

Community Bank Market Value – How is it Determined, and How is it Changing?

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COMMUNITY BANK MARKET VALUE: HOW IS IT DETERMINED AND HOW IS IT CHANGING?

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I | MACROECONOMIC ENVIRONMENT: EVERYTHING IS CHANGING



THE PARTY'S OVER AND NOW WE ARE LEFT WITH THE TAB

- During the COVID lockdowns of 2020, the Federal Government spent an **unprecedented \$3.5 trillion**.
- After the economy started to recover in 2021, the Biden Administration passed a series of spending measures providing **\$3.2 trillion of additional fiscal spending** on top of regular budgeted expenditures.
- This **\$6.7 trillion** of Fiscal stimulus has been the **largest fiscal spending in U.S. history** and has been appropriated from March 2020 to today.

CARES Act March 2020	\$2.2 Trillion
Consolidated Appropriations Act December 2020	\$900 Billion
Other Related 2020 Spending	\$400 Billion
American Rescue Plan Act March 2021	\$1.9 Trillion
Infrastructure Investment and Jobs Act November 2021	\$500 Billion
The CHIPS and Science Act August 2022	\$280 Billion
Inflation Reduction Act August 2022	\$437 Billion
Total as of November 2022	\$6.7 Trillion

TIME TO PAY THE PARTY'S TAB

Stages of Inflation:

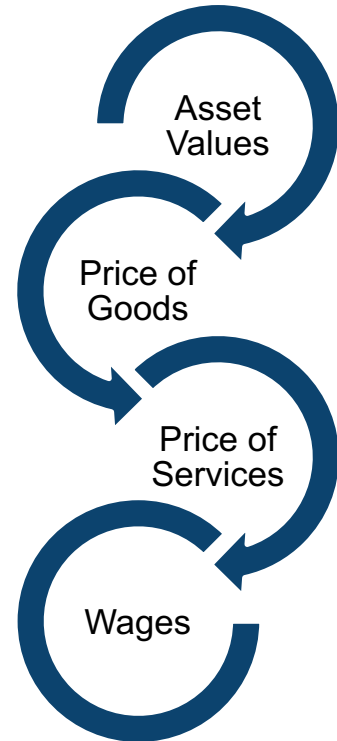
1. Asset Values

2. Price of Goods

3. Price of Services

4. Wages

The Order in Which Inflation Flows Through an Economy:



TO COMBAT INFLATION, THE FED HAS BEGUN HIKING RATES AGGRESSIVELY

■ The Fed has embarked in the most aggressive rate hiking period since the early 1980s.

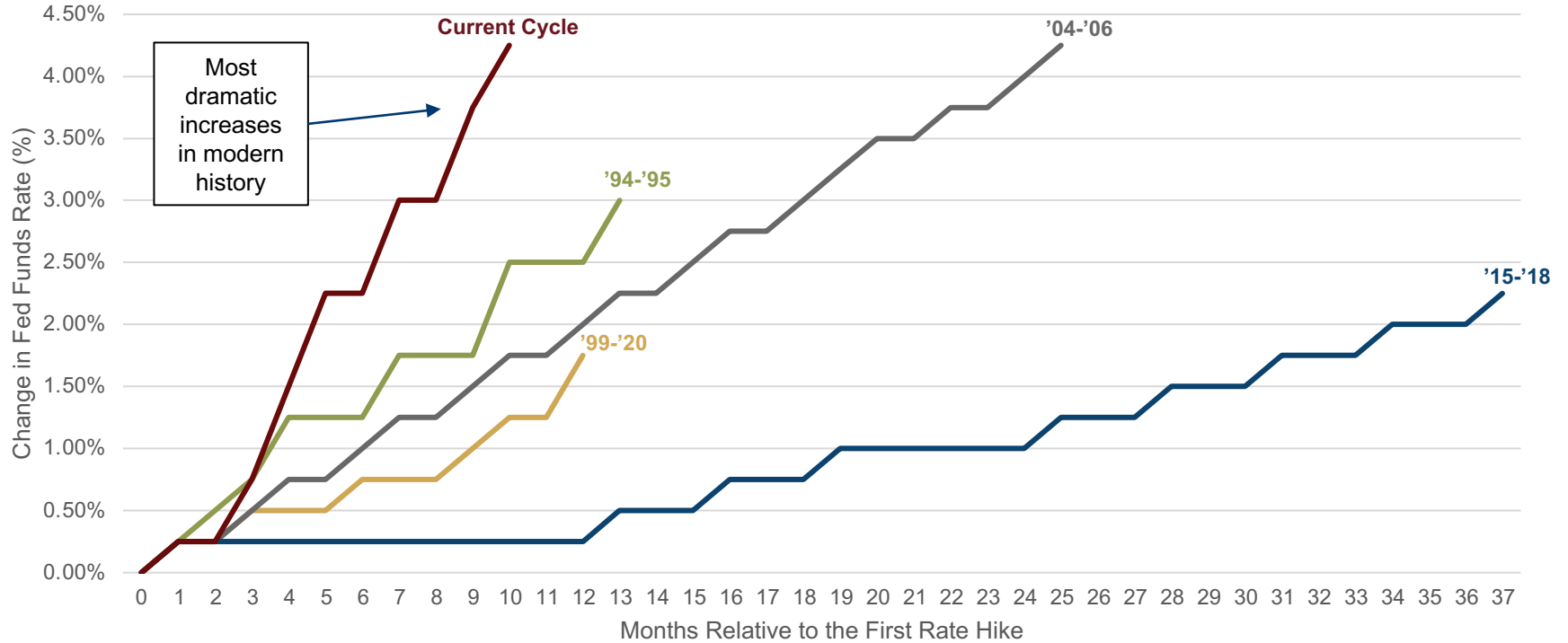
■ Rate Hikes in 2022:

- March 2022: 25 bps
- May 2022: 50 bps
- June 2022: 75 bps
- July 2022: 75 bps
- September 2022: 75 bps
- November 2022: 75 bps
- December 2022: 50 bps
- **Total 2022: 425 bps**



UNPRECEDENTED PACE FOR FED RATE HIKES

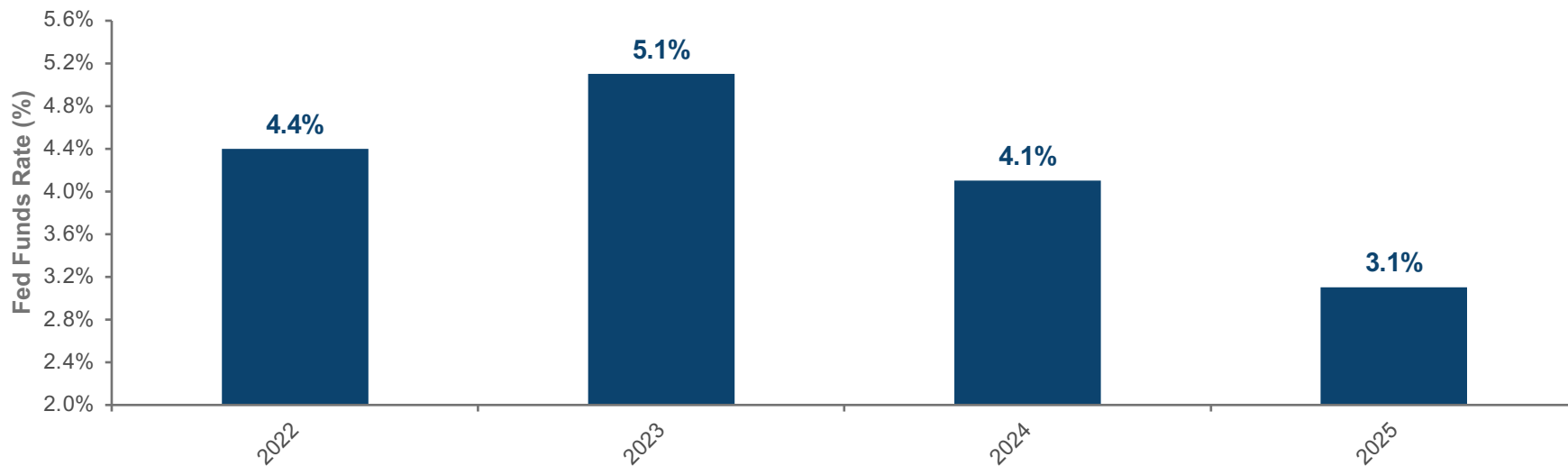
FOMC'S TARGET FEDERAL FUNDS RATE CHANGES OVER TIME



FOMC PROJECTIONS FOR THE FED FUNDS RATE

- The Fed's preferred inflation gauge, the core PCE index, rose 4.7% in November¹, more than double the central bank's 2% target
- The Consumer Price Index (CPI) rose 6.5% in December from a year ago, in line with expectations from economists.²
- In 2022, the Fed raised interest rates 425 basis points to a range of 4.25%-4.50%.
- In December, the Fed again raised rates another 50 basis points, in its latest attempt to quash inflation.
 - "I would say it's our judgment today that we're not in a sufficiently restrictive policy stance yet, which is why we say that we would expect that ongoing hikes will be appropriate." – Fed Chairman Powell (December 14, 2022)

MEDIAN FOMC SUMMARY OF ECONOMIC PROJECTIONS FOR THE FED FUNDS RATE³

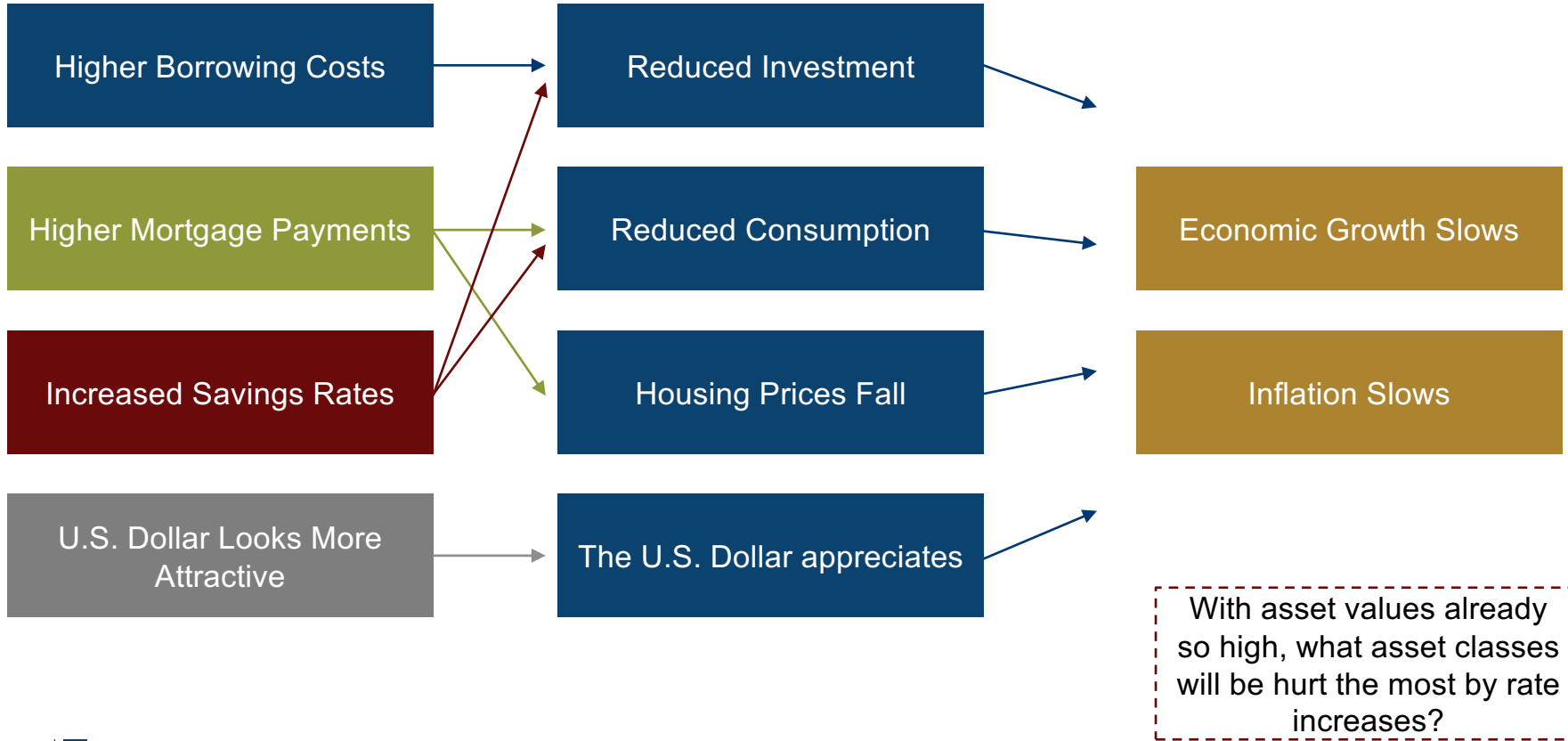


1. Bureau of Economic Analysis

2. CNBC (Consumer prices fell 0.1% in December, in line with expectations from economists)

3. FRED (Updated December 14, 2022)

IMPLICATIONS OF RISING INTEREST RATES



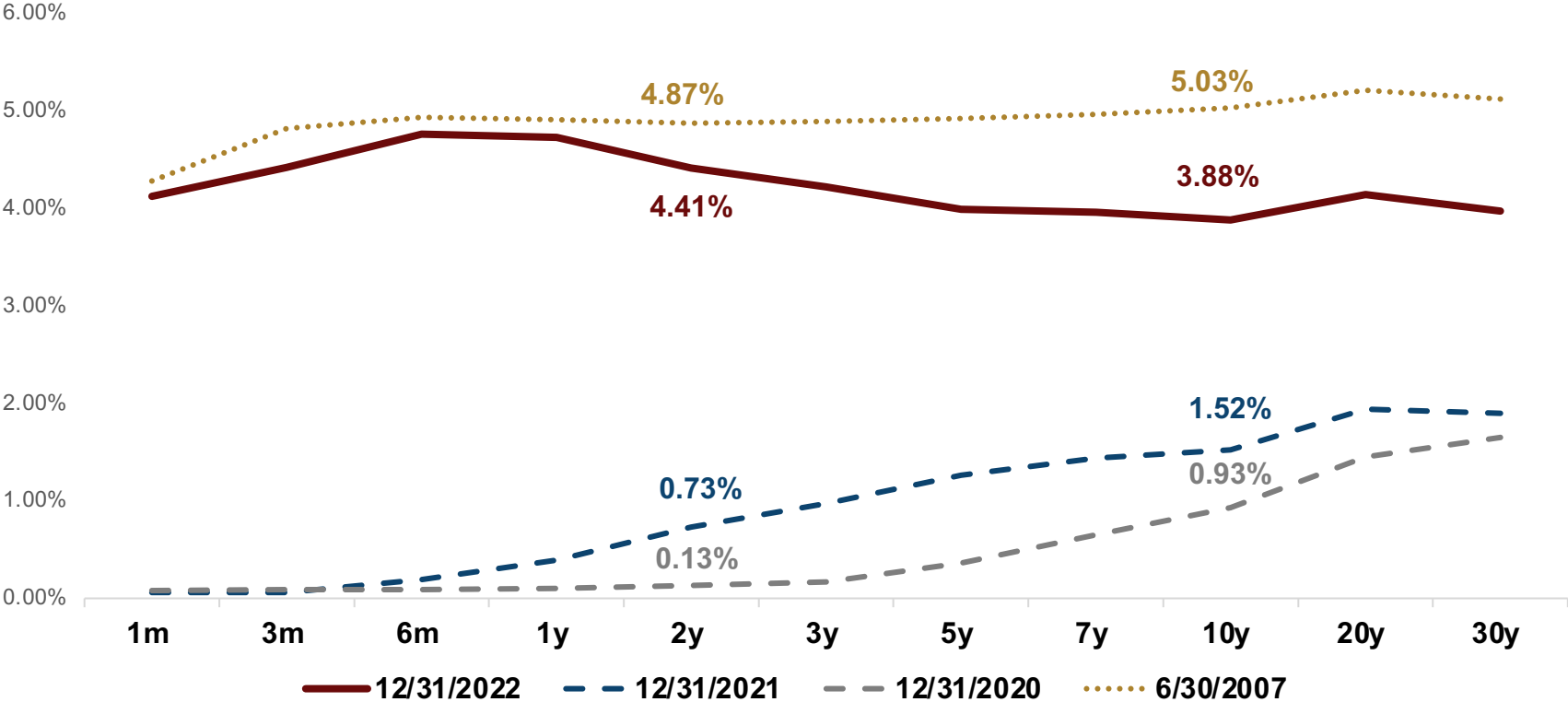
WHAT WILL THE FED BREAK THIS TIME?

