

JUNE 2023

Bank Watch

ARTICLES

**Key Considerations in the Valuation of Banks
and Bank Holding Companies | WHITEPAPER**

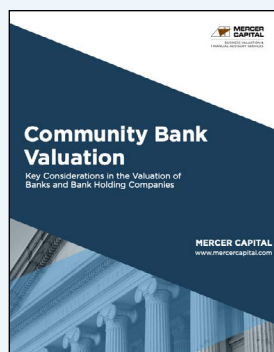
Net Interest Margin Trends for Banks Versus Credit Unions

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Key Considerations in the Valuation of Banks and Bank Holding Companies

Excerpt from The Community Bank Valuation Whitepaper



This whitepaper focuses on the two issues most central to our work with depository institutions at Mercer Capital:

- What drives value for a depository institution?
- How are these drivers distilled into a value for a given depository institution?

In this whitepaper, we dive into the more technical valuation issues, but at its core, value is a function of the following:

- A specified financial metric or metrics
- Growth
- Risk

The whitepaper begins with a framework for bank valuation and then delves into bank financial analysis, including understanding the balance sheet and income statement, return decomposition, and income statement metrics. Analysis of the parent company is also covered. We then discuss different valuation methodologies and distinguish between those applicable to minority and controlling interests.

The following is an excerpt from the whitepaper discussing the basic framework for bank valuation. To download the whitepaper, [**CLICK HERE.**](#)

Financial Metrics

Many industries have a valuation benchmark used by industry participants, although this metric does not necessarily cohere with benchmarks used by investors. In the banking industry, “book value” fills this role. In fact, there are several potential measures of book value, including:

- » Stated shareholders' equity, as indicated in the institution's financial statements
- » Tangible book value, which deducts purchase accounting intangible assets from stated shareholders' equity
- » Tier 1 common equity, which is a regulatory capital measure that is less commonly used as a valuation metric

The most commonly used book value metric is tangible book value (or TBV). Like most industry benchmarks, simplicity and commonality are reasons industry participants embrace TBV as a valuation metric. Strengths of TBV as a valuation metric include:

- » It is reported frequently and comparable from institution to institution.
- » TBV is subject to less pronounced volatility than net income; thus, valuation multiples computed using TBV may be less prone to exaggeration when, for example, earnings are temporarily depressed.
- » TBV can be used to capture the mean reversion tendencies of return on equity (ROE). For example, consider an institution with an ROE exceeding its peer group. Over time, as competitors understand and replicate its business model, these excess returns may diminish. An analyst could use

TBV multiples to model potential mean reversion in ROE, which is more difficult to capture using a current period price/earnings multiple.

While TBV has its place, investors focus primarily on an institution's earnings and the growth therein. This earnings orientation occurs because investors are forward-looking, and TBV inherently is a backward-looking measure representing the sum of an institution's common stock issuances, net income, dividends, and share redemptions since its inception. In addition to being forward-looking, investors also appreciate that earnings ultimately are the source of returns to shareholders. With earnings, the institution can do any of (or a combination of) the following:¹

- » Reinvest (i.e., retain earnings), with the goal of generating higher future earnings
- » Pay dividends to shareholders
- » Repurchase stock, which supports the per share value by reducing the outstanding shares
- » Acquire other companies. Because goodwill and intangible assets are deducted when computing regulatory capital, earnings offset the TBV dilution created in these transactions

More bluntly, investors like growing earnings and cash returns (dividends or share repurchases), which are difficult to provide without a sustainable base of strong earnings. Investors will tolerate some near-term drag on earnings from expansion or risk mitigation strategies, but their patience is not limitless.

