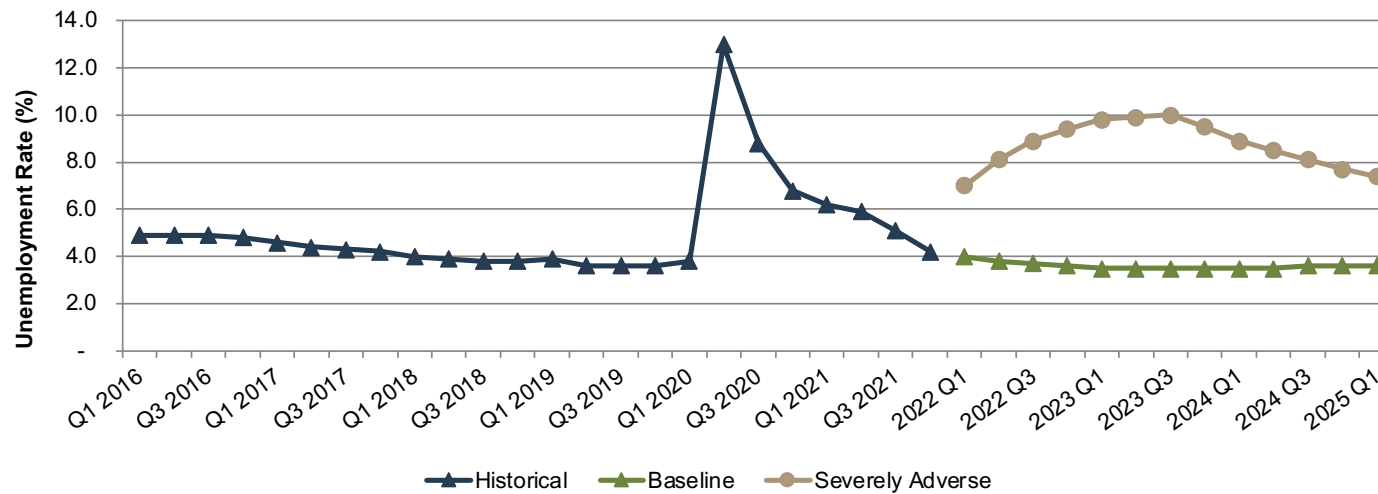
S&P’s U.S. purchasing managers **index** indicated a **steep drop** in business activity in July marking the first contraction in activity since June 2020.

⁴ OCC 2012-33 “Supervisory Guidance” on Community Bank Stress Testing dated October 18, 2012 and accessed at www.occ.gov/news-issuances/bulletins/2012/bulletin-2012-33.html.

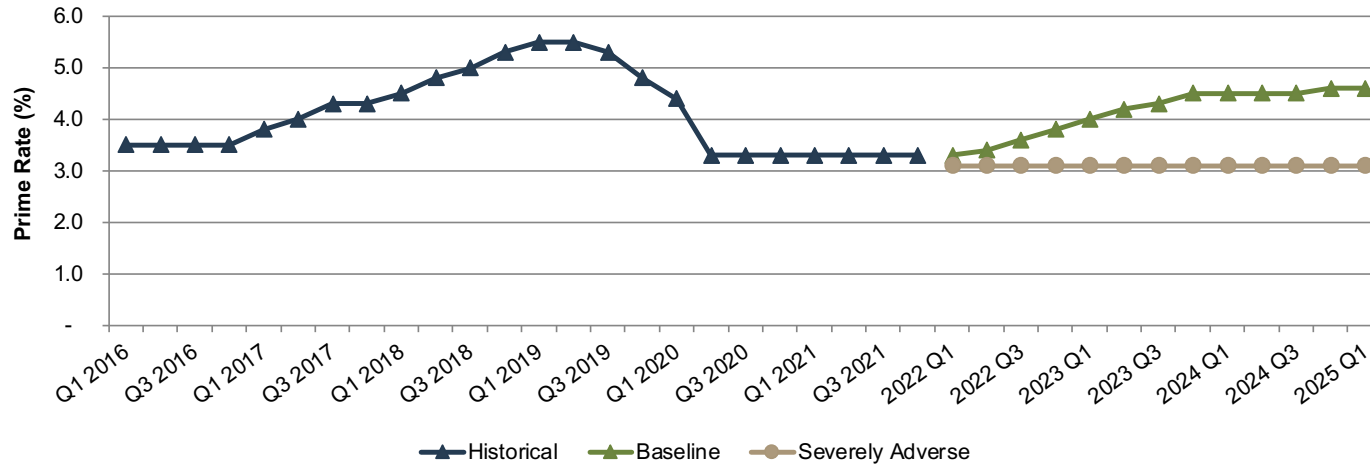
2022 Supervisory Economic Scenarios Overview