LARGE PENSION, INVESTMENT FUND, FINANCIAL ENTITY OR FOREIGN GOVERNMENT?

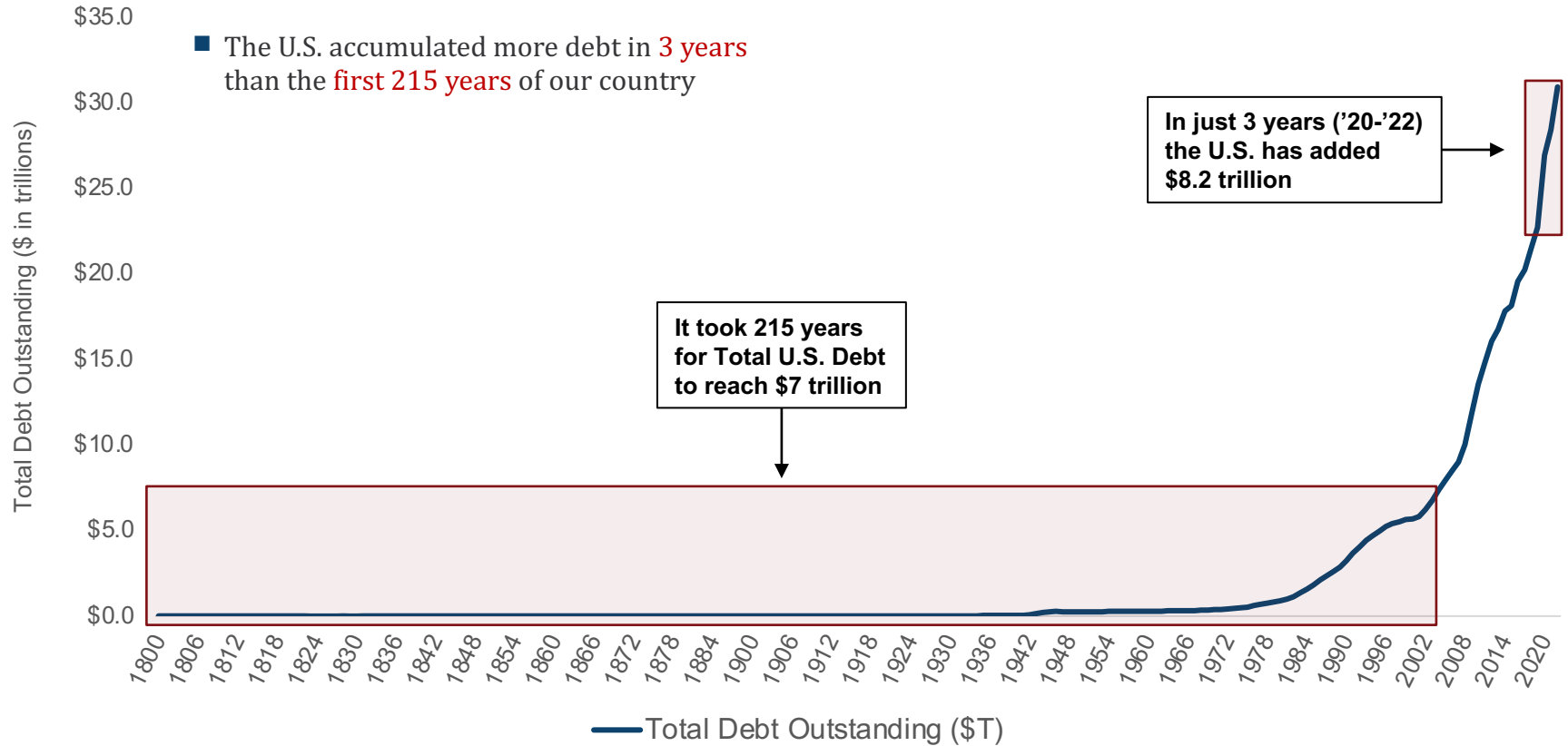


YIELD CURVE – BIG CHANGE FROM RECENT YEARS

U.S. YIELD CURVE (CURRENT, 1 YEAR AGO, 2 YEARS & PRE-GREAT RECESSION)



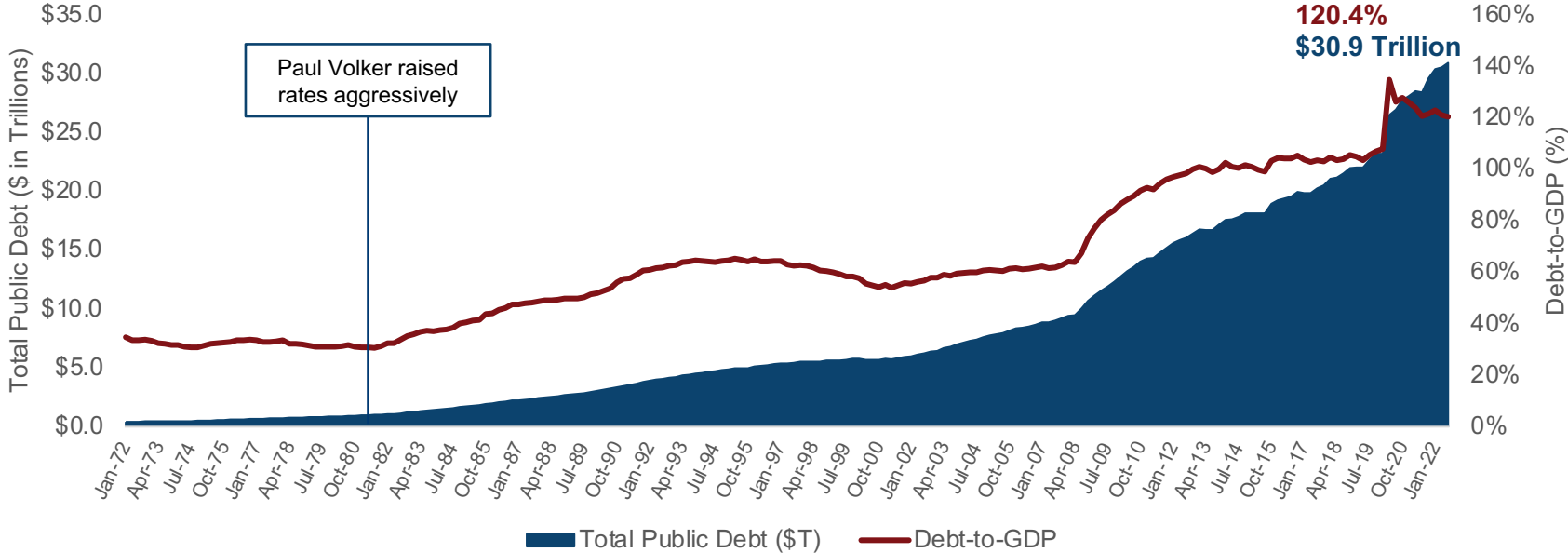
U.S. DEBT ACCUMULATION SINCE 2020



U.S. NATIONAL DEBT TO GDP LIMITS OUR FLEXIBILITY

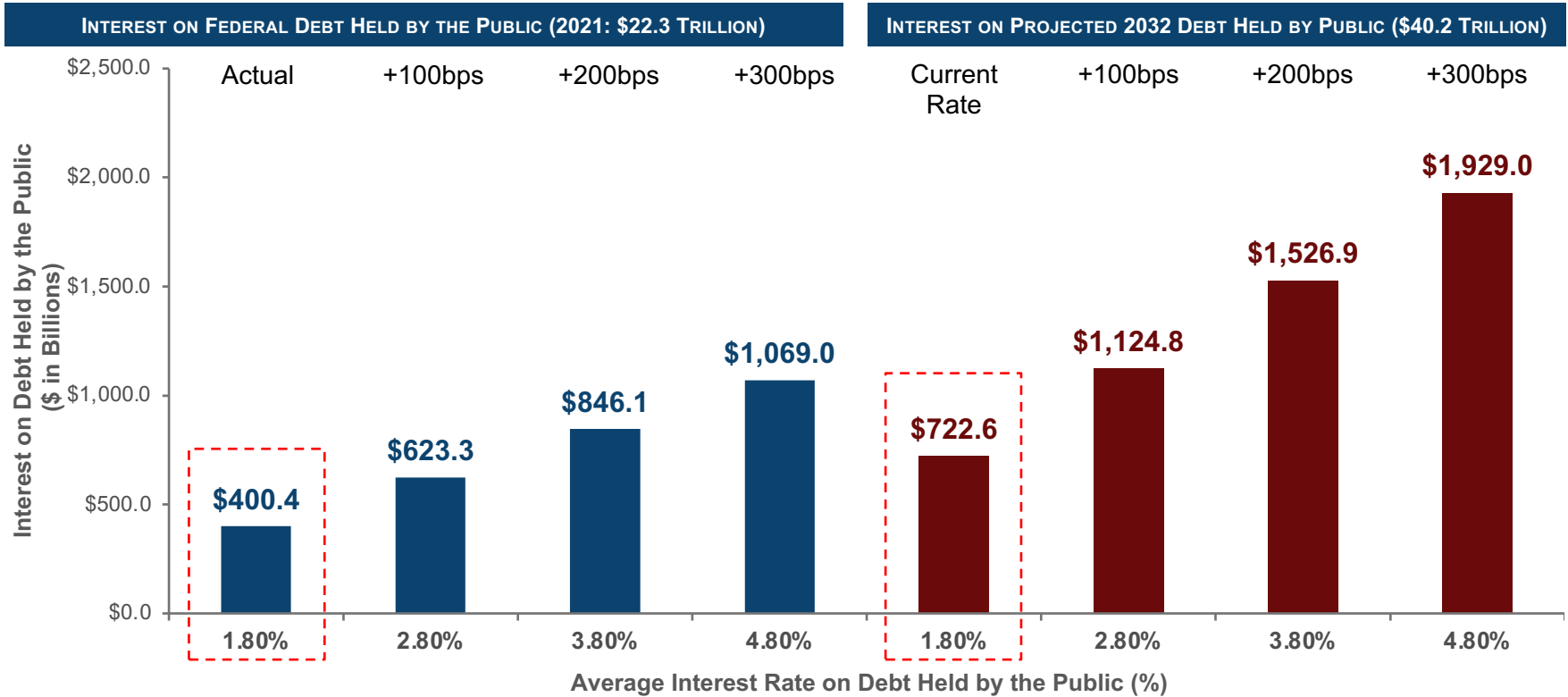
- The U.S. currently has \$30.9 trillion in public debt which does not include future entitlement obligations.
- The U.S. **Debt-to-GDP is currently at 120.4% - higher than WWII levels.**
- The CBO projects public debt to reach \$45.4 trillion by the end of 2032.
- U.S. Debt levels are unsustainable and put economic growth and stability at great risk.

TOTAL PUBLIC DEBT-TO-GROSS DOMESTIC PRODUCT



WHAT HAPPENS TO FEDERAL INTEREST EXPENSE IF INTEREST RATES RISE?

- Holding federal debt held by the public constant at the 2021 level of \$22.3 trillion, a **3.00% increase in the average interest rate on this debt would increase its interest expense by 267%**. This debt is expected to increase to \$40.2 trillion by 2032. The CBO projects this interest to be 3.15% by 2032.