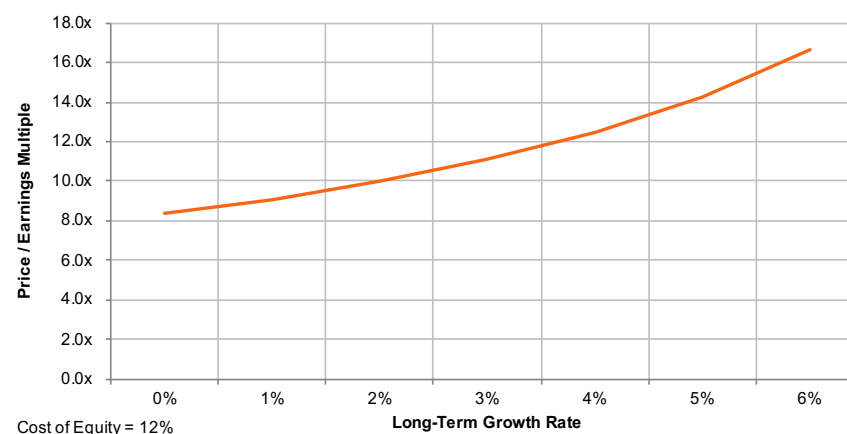
In many industries, earnings before interest, taxes, depreciation, and amortization (EBITDA) or a similar metric is the preferred earnings measure. However, banks derive most of their revenues from interest spreads, and EBITDA is an inappropriate metric. Instead, bank investors focus on net income and earnings per share. When credit quality is distressed, investors may consider earnings metrics calculated before the loan loss provision, such as pre-tax, pre-provision operating income (PPOI).

While earnings-based analyses generally should have valuation primacy in our opinion, TBV multiples nevertheless serves as an important test of reasonableness for a valuation analysis. It would be foolhardy to develop a valuation for a depository institution without calculating the TBV multiple implied by the concluded value. Analysts should be able to reconcile implied TBV multiples to public market or M&A market benchmarks and explain any significant discrepancies.

Occasionally, analysts cite balance sheet-based metrics beyond TBV, some of which have more analytical relevance than others. The most useful is a multiple of “core” deposits, a definition of deposits that excludes larger deposits and deposits obtained from wholesale funding markets. Core deposits are time consuming and costly to gather; thus, a multiple of core deposits aligns a bank's value with its most attractive funding source. A less useful multiple is value as a percentage of total assets, the use of which would implicitly encourage management to stockpile assets without regard to their incremental profitability.

Growth

Figure 1: Price/Earnings Multiples at Various Growth Rates



Investors like growth and accelerating growth even more. Without demonstrating the mathematics, higher expected growth rates produce higher valuation multiples. Further, price/earnings multiples expand at an increasing rate as growth rates increase, as indicated in Figure 1 (on the previous page). The opposite is true, too, as slowing growth reduces the price/earnings.

Banks report innumerable metrics to directors and investors, but what are the most relevant growth indicia to investors? Usually, investors focus on growth in the following:

- » Balance sheet components like loans and deposits, which ultimately drive revenue growth
- » Asset quality and capital adequacy
- » Pre-tax, pre-provision operating income, which smooths earnings fluctuations caused by periodic volatility in provisions for loan losses
- » Net income per share
- » Dividends per share
- » Tangible book value per share

Valuation is inherently forward-looking, and historical growth rates are useful mostly as potential predictors of future growth. Further, most investors understand that there is some tradeoff between earnings today and investing for higher earnings in the future. While some near-term pressure on earnings from an expansion strategy is acceptable, strategic investments should not continually be used to explain below average profitability. After all, a bank's competitors likely are reinvesting as well for the future.

How does growth affect value? As a thought experiment, consider a bank with no expected growth in earnings and a 100% dividend payout ratio. Should this bank's common equity value increase? In this admittedly extreme scenario, the answer

is no. This bank's common equity resembles a preferred stock investment, with a shareholder's return generated by dividends. That is, for value to grow, one (or preferably more) of the preceding factors must increase.

Should a bank prioritize growth in earnings per share, dividends per share, or another metric? The answer likely depends on the bank's shareholder base. In public markets, investors tend to be more focused on earnings per share growth. If an investor desires income, he or she can sell shares in the public market. For privately-held banks, though, investors often are keenly aware of dividend payments and emphasize the income potential of the investment. Of course, sustaining higher dividend payments requires earnings growth.