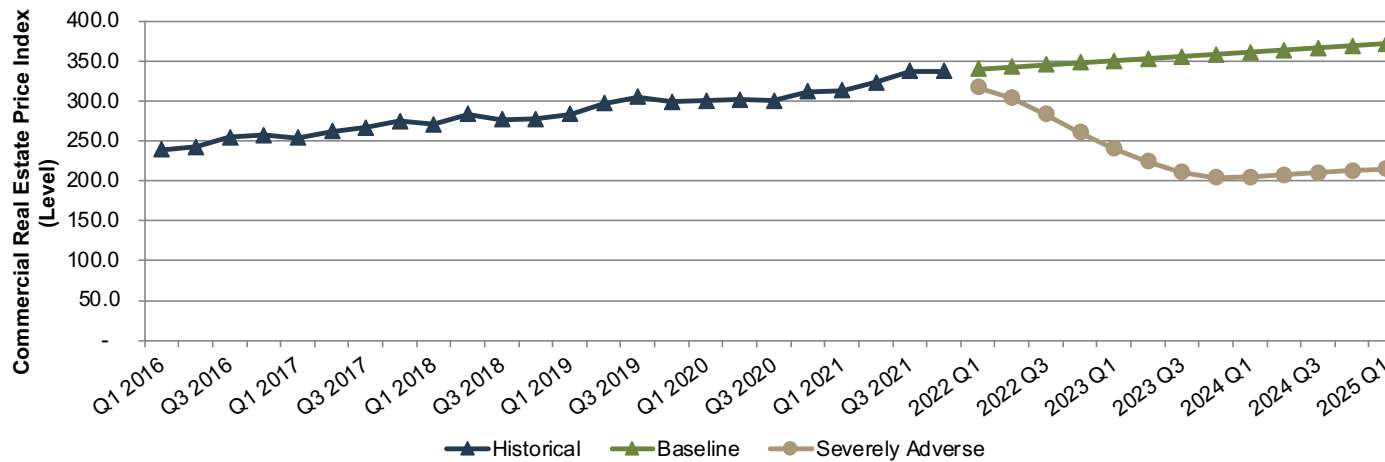
2022 Supervisory Economic Scenarios Overview



2022 Supervisory Economic Scenarios Overview



2022 Supervisory Economic Scenarios Overview



Benefits of the Stress Test

As the U.S. moves into a more uncertain economic environment, a financial institution's preparation for its trip "into the woods" of this uncertain economic environment can reap dividends. Improved valuation, performance enhancement from enhanced strategic decisions, and risk management are some of these benefits. Greater clarity into the bank or credit union's capital position, credit risk, and earnings outlook under different economic circumstances helps management to make more informed operational decisions.

Conclusion

We acknowledge that bank and credit union stress testing can be a complex exercise. The bank or credit union must administer the test, determine and analyze the outputs of its performance, and provide support for key assumptions/results. There is also a variety of potential stress testing methods and economic scenarios to consider when setting up their test. In addition, the qualitative, written support for the test and its results is often as important as the results themselves. For all of these reasons, it is important that bank and credit union management begin building their stress testing expertise sooner rather than later.

In order to assist financial institutions with this complex and often time-consuming exercise, we offer several solutions, including preparing custom stress tests for your institution or reviewing ones prepared by the institution internally, to make the process as efficient and valuable as possible.