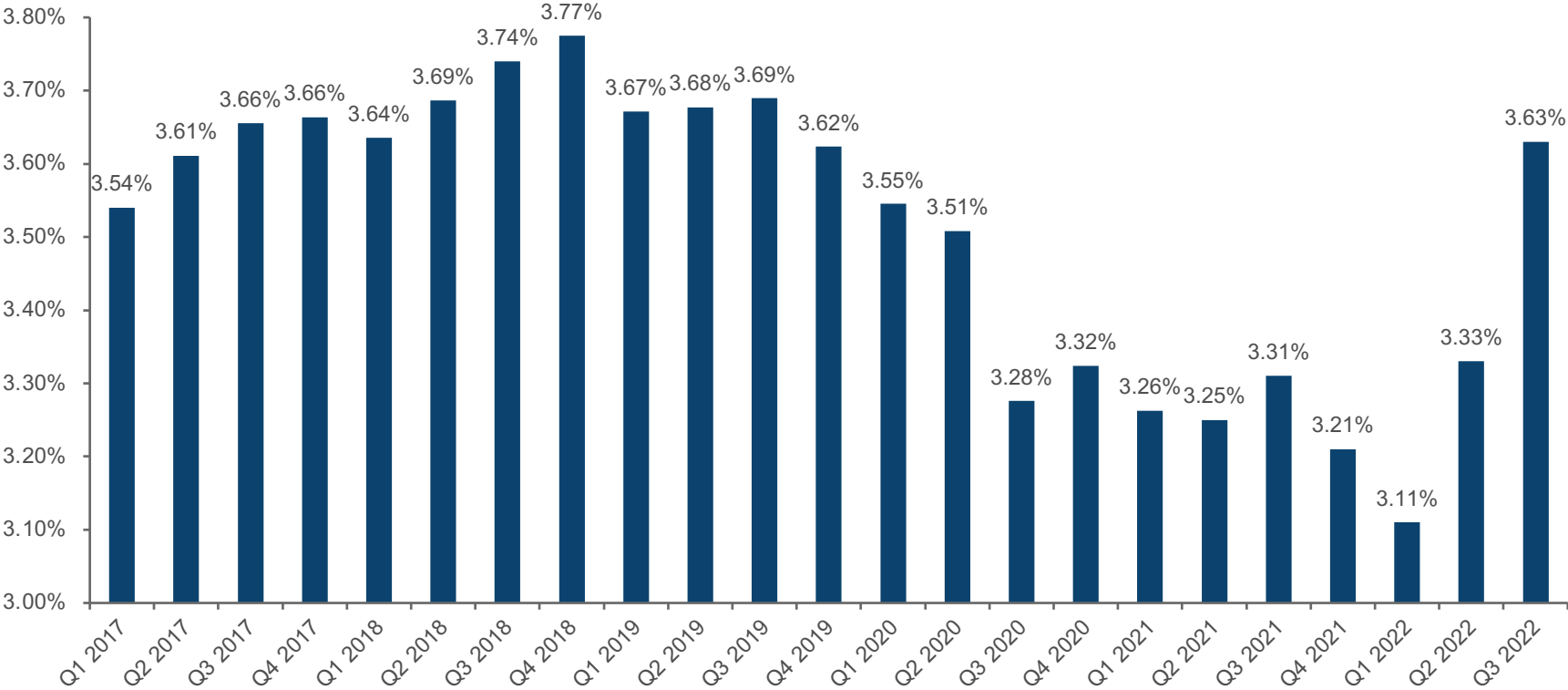


II BANK EARNINGS FACE HEADWINDS



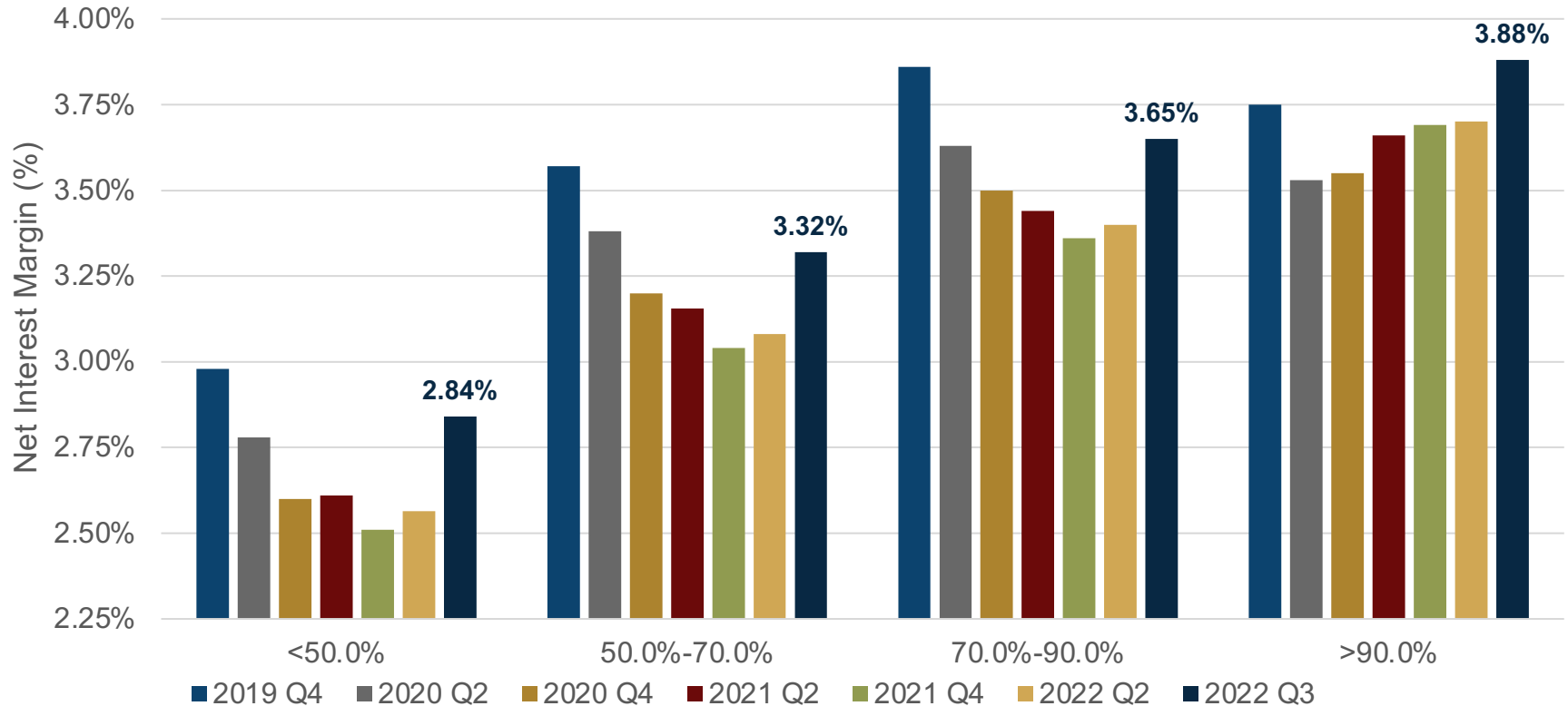
WHAT IS THE FUTURE FOR NET INTEREST MARGIN?

QUARTERLY BANK INDUSTRY NET INTEREST MARGIN



NIM BY LOANS-TO-DEPOSITS

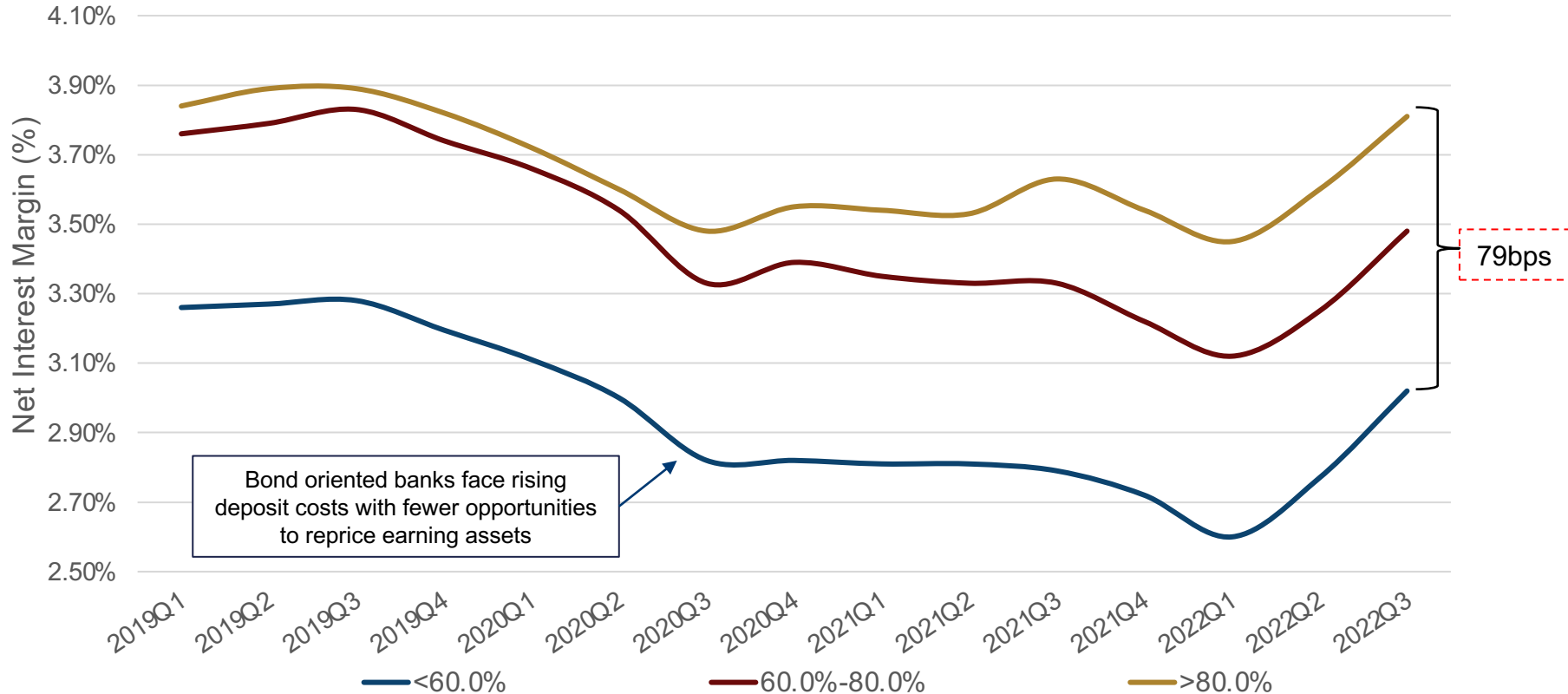
NIM BY LOANS/DEPOSITS RANGES



Note: Includes all commercial banks, savings banks and savings and loan associations (where Q2 2020 loan-to-deposit ratio is above 1.00%)
 Source: S&P Global Market Intelligence

LOAN-TO-DEPOSIT RATIO: IMPACT ON NET INTEREST MARGIN

MEDIAN NET INTEREST MARGIN BY LOAN-TO-DEPOSIT RATIO



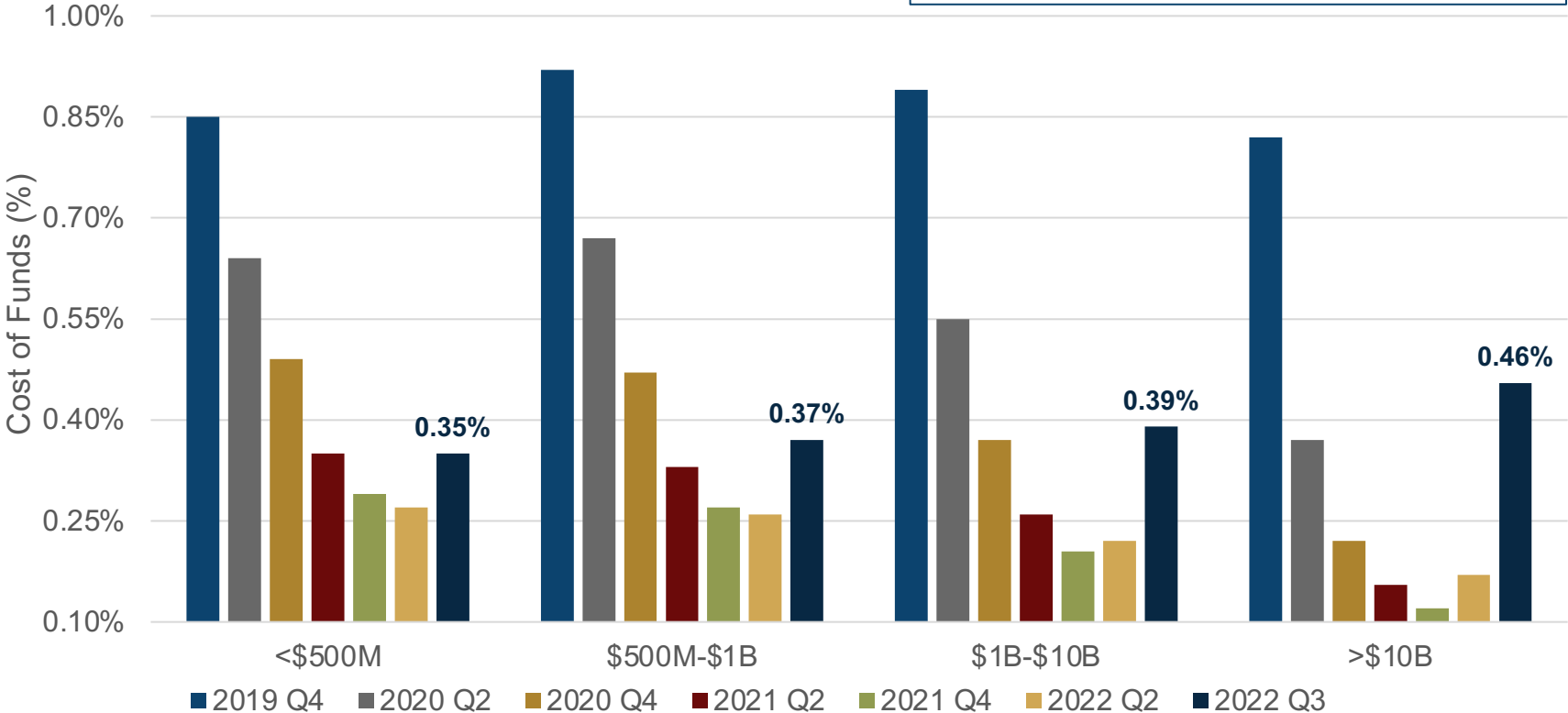
Bond oriented banks face rising deposit costs with fewer opportunities to reprice earning assets

79bps

Note: Includes all commercial banks, savings banks and savings and loan associations (where Q2 2020 loan-to-deposit ratio is above 1.00%)
 Source: S&P Global Market Intelligence; Data as of 9/30/2022

COST OF FUNDS BY ASSET RANGES

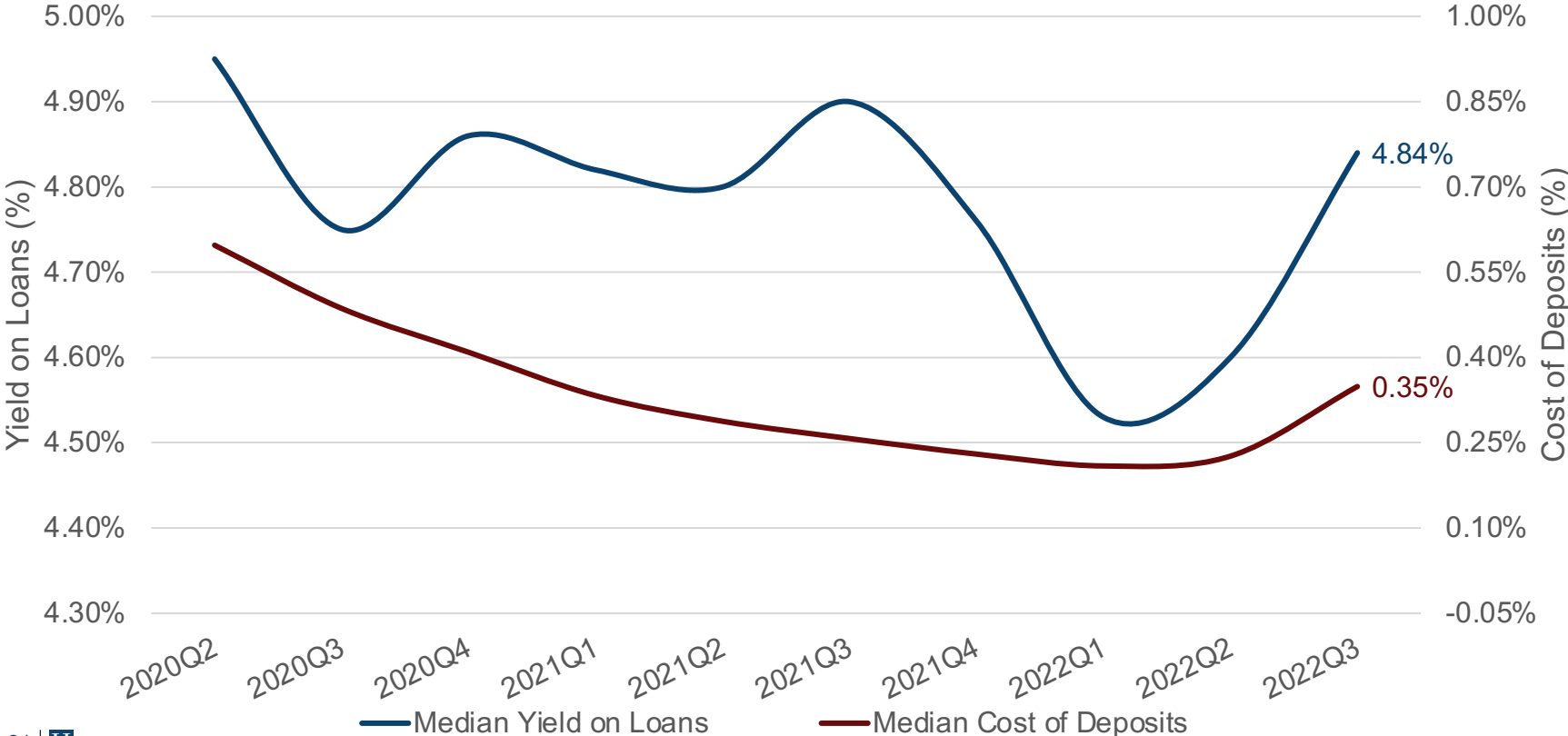
How fast and how far will deposit costs go?