Growth creates a virtuous cycle – retained earnings lead to higher future net income, allowing for future higher dividends or additional reinvestment, and so the cycle continues. One important caveat exists, though. *This virtuous cycle presumes that the retained earnings from a given year are invested in new opportunities yielding the same return on equity as the existing operations.* If reinvestment occurs in lower ROE opportunities – such as liquid assets supported by excess capital beyond the level needed to operate the bank safely – then growth in value may be diminished.

This discussion of growth segues into the third key valuation factor, risk.

Risk

More than most industries, risk management is an overarching responsibility of management and the board of directors and a crucial element to long-term shareholder returns. Banks encounter the following forms of risk:

- » Credit risk, or the risk that the bank's investments in loans and other assets may not be repaid in full or on a timely basis
- » Liquidity risk, or the risk that arises from transforming liabilities that are due on demand (deposits) into illiquid assets (loans)

- » Interest rate risk, or the risk attributable to assets and liabilities with mismatched pricing structures or durations
- » Operational risk, such as from malevolent actors like computer hackers

While growth rates are observable from reported financial metrics, the risk assumed to achieve that growth often is more difficult to discern – at least in the near-term. Risk can accumulate, layer upon layer, for years until a triggering event happens, such as an economic downturn. Risk also is asymmetric in the sense that a strategy creating incremental risk, such as a new lending product, can be implemented quickly, but exiting the problems resulting from that strategy may take years.

From a valuation standpoint, investors seek the highest return for the least risk. Given two banks with identical growth prospects, investors would assign a higher price/earnings multiple to the bank with the lower risk profile. Indicia of risk include:

- » The launch of new products or business lines
- » Expansion into new geographic markets
- » Higher than average loan yields coupled with lower than average loan losses

None of the preceding factors necessarily imply higher risk vis-à-vis other banks; the key is risk management, not risk avoidance. However, if an investor believes risk is rising for any reason, then that expectation can manifest in our three pronged valuation framework as follows:

1. **Financial Metric.** The investor may view a bank's current earnings as unsustainable once the risk associated with a business strategy becomes evident, leading to reduced expectations of future profitability.
2. **Growth.** An investor may assess that a bank's growth rates are exaggerated by accepting too much risk in pursuing growth. In this event, earnings growth expectations would be tempered as the bank realigns its growth, risk, and return objectives.

3. **Risk.** Valuation multiples are inversely related to risk. By increasing the investor's required return, the investor increases his or her margin of safety in the event of unfavorable financial developments.

An old adage is that risk can be quantified and uncertainty cannot. This observation explains why stock prices and pricing multiples can be particularly volatile for banks in periods of economic uncertainty or distress. If investors cannot quantify a bank's downside exposure, which often is more attributable to general economic anxieties than the quality of the bank's financial disclosures, then they tend to react by taking a pessimistic stance. As a result, risk premiums can widen dramatically, leading to lower multiples.

Conclusion

This article provides an overview of the three key factors underlying bank stock valuations – financial performance, risk, and growth. While these three factors are universal to valuations, we caution that the examples, guidance, and observations in this article may not apply to every depository institution.

At Mercer Capital, valuations of clients' securities are more than a mere quantitative exercise. Integrating a bank's growth prospects and risk characteristics into a valuation analysis requires understanding the bank's history, business plans, market opportunities, response to emerging technological issues, staff experience, and the like. These important influences on a valuation analysis cannot be gleaned solely from reviewing a bank's Call Report. The whitepaper describes both the quantitative and qualitative considerations we use to arrive at sound, well-reasoned, and well-supported valuations. Download your copy [HERE](#).