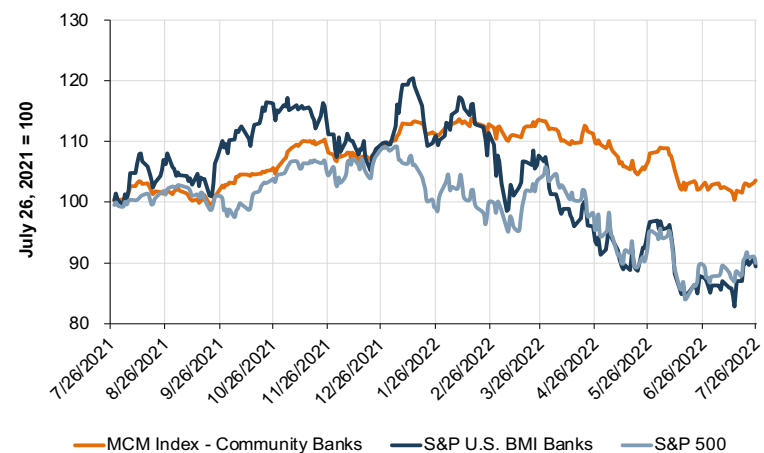
To discuss your stress testing needs in confidence, please do not hesitate to contact us. For more information about stress testing, [click here](#).



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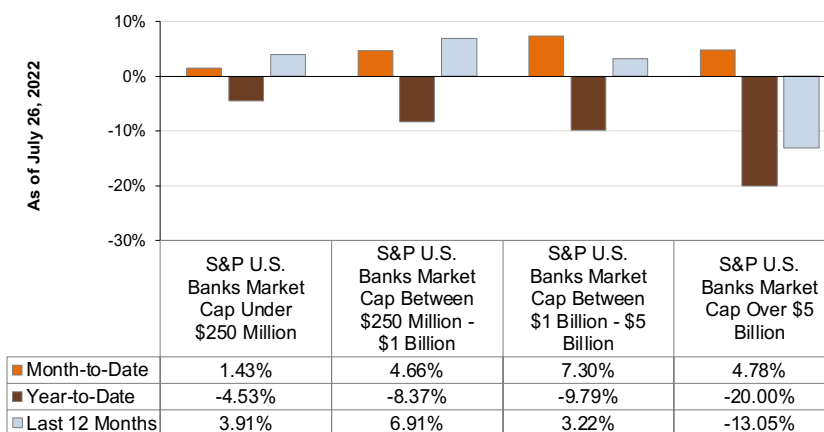
Mercer Capital's Bank Group Index Overview



Source: S&P Capital IQ Pro.

Return Stratification of U.S. Banks

by Market Cap



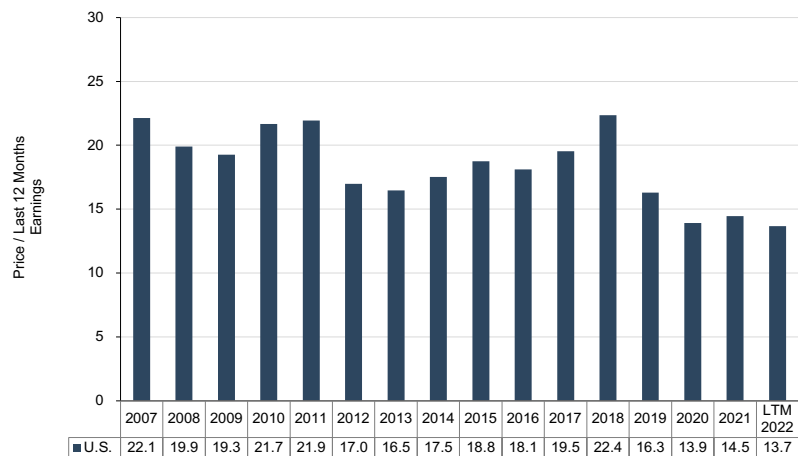
Source: S&P Capital IQ Pro.