Note: Includes all commercial banks, savings banks and savings and loan associations (where Q2 2020 loan-to-deposit ratio is above 1.00%)
Source: S&P Global Market Intelligence

LOAN YIELDS AND DEPOSIT COSTS: CAN WE EXPECT MARGINS TO EXPAND?

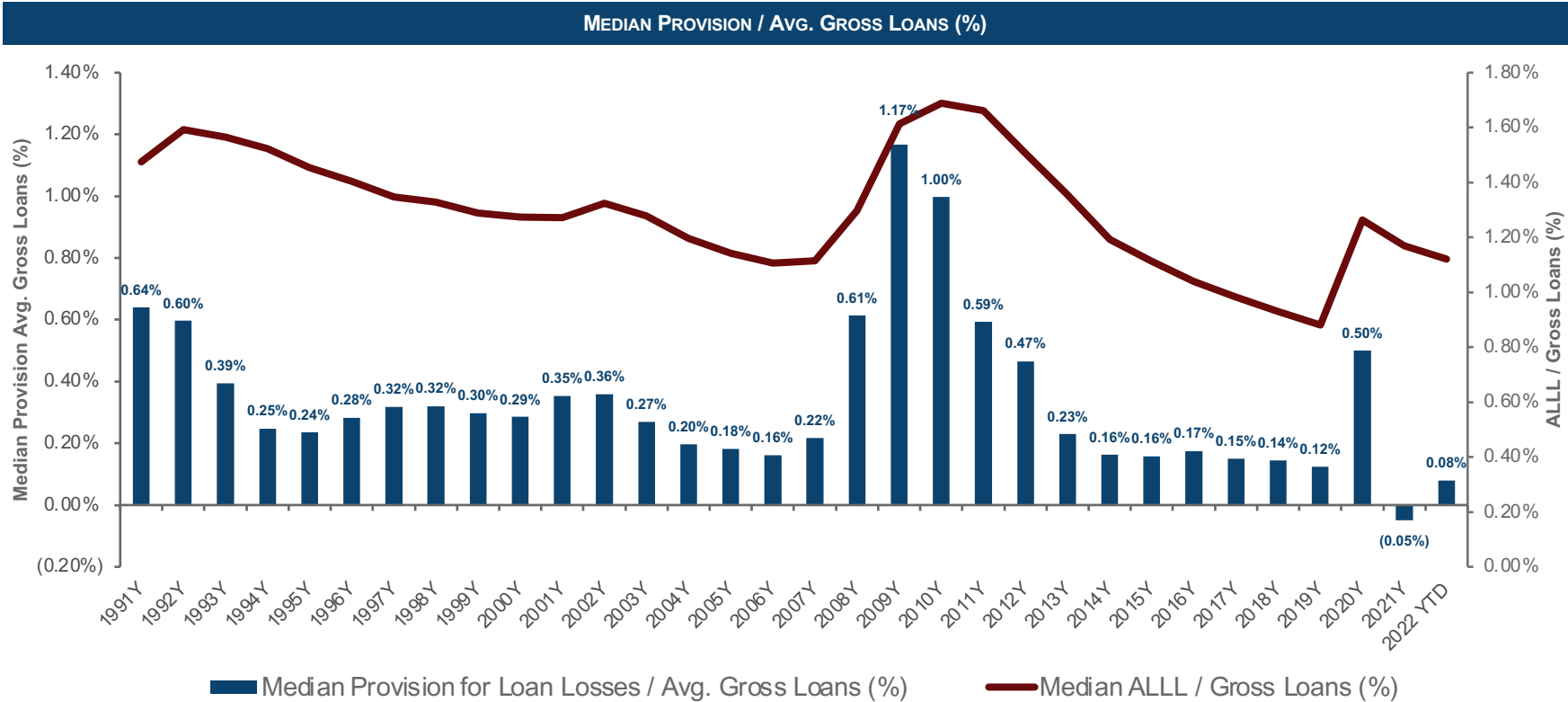
MEDIAN YIELD ON LOANS VS. MEDIAN COST OF DEPOSITS (LAST 10 QUARTERS)¹



Note: Includes all commercial banks and savings banks with Q2 2022 assets between \$250 million and \$25 billion
Source: S&P Global Market Intelligence; Data as of 9/30/2022

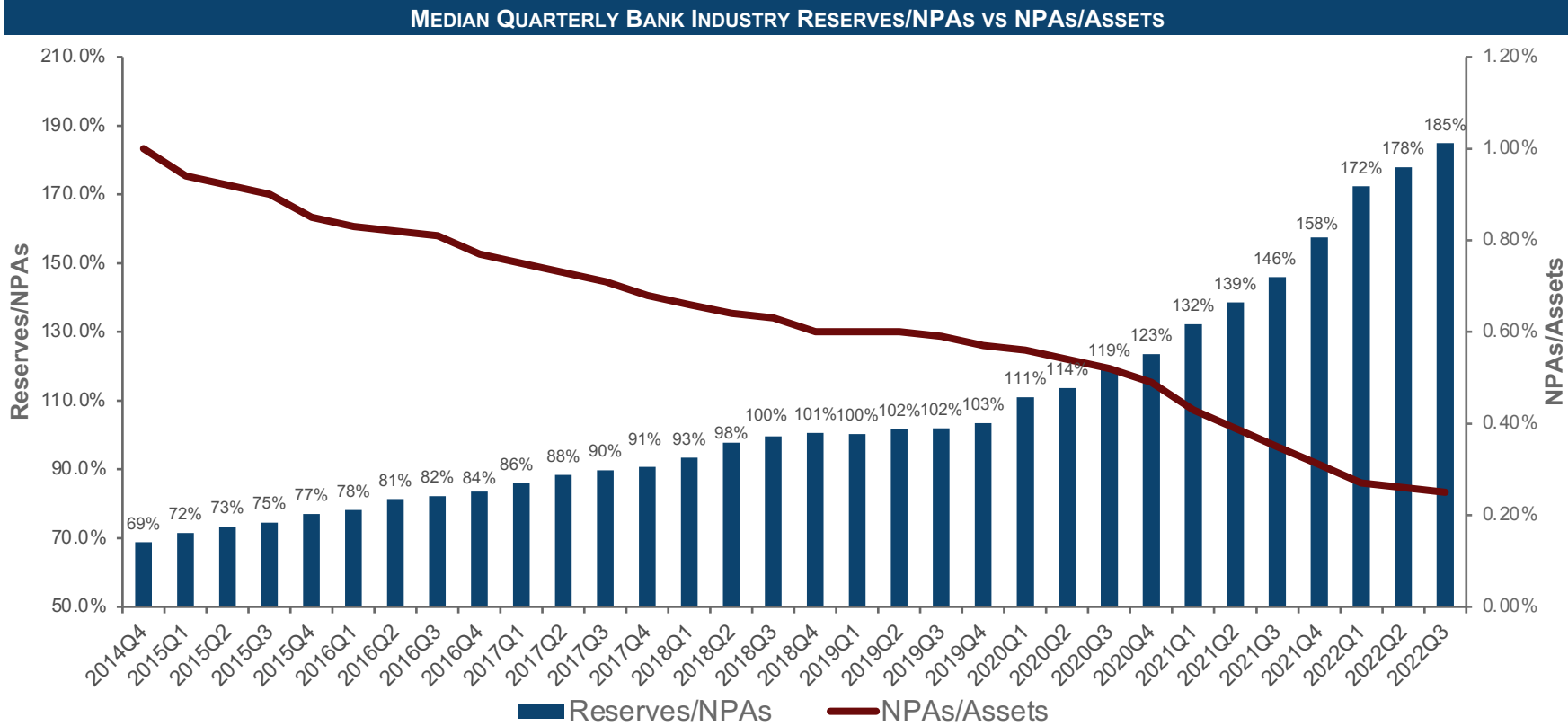
ARE BANKS ADEQUATELY RESERVED?

■ While banks set aside large reserves in 2020, they recouped some of those reserves in 2021. In 2022, these levels have begun to normalize.

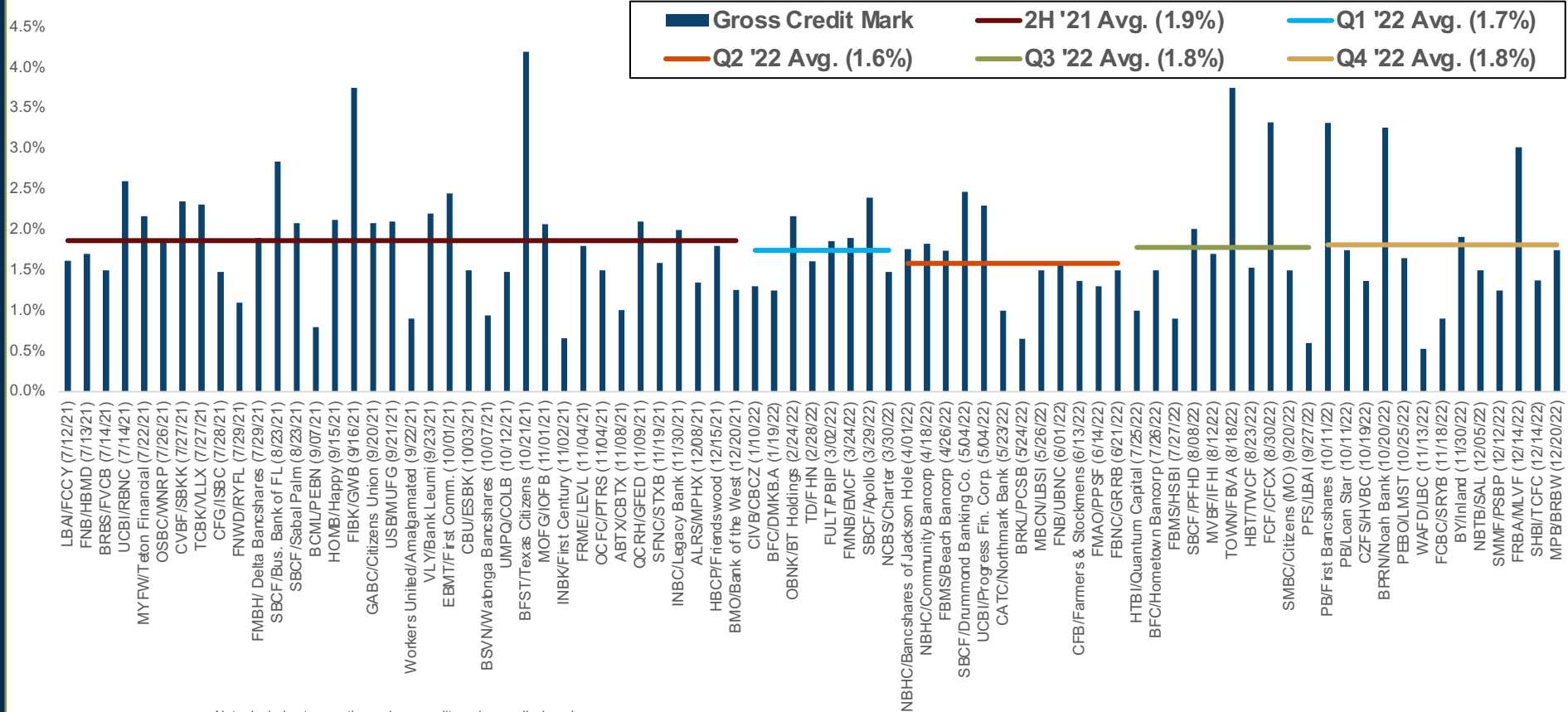


Note: Includes all NASDAQ and NYSE listed banks
Financial data as of 9/30/2022
Source: S&P Global

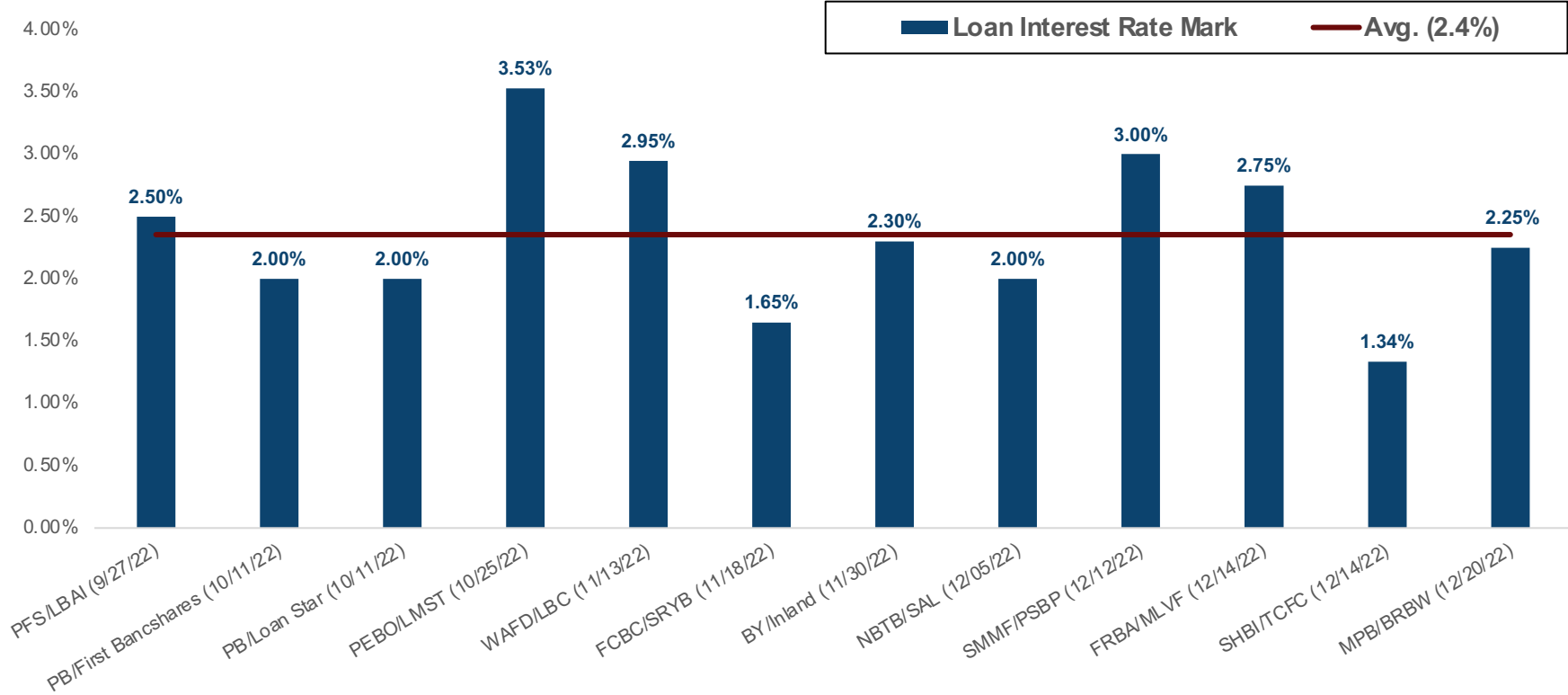
BANKS APPEAR TO BE WELL RESERVED UTILIZING TRADITIONAL METRICS



CREDIT MARKS SINCE JUNE 30, 2021



GROSS LOAN INTEREST RATE MARKS SINCE SEPTEMBER 1, 2022



BANK EARNINGS OUTLOOK



(Sunny)