WHITEPAPER

Community Bank Valuation

Key Considerations in the Valuation of Banks and Bank Holding Companies

DOWNLOAD WHITEPAPER

CH.1 - A Framework for Bank Valuation

CH.2 - Bank Financial Analysis

CH. 3 - Parent Company Financial Analysis

CH.4 - Minority Interest Valuations

CH.5 - Controlling Interest Valuations



Community Bank Valuation

Key Considerations in the Valuation of Banks and Bank Holding Companies

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Net Interest Margin Trends for Banks Versus Credit Unions

Change in Median Measures from 1Q2022 - 1Q2023

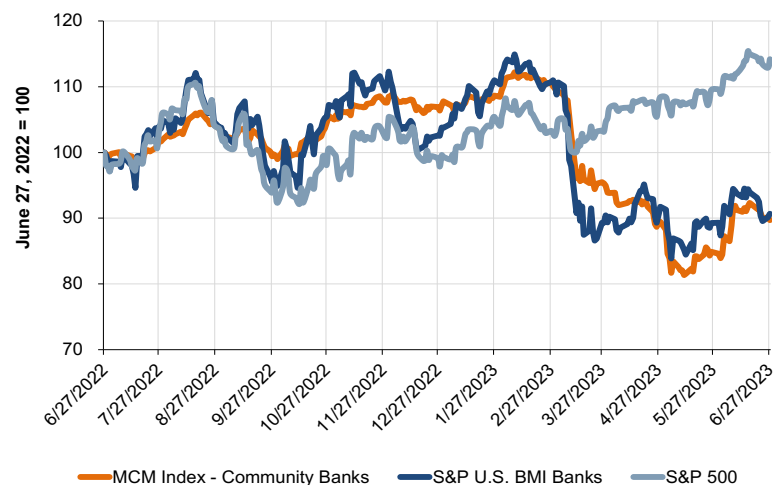
Asset Size Range	Δ Net Interest Margin			Δ Yield on Earning Assets			Δ Cost of Earning Assets			Δ Yield on Loans			Δ Cost of Interest Bearing Liabilities		
	Bank	Credit Union	Bank - Credit Union	Bank	Credit Union	Bank - Credit Union	Bank	Credit Union	Bank - Credit Union	Bank	Credit Union	Bank - Credit Union	Bank	Credit Union	Bank - Credit Union
\$500 Million - \$1 Billion	35 bps	32 bps	3 bps	110 bps	93 bps	17 bps	75 bps	57 bps	17 bps	70 bps	49 bps	21 bps	107 bps	57 bps	50 bps
\$1 Billion - \$3 Billion	27	25	2	123	96	27	96	76	20	85	62	23	137	77	60
\$3 - \$10 Billion	35	18	17	146	117	29	108	91	17	121	73	48	157	91	67
\$10 Billion +	58	10	48	180	95	84	130	93	37	176	88	88	180	93	87
All	31 bps	25 bps	6 bps	127 bps	99 bps	27 bps	91 bps	70 bps	21 bps	87 bps	61 bps	27 bps	132 bps	72 bps	60 bps

- The change in the median NIM from 1Q22-1Q23 is greater for banks versus credit unions (31 basis point expansion vs. 25 basis point expansion).
- Yields on earning assets expanded to a greater degree for banks versus credit unions from 1Q22-1Q23, which likely reflects a greater proportion of fixed rate loans for credit unions versus banks.
- The median yield on loans increased 87 bps for banks from 1Q22-1Q23 in comparison to 61 bps for credit unions.
- Credit unions appear to be less sensitive (at least so far) to funding cost pressure.
- The median cost of earning assets for banks increased by 91 bps from 1Q22-1Q23 in comparison to 70 bps for credit unions.
- The 1Q22-1Q23 change in the NIM components varies by asset size (that is larger banks/CUs generally have experienced larger upward adjustments to both asset yields and the cost of funds, relative to smaller banks/CUs).
- Over the course of 2022, the median NIM for banks expanded from 3.06% in 1Q22 to 3.59% in 4Q22, while the median NIM for credit unions expanded from 3.04% to 3.40%.
- The NIM advantage reported by banks began to dissipate in 1Q23 as banks faced more cost of funds pressure than CUs.
- Bank NIMs widened by 17 bps more than CU NIMs between 1Q22 and 4Q22. However, funding cost pressures in 1Q23 caused bank NIMs to tighten by 22 bps in 1Q23, while CU NIMs compressed by only 11 bps.