	Total Return			Regional Index Data as of July 26, 2022					
	Month-to-Date	Year-to-Date	Last 12 Months	Price/LTM EPS	Price / 2022 (E) EPS	Price / 2023 (E) EPS	Price / Book Value	Price / Tangible Book Value	Dividend Yield
Atlantic Coast Index	1.4%	-10.0%	-5.9%	9.4x	9.5x	8.9x	115%	125%	2.7%
Midwest Index	-0.7%	-4.4%	5.8%	9.2x	9.3x	9.0x	106%	123%	2.9%
Northeast Index	2.0%	-2.3%	7.7%	8.9x	9.2x	8.7x	116%	119%	3.0%
Southeast Index	0.6%	4.2%	7.7%	11.4x	9.4x	8.6x	119%	133%	2.4%
West Index	1.2%	-11.3%	3.4%	10.0x	8.8x	7.4x	108%	116%	3.0%
Community Bank Index	1.0%	-5.8%	3.6%	9.4x	9.3x	8.6x	113%	123%	2.9%
S&P U.S. BMI Banks	5.1%	-18.4%	-10.6%	na	na	na	na	na	na

Source: S&P Capital IQ Pro.

Median Price/Earnings Multiples

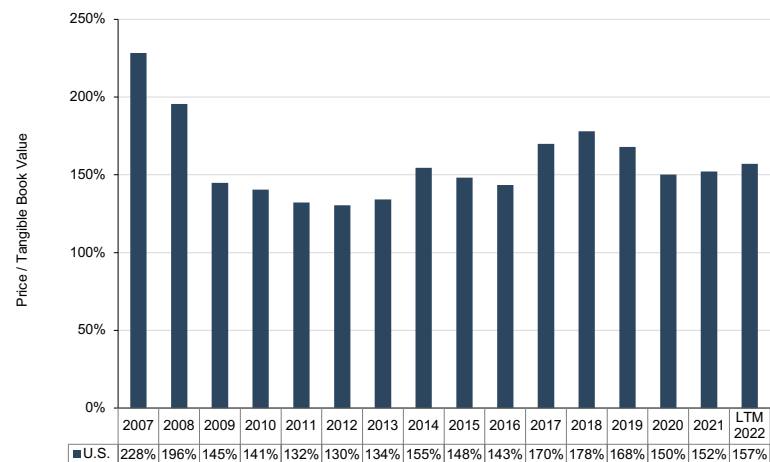
Target Banks' Assets <\$5B and LTM ROE >5%



Source: S&P Capital IQ Pro.

Median Price/Tangible Book Value Multiples

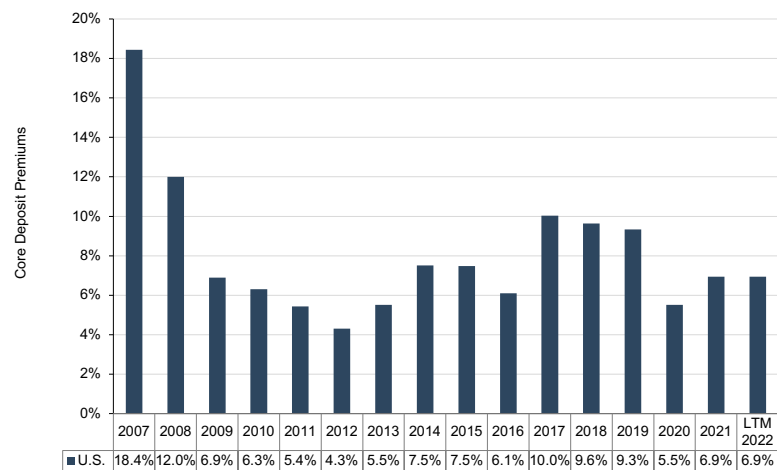
Target Banks' Assets <\$5B and LTM ROE >5%



Source: S&P Capital IQ Pro.

Median Core Deposit Premiums

Target Banks' Assets <\$5B and LTM ROE >5%



Source: S&P Capital IQ Pro.