Higher Loan
Yields



(Mostly Cloudy)

Costs of
Deposits



(Cloudy)

Drag of
Underwater
Securities



(Thunderstorms)
60% Chance

Credit Quality



(Rain)

Inflation on
Operating
Costs



(Cloudy)

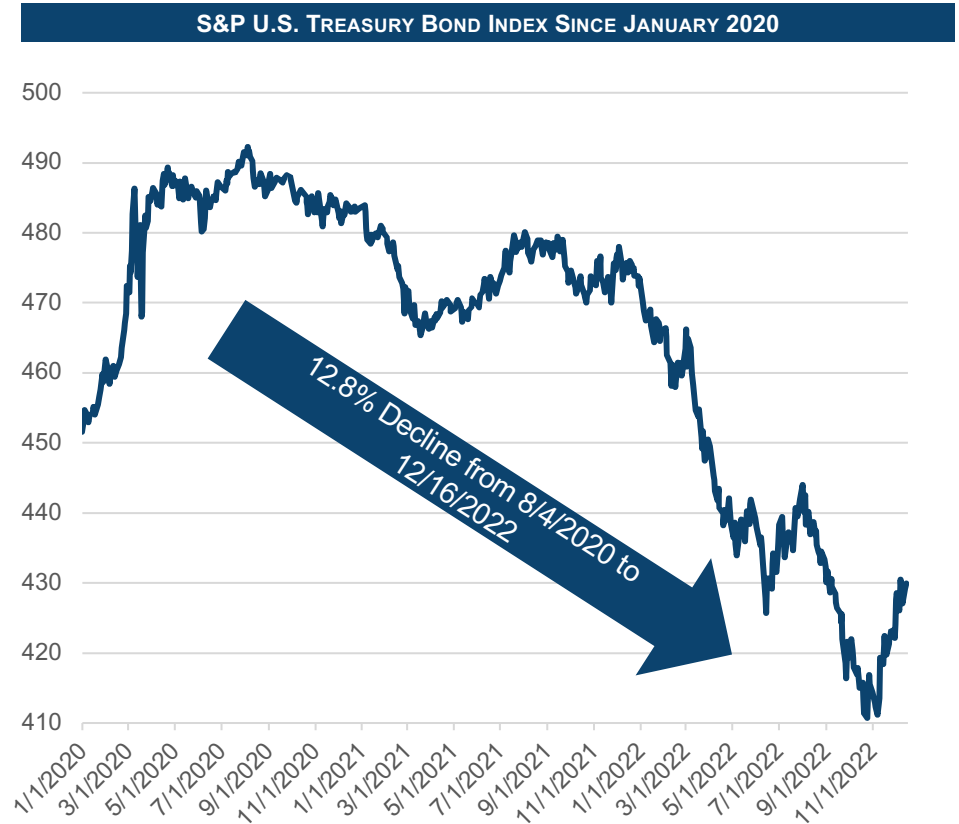
Compliance

III BANK CAPITAL IS BECOMING A CONCERN



DEBT SECURITIES HAVE SUFFERED HISTORIC LOSSES

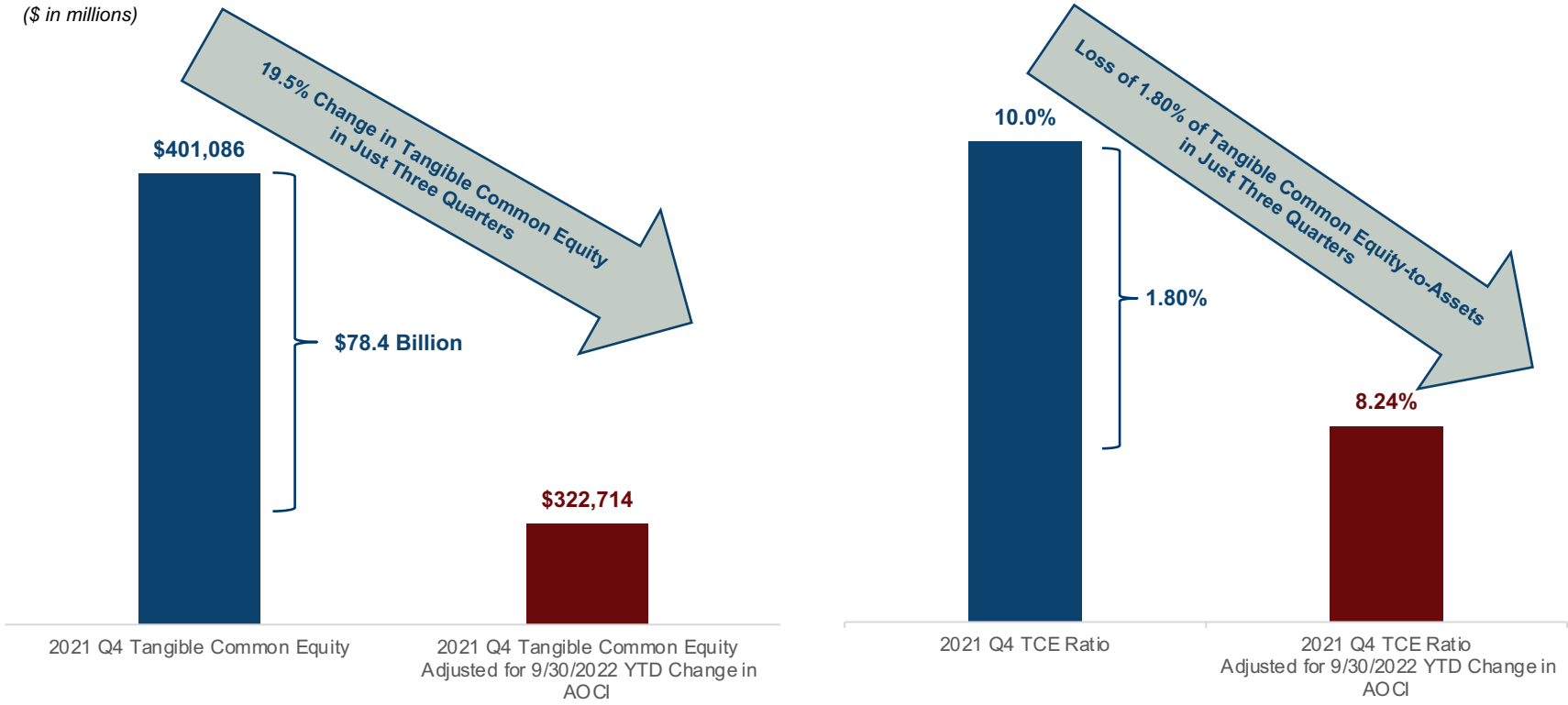
- The S&P US Treasury Bond Index has suffered a 12.8% decline since its high in 2020.
- By some counts, U.S. Treasuries have had their worst performance since 1788¹.
- The S&P U.S. Treasury Bond Index dropped 19.8% between August 4, 2020 and October 24, 2022.



EFFECT OF UNREALIZED BOND LOSSES ON CAPITAL

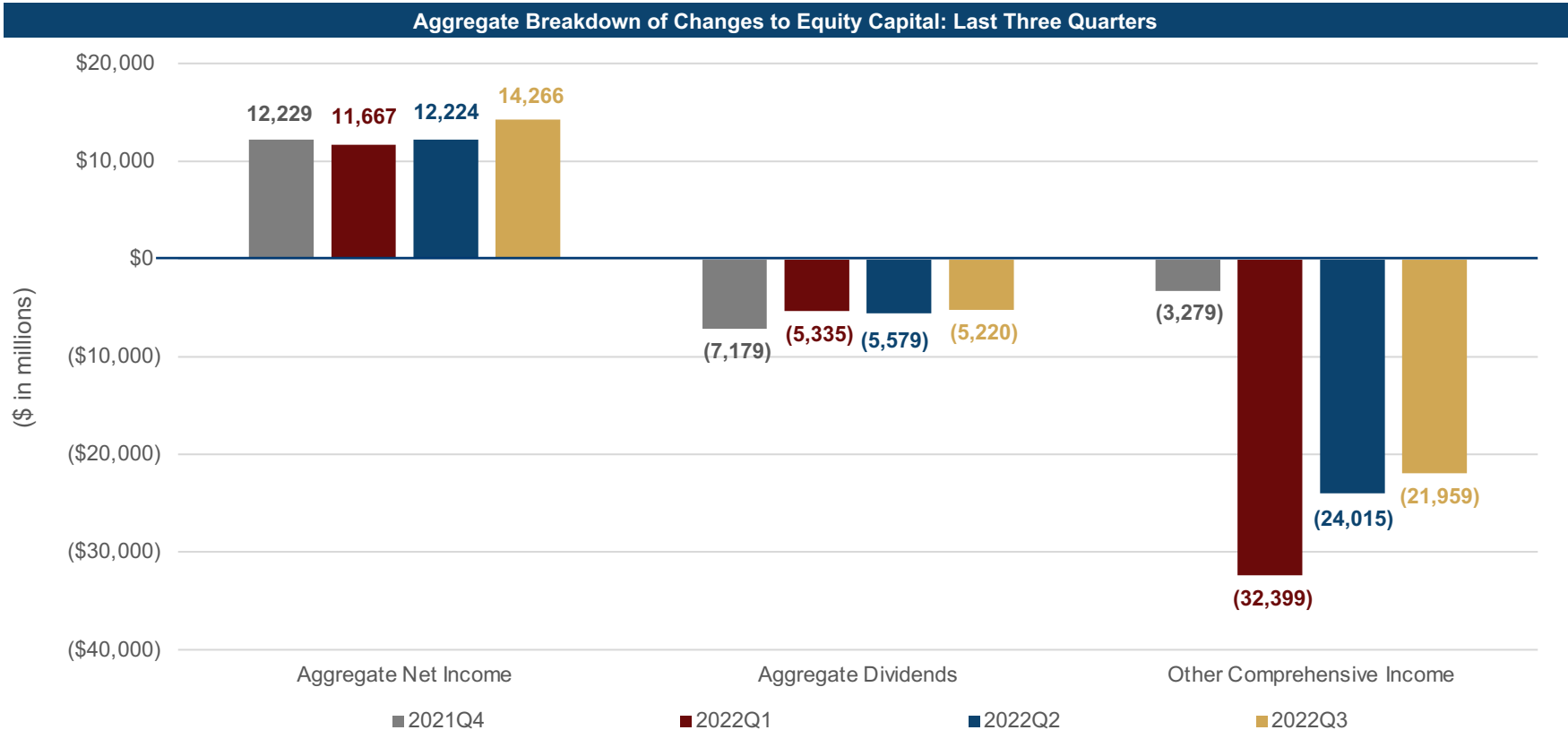
Accumulated Other Comprehensive Income's Impact on Tangible Common Book Value (Aggregate for Banks < \$20 Billion)

(\$ in millions)



Note: Adjusted TCE Ratio reduces Tangible Common Equity and Tangible Assets by Year-to-Date Change in AOCI
 Note: Includes all Commercial Banks, Savings Banks and Savings & Loan Associations with less than \$20 billion in assets and a loan-to-deposit ratio greater than 1%
 Source: S&P Global Market Intelligence

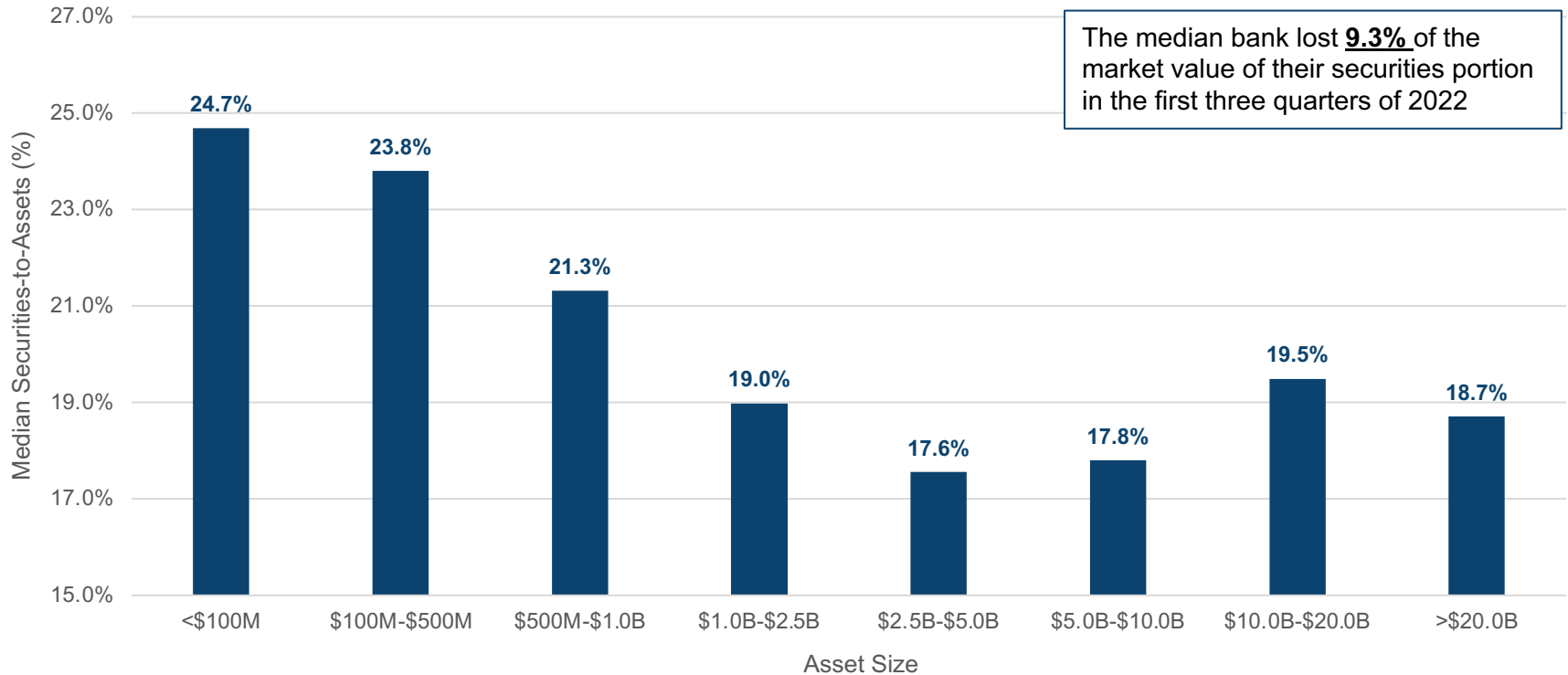
THE EFFECTS OF UNREALIZED LOSSES¹



1. Changes to equity capital exclude transactions with parent companies, changes due to business combinations, sale/conversion/acquisition of Stock and restatements
 Note: Includes all Commercial Banks, Savings Banks and Savings & Loan Associations with less than \$20 billion in assets and a loan-to-deposit ratio greater than 1%
 Source: S&P Global Market Intelligence