The change in NIMs between 1Q22 and 1Q23 can be decomposed as follows:

	Cumulative				Median Net Interest Margin		
	1Q22 - 4Q22	1Q23	1Q22 - 1Q23		1Q22	4Q22	1Q23
Change in Bank NIMs	53 bps	-22 bps	31 bps	Banks	3.06%	3.59%	3.37%
Change in CU NIMs	36 bps	-11 bps	25 bps	CUs	3.04%	3.40%	3.29%
Difference	17 bps	-11 bps	6 bps	Difference	0.02%	0.19%	0.08%

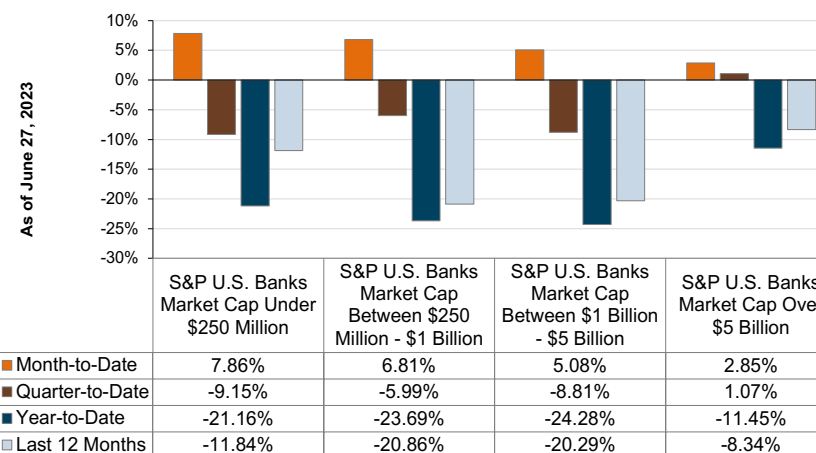
Mercer Capital's Bank Group Index Overview



Source: S&P Capital IQ Pro.

Return Stratification of U.S. Banks

by Market Cap



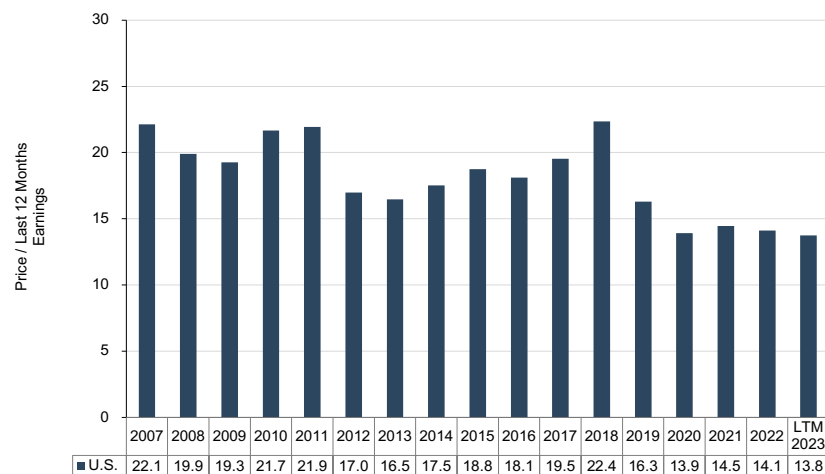
Source: S&P Capital IQ Pro.