Median Valuation Multiples for M&A Deals

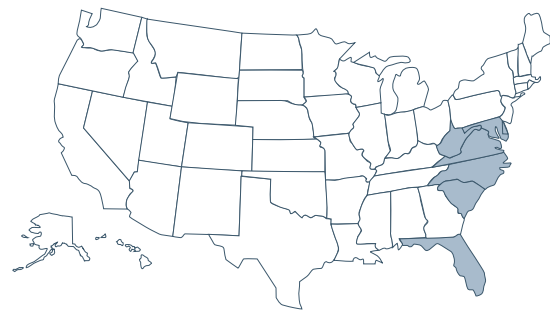
Target Banks' Assets <\$5B and LTM ROE >5%, 12 months ended July 26, 2022

Regions	Price / LTM Earnings	Price/ Tang. BV	Price / Core Dep Premium	No. of Deals	Median Deal Value (\$M)	Target's Median Assets (\$000)	Target's Median LTM ROAE
Atlantic Coast	12.2x	187%	7.0%	11	143.0	689,345	13.2%
Midwest	14.5x	153%	7.8%	53	97.2	218,209	9.8%
Northeast	14.1x	118%	3.2%	5	60.7	442,468	7.8%
Southeast	13.0x	161%	6.4%	24	67.6	355,747	15.5%
West	13.0x	161%	7.5%	18	81.8	540,658	13.4%
National Community Banks	13.7x	157%	6.9%	111	88.6	333,779	11.2%

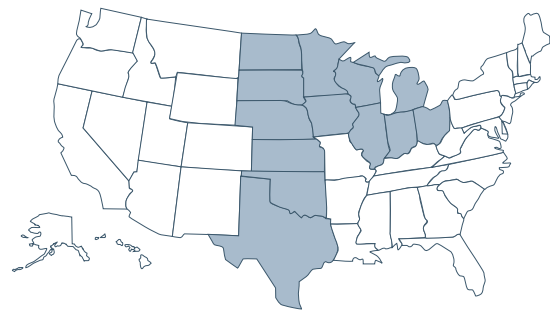
Source: S&P Capital IQ Pro.

Mercer Capital's Regional Public Bank Peer Reports

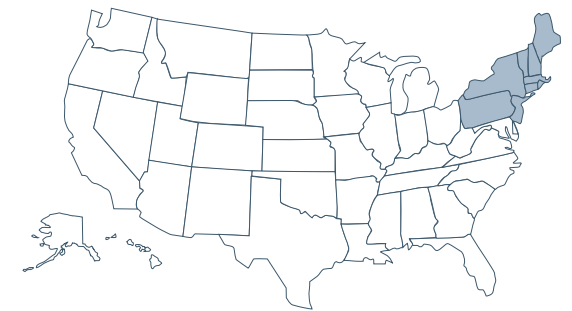
Updated weekly, Mercer Capital's Regional Public Bank Peer Reports offer a closer look at the market pricing and performance of publicly traded banks in the states of five U.S. regions. Click on the map to view the reports from the representative region.



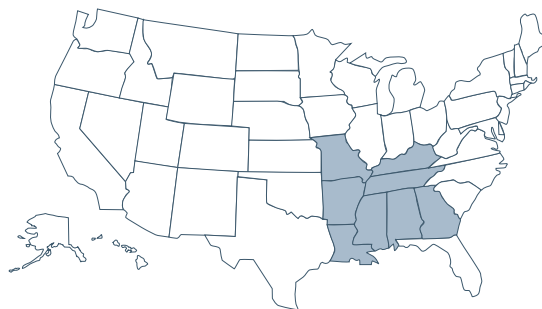
Atlantic Coast



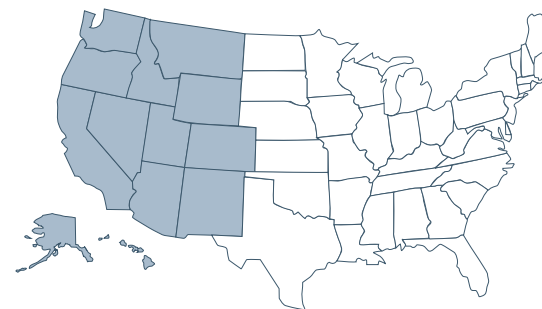
Midwest



Northeast



Southeast



West

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Mercer Capital assists banks, thrifts, and credit unions with significant corporate valuation requirements, transaction advisory services, and other strategic decisions.

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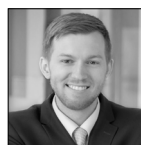
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