SECURITIES PORTFOLIO BY SIZE OF BANK

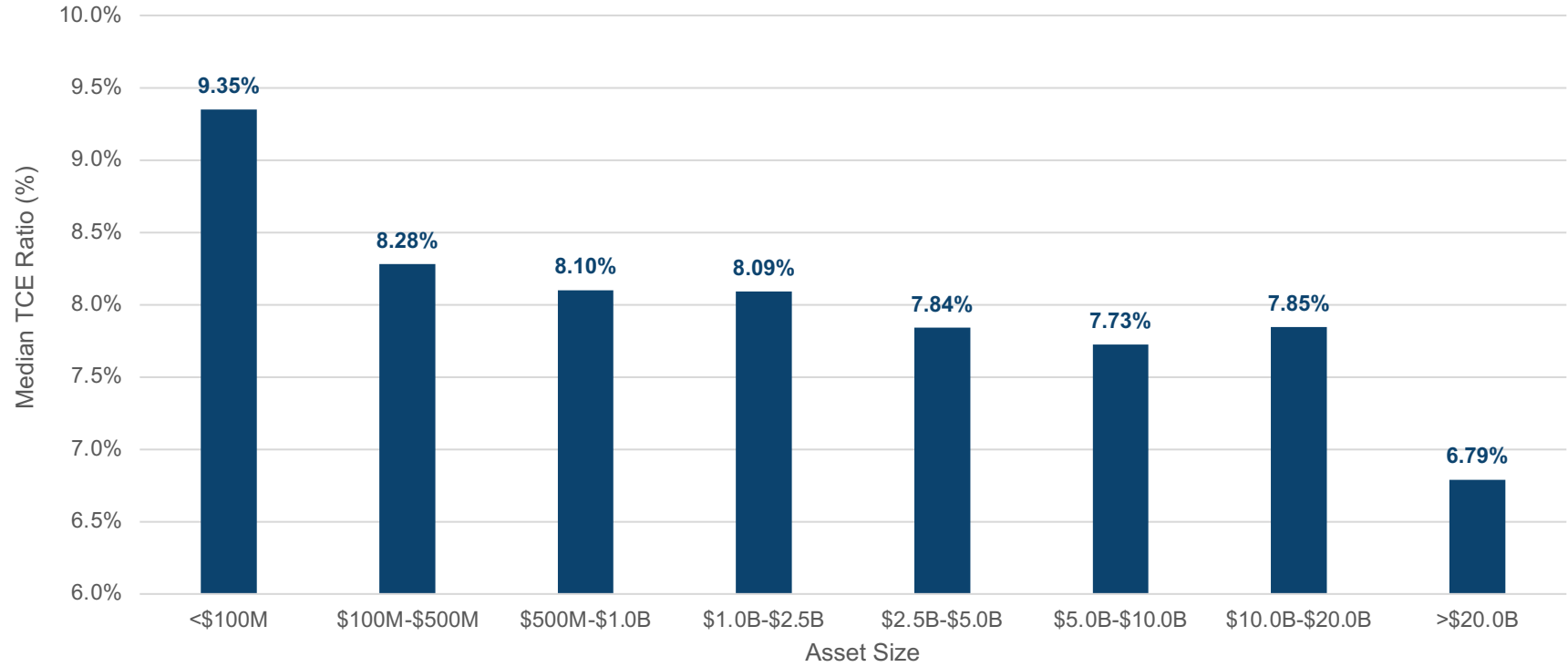
MEDIAN SECURITIES-TO-ASSETS BY ASSET SIZE



The median bank lost **9.3%** of the market value of their securities portion in the first three quarters of 2022

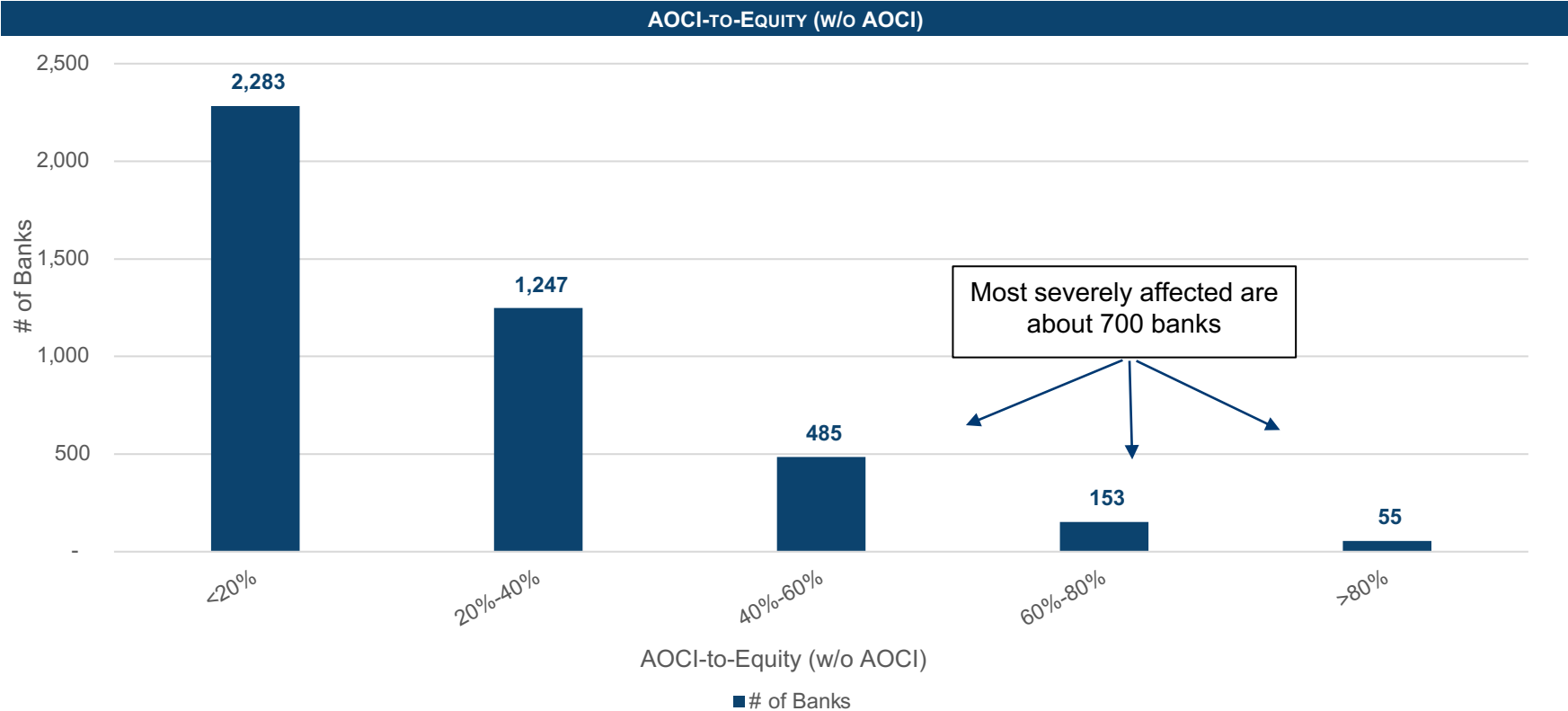
TANGIBLE CAPITAL LEVELS BY ASSET SIZE

MEDIAN TANGIBLE COMMON EQUITY-TO-ASSETS BY ASSET SIZE



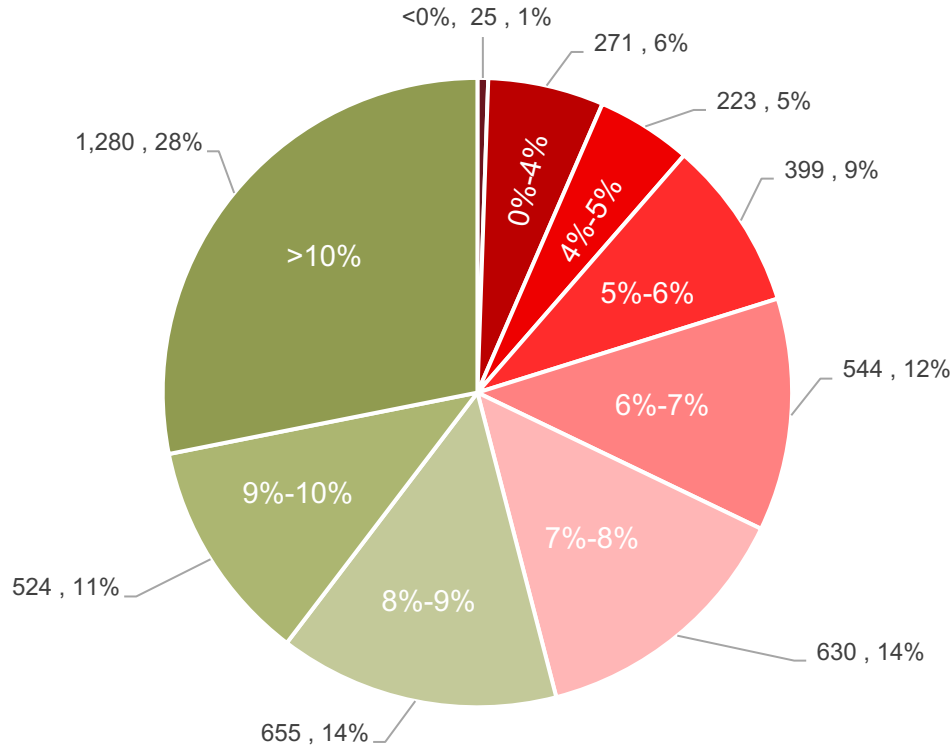
Notes: Includes all commercial banks, savings banks and savings & loan associations (top tier consolidated), MRQ loans-to-deposits greater than 1%
Source: S&P Capital IQ Pro

INTEREST RATE HIKES HAVE AFFECTED BANK'S SECURITIES PORTFOLIOS



FED RATE INCREASES HAVE DEPLETED BANK CAPITAL

PERCENTAGE OF INDUSTRY BY TANGIBLE COMMON EQUITY-TO-ASSETS



- **46.0% of banks have less than 8%** Tangible Common Equity-to-Assets as of September 30, 2022.
- The unprecedented pace of rate increases have caused bank bond portfolios to go underwater.
- If interest rates continue to rise, the industry's capital ratios may become even tighter.

Note: Legend (# of Banks, % of Industry)

Notes: Includes all commercial banks, savings banks and savings & loan associations (top tier consolidated), MRQ loans-to-deposits greater than 1%

Source: S&P Capital IQ Pro; Data as of 9/30/2022

REGULATORY TOOL KIT FOR AOCI PROBLEMS?



* Sub-S banks given less grace with corporate tax rate now 21%?