	Total Return				Regional Index Data as of June 27, 2023					
	Month-to-Date	Quarter-to-Date	Year-to-Date	Last 12 Months	Price / LTM EPS	Price / 2023 (E) EPS	Price / 2024 (E) EPS	Price / Book Value	Price / Tangible Book Value	Dividend Yield
Atlantic Coast Index	8.2%	-5.0%	-20.4%	-13.0%	7.2x	9.8x	8.8x	94%	103%	3.5%
Midwest Index	5.2%	-7.0%	-15.6%	-10.1%	7.8x	7.5x	7.8x	90%	113%	3.9%
Northeast Index	7.8%	-1.6%	-13.5%	-6.4%	7.6x	8.2x	8.0x	100%	103%	3.6%
Southeast Index	3.9%	-8.8%	-23.1%	-26.0%	7.2x	7.8x	7.5x	84%	95%	3.5%
West Index	6.0%	-5.4%	-17.7%	-8.9%	7.6x	8.3x	7.2x	95%	97%	3.4%
Community Bank Index	6.9%	-4.4%	-16.8%	-10.3%	7.6x	8.0x	7.8x	94%	99%	3.6%
S&P U.S. BMI Banks	3.8%	0.5%	-12.6%	-9.3%	na	na	na	na	na	na

Source: S&P Capital IQ Pro.

Median Price/Earnings Multiples

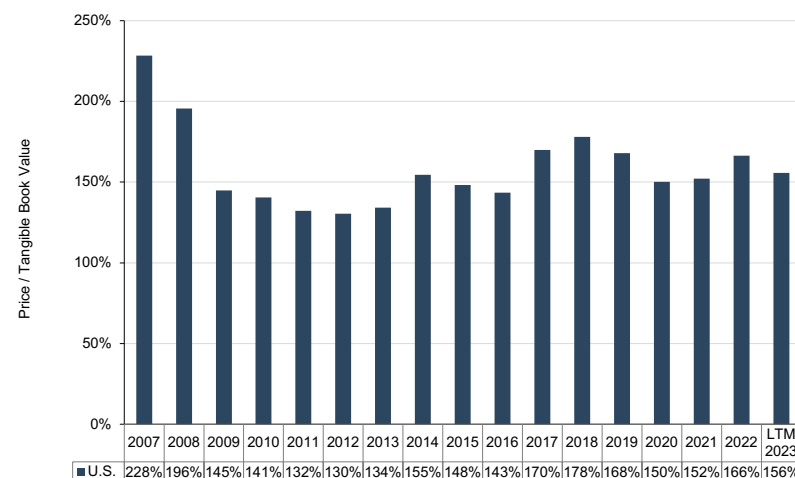
Target Banks' Assets <\$5B and LTM ROE >5%



Source: S&P Capital IQ Pro.

Median Price/Tangible Book Value Multiples

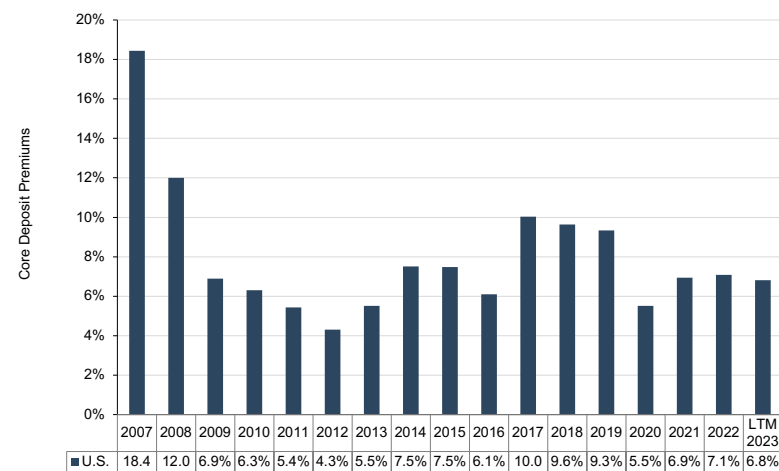
Target Banks' Assets <\$5B and LTM ROE >5%



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

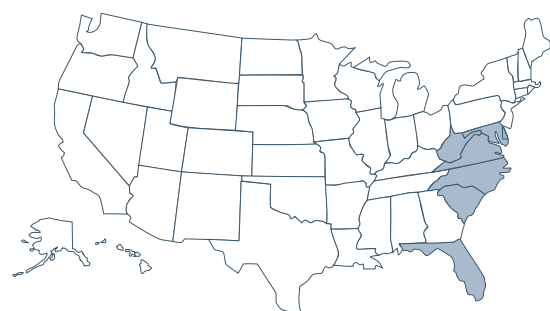
Target Banks' Assets <\$5B and LTM ROE >5%, 12 months ended June 28, 2023