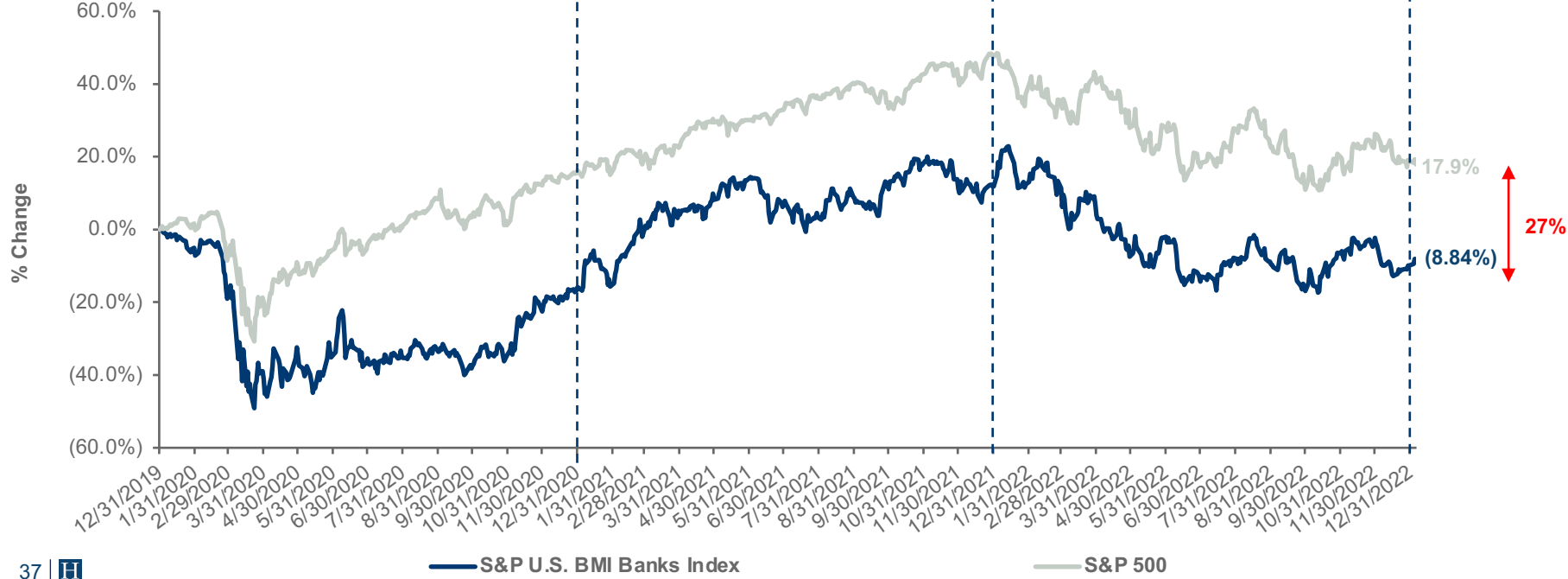
IV THE IMPACT ON BANK STOCK PRICES AND M&A



THE BANK STOCK MARKET GRAPPLES WITH CONTINUED UNCERTAINTIES IN 2023

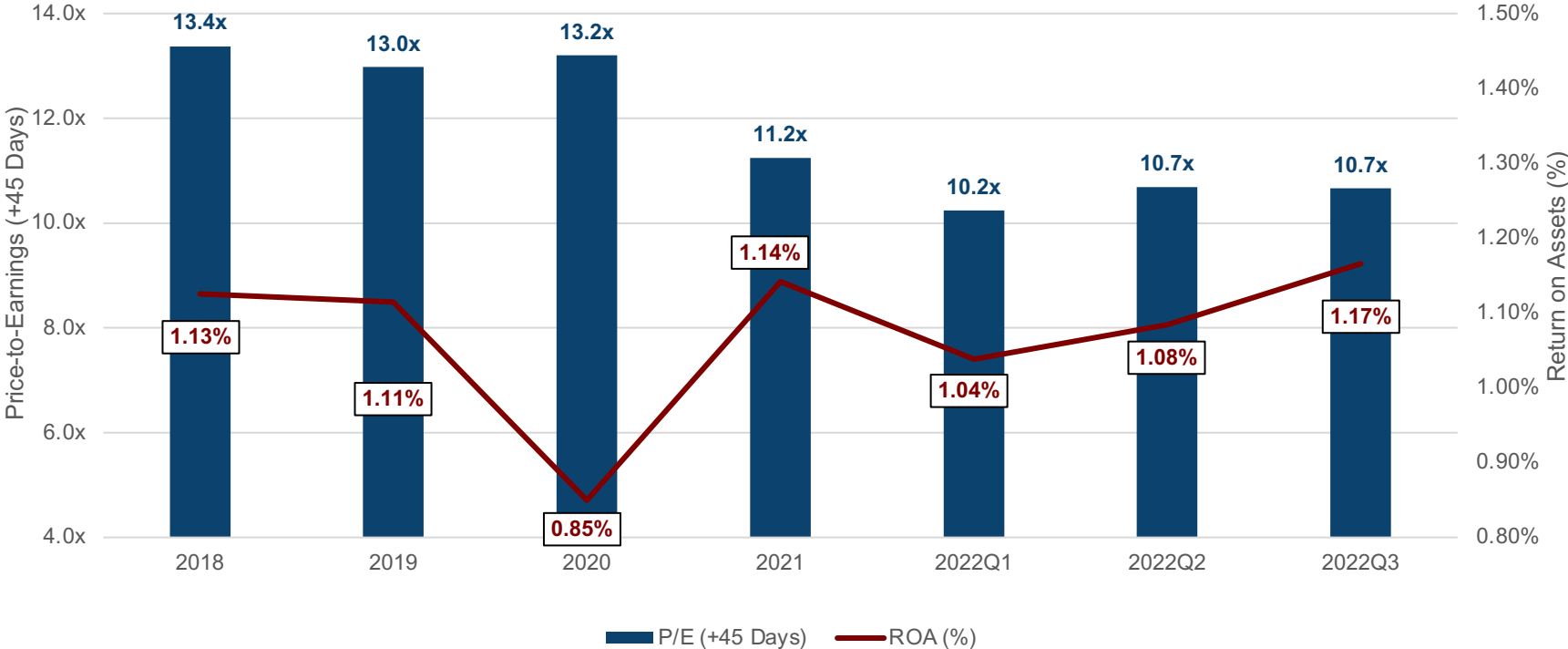
- Massive stimulus helped to propel the broad market to new highs by year-end 2020 and continued its run throughout 2021
- Skepticism about bank earnings stemming from concerns about asset quality and NIM compression have left financial stocks out of the rally
- The Biden administration poses new risks for bank earnings with added pressure on fee income and compliance costs
- Inflation, rapid Fed rate increases and recession fears have dampened the market performance in 2022 and hindered the outlook for 2023

S&P U.S. BMI BANKS INDEX VS. S&P 500 SINCE 12/31/2019



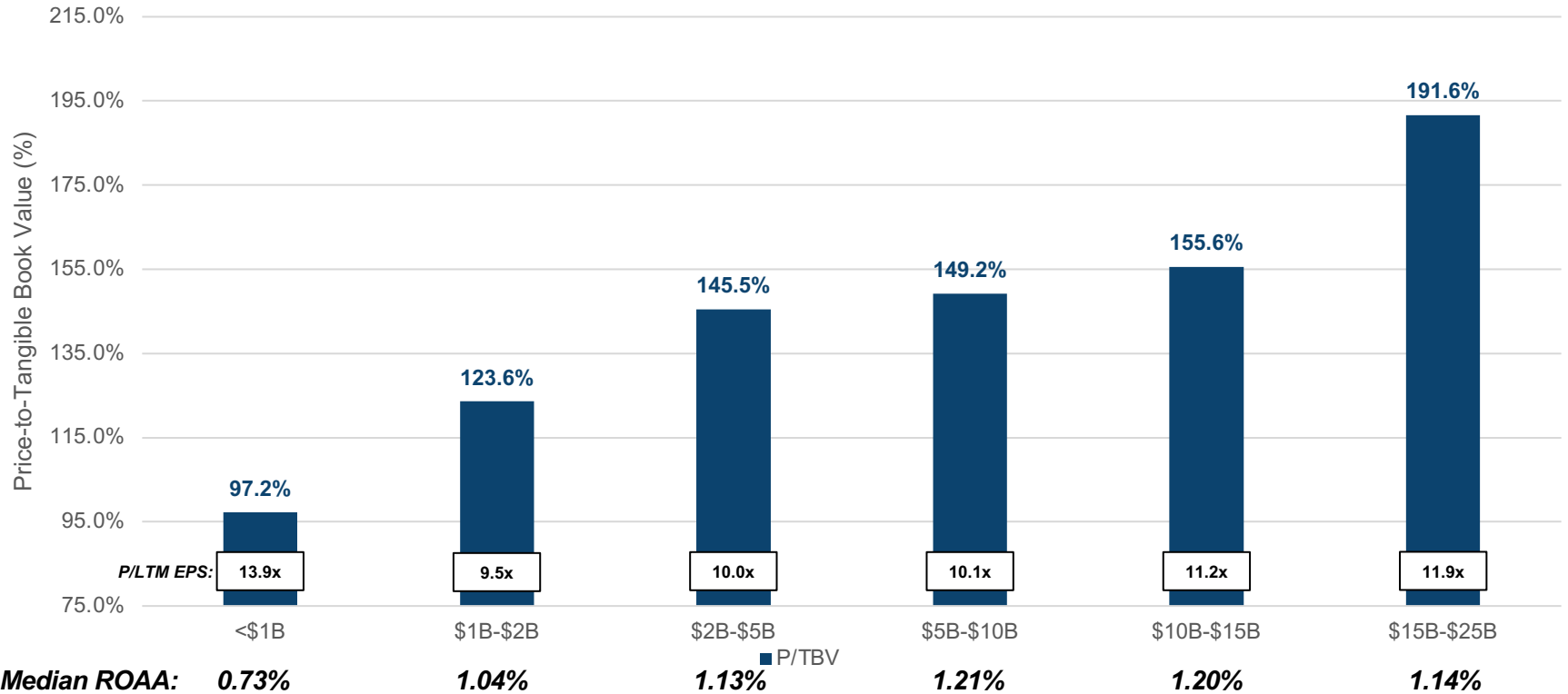
MEDIAN PRICE-TO-EARNINGS AND ROA SINCE 2018

Price-to Earnings vs. Return on Assets



MARKET PRICING BY ASSET SIZE – STILL A STRONG PREFERENCE FOR SIZE

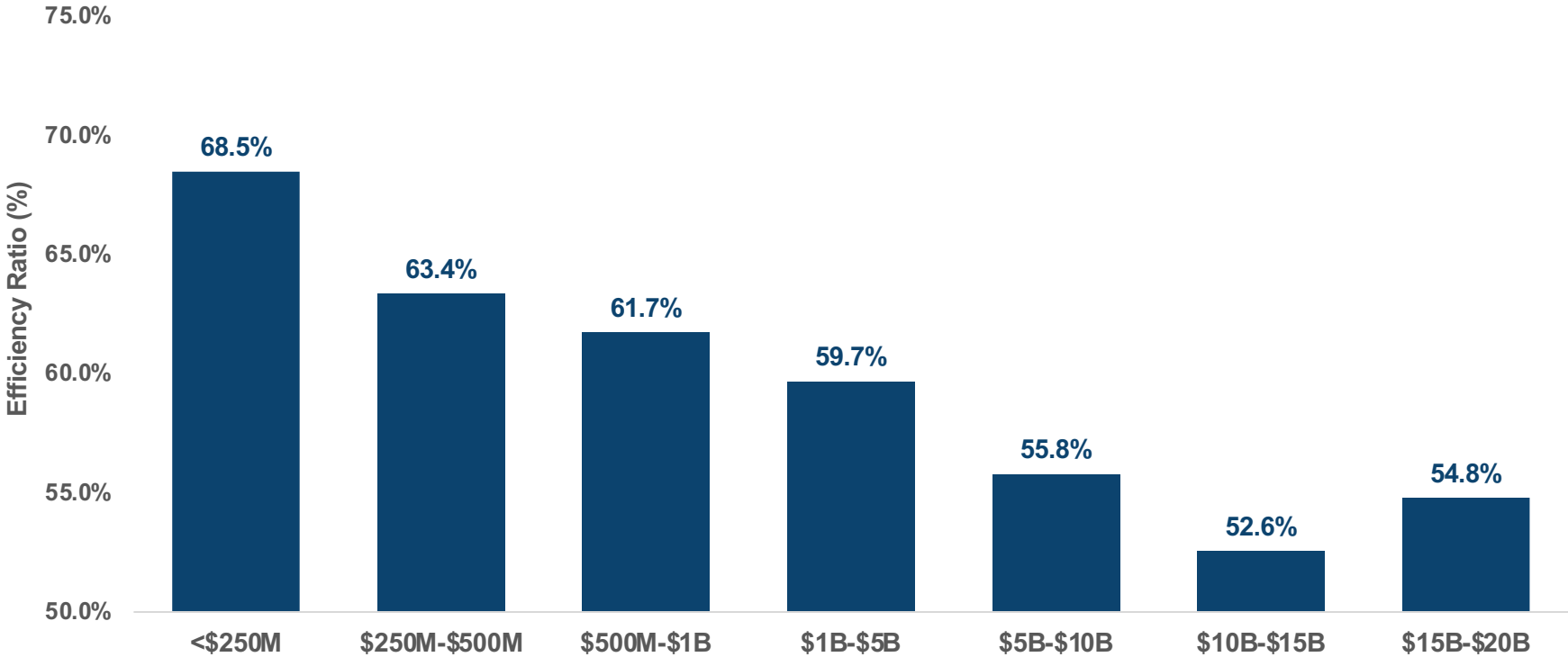
MEDIAN PRICE-TO-TANGIBLE BOOK VALUE & PRICE-TO-LTM EARNINGS BY ASSET SIZE



Note: Includes all banks traded on the NYSE and NASDAQ exchanges
 Source: S&P Global Market Intelligence; Data as of 1/5/2023

ACHIEVING ECONOMIES OF SCALE WITH SIZE

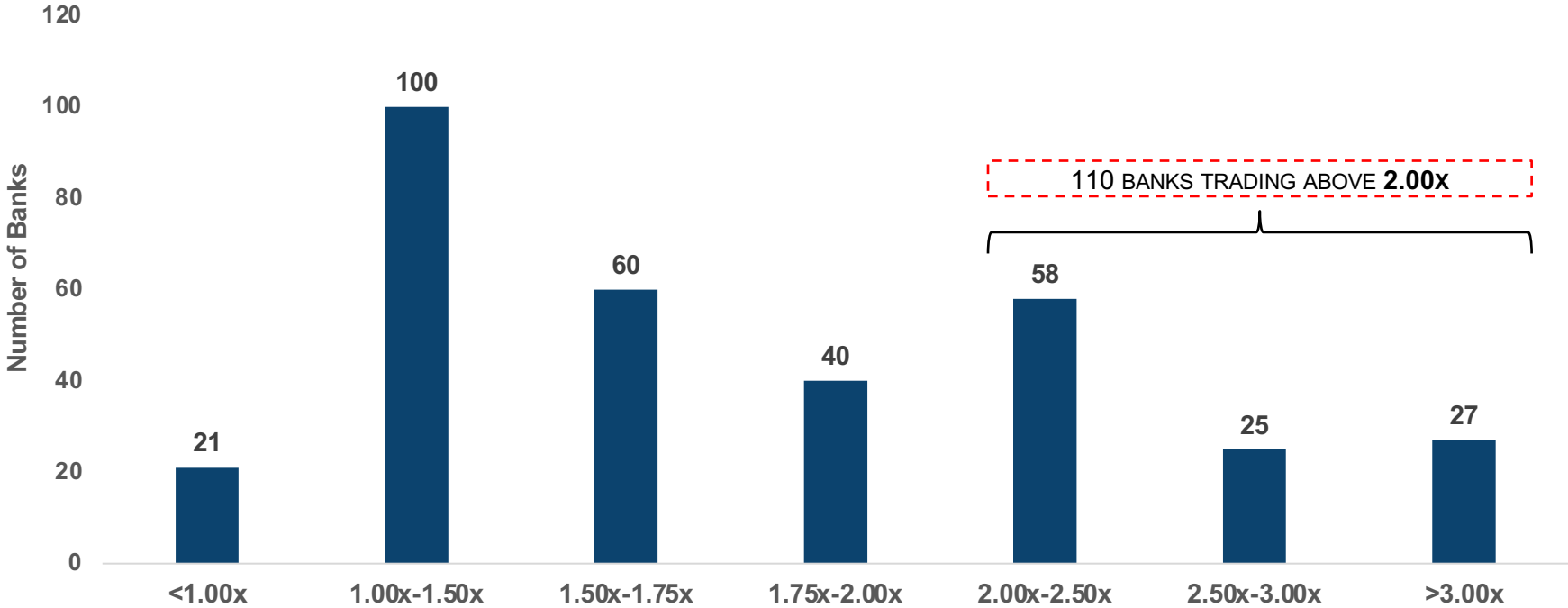
MEDIAN YEAR-TO-DATE EFFICIENCY RATIO BY ASSET SIZE



*Note: Includes all commercial banks and savings banks
Source: S&P Global Market Intelligence; Data as of 9/30/2022*