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	11.7x	143%	3.2%	8	87.2	601,146	10.5%
Midwest	14.1x	154%	6.9%	12	78.6	687,301	11.6%
Northeast	12.8x	128%	4.1%	6	59.0	588,346	10.6%
Southeast	13.8x	180%	7.6%	7	67.6	659,711	9.9%
West	11.7x	143%	10.4%	2	48.6	267,576	11.0%
National Community Banks	13.8x	156%	6.8%	35	66.9	608,600	11.6%

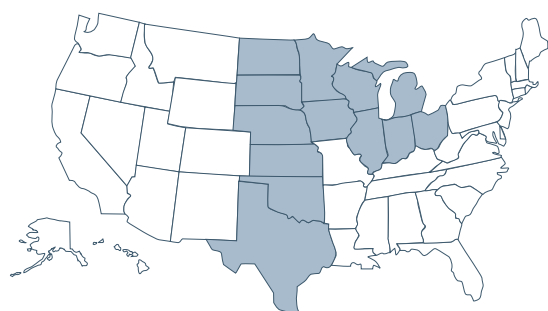
Source: S&P Capital IQ Pro.

Mercer Capital's Regional Public Bank Peer Reports

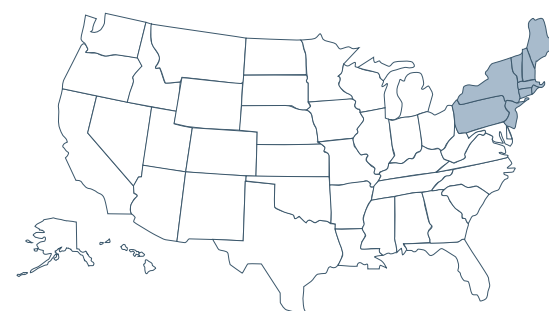
Updated weekly, Mercer Capital's Regional Public Bank Peer Reports offer a closer look at the market pricing and performance of publicly traded banks in the states of five U.S. regions. Click on the map to view the reports from the representative region.



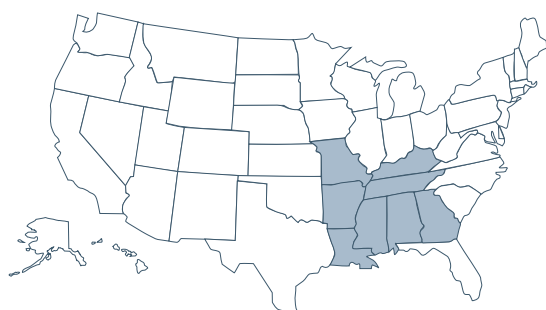
Atlantic Coast



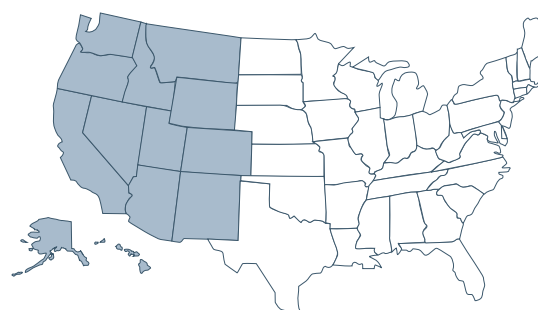
Midwest



Northeast



Southeast



West

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Depository Institutions Services

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

Mercer Capital pairs analytical rigor with industry knowledge to deliver unique insight into issues facing banks. These insights underpin the valuation analyses that are at the heart of Mercer Capital's services to depository institutions.

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- » Goodwill impairment
- » Litigation support
- » Stress Testing
- » Loan portfolio valuation
- » Tax compliance
- » Transaction advisory
- » Strategic planning

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