BANKS ARE TRADING HIGHER ON TBV AS AOCI LOSSES MOUNT

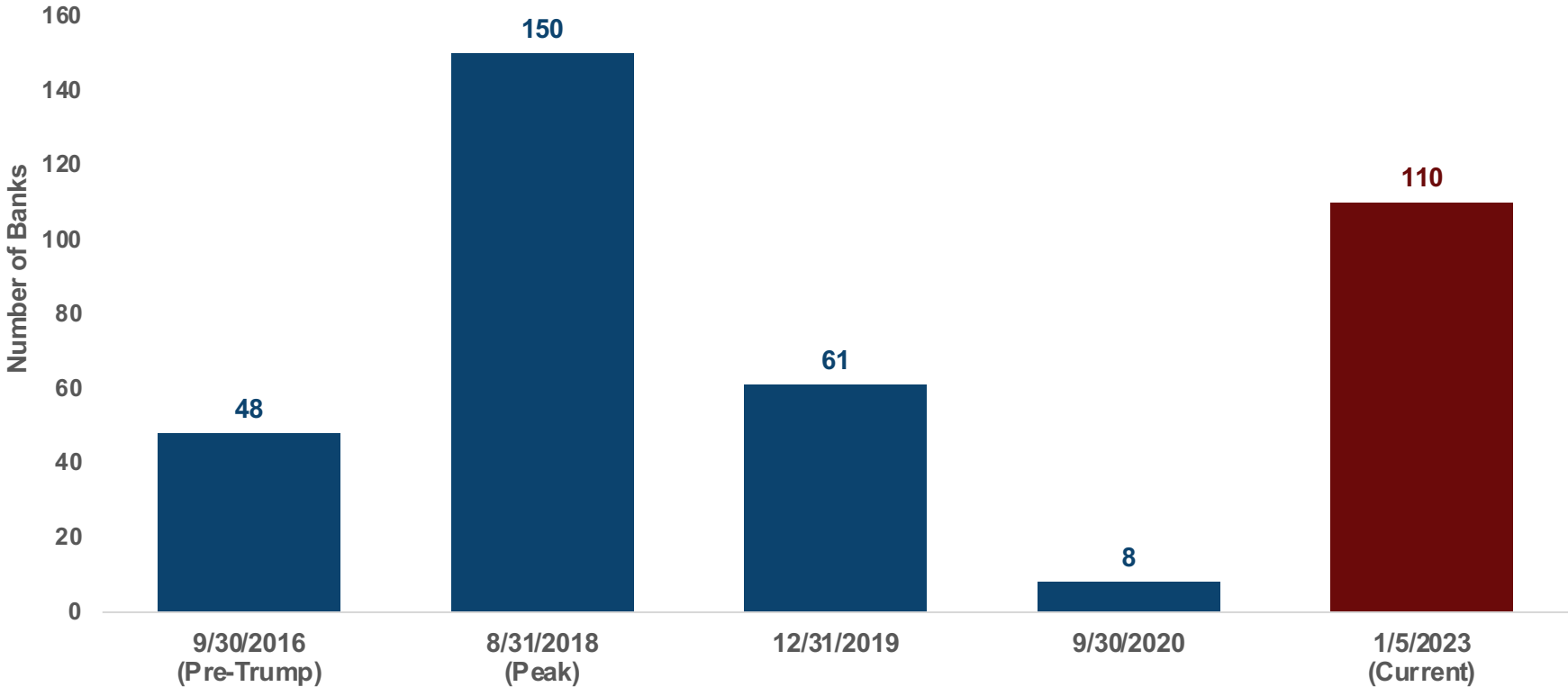
NUMBER OF BANKS IN PRICE-TO-TANGIBLE BOOK RANGES



Note: Includes all banks traded on the NYSE and NASDAQ exchanges where price-to-tangible book metrics are available
Source: S&P Global Market Intelligence; Data as of 1/5/2023

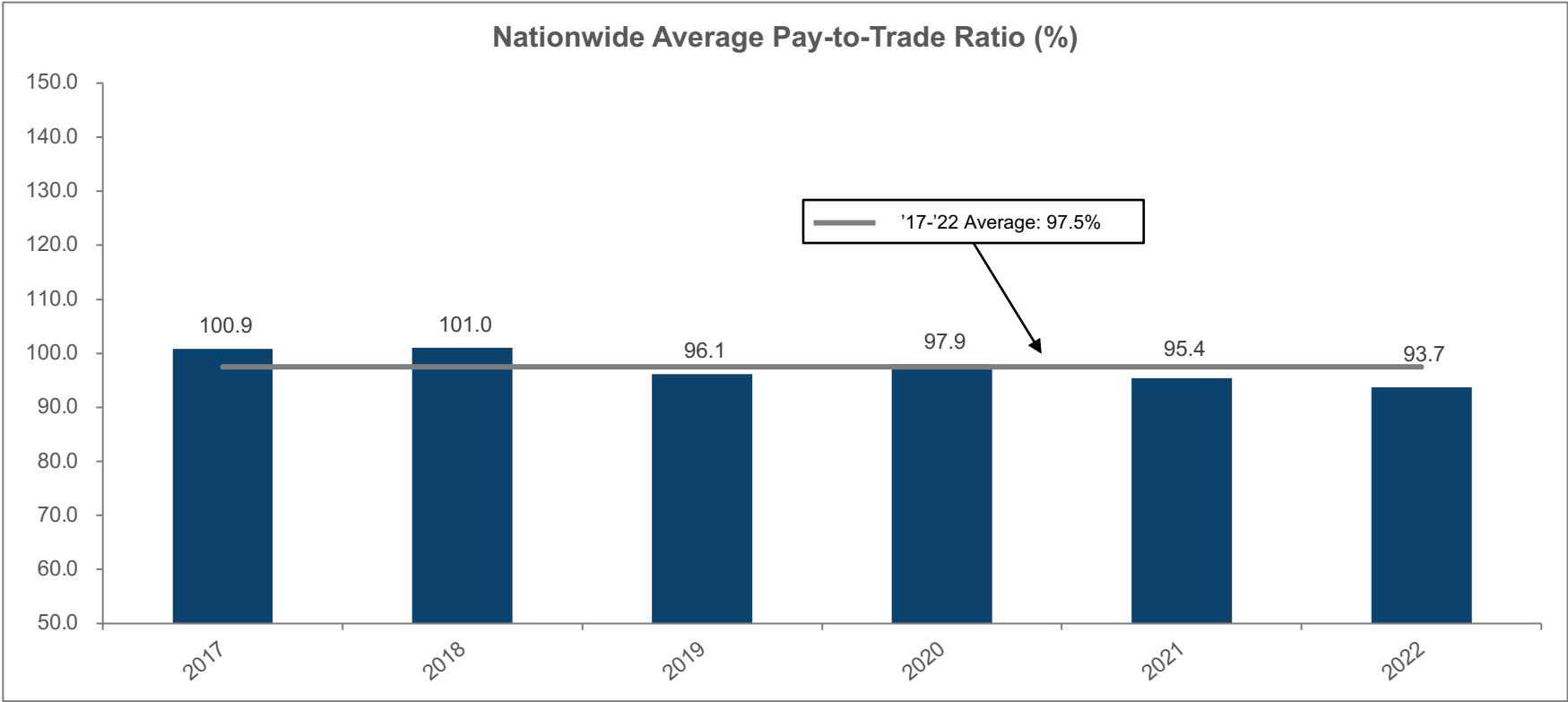
AOCI HAS ARTIFICIALLY INFLATED BANKS' PRICE-TO-TANGIBLE BOOK VALUE

NUMBER OF BANKS WITH PRICE-TO-TANGIBLE BOOK VALUES GREATER THAN 2.00X

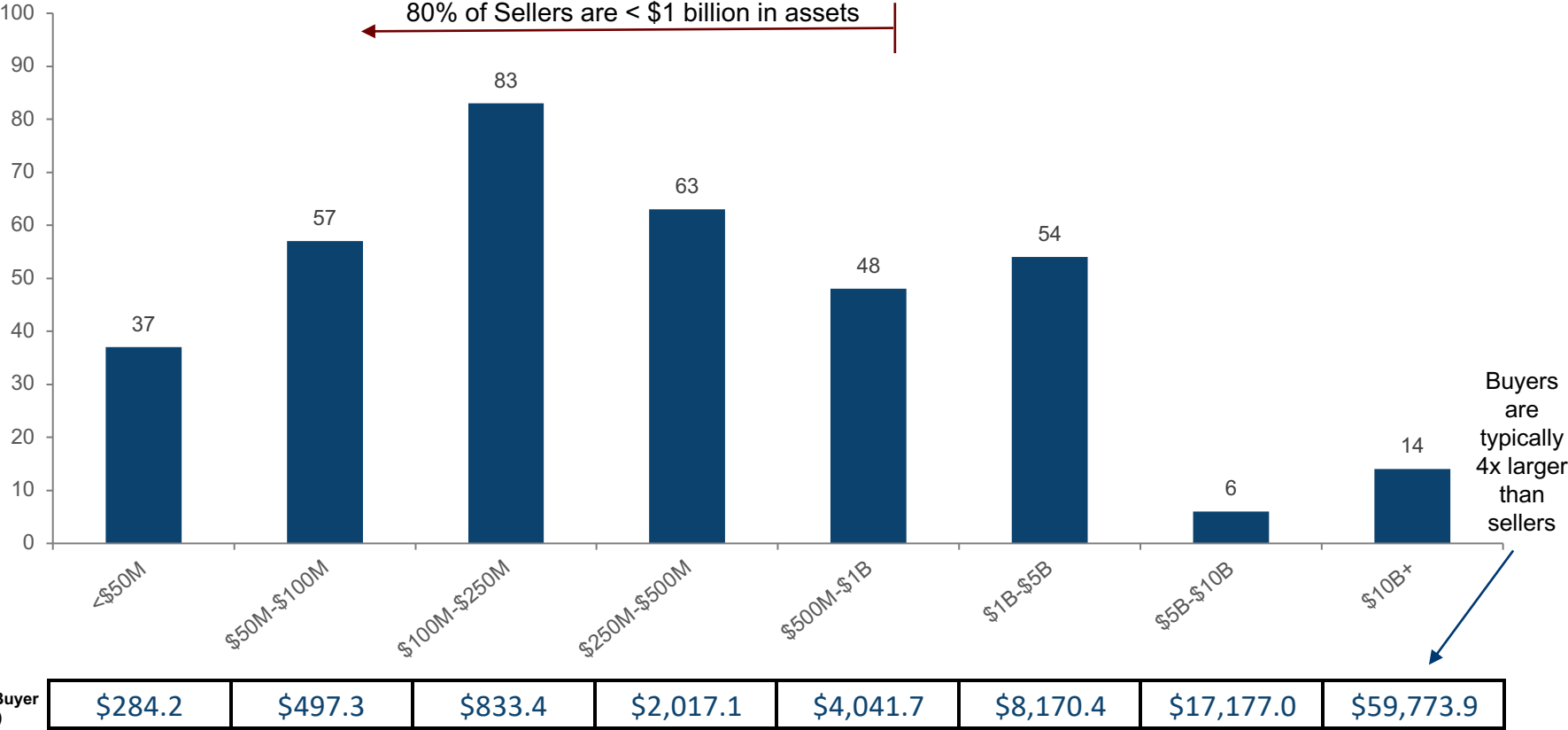


*Note: Includes all banks traded on the NYSE and NASDAQ exchanges where price-to-tangible book metrics are available
Source: S&P Global Market Intelligence; Data as of 1/5/2023*

WHOLE BANK & THRIFT M&A TRENDS: PAY-TO-TRADE RATIO

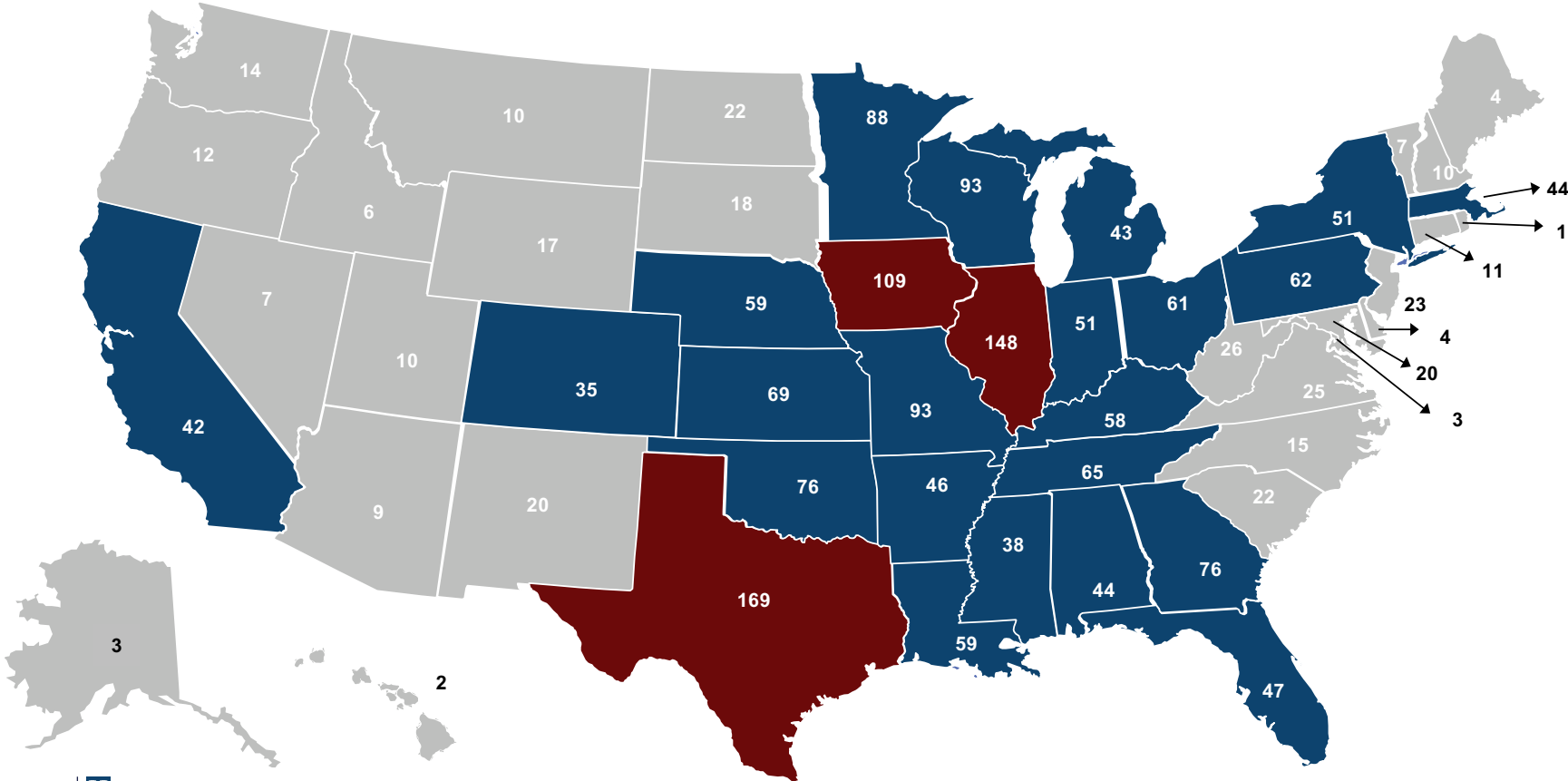


SELLERS BY SIZE OF BANK FOR 2021 AND 2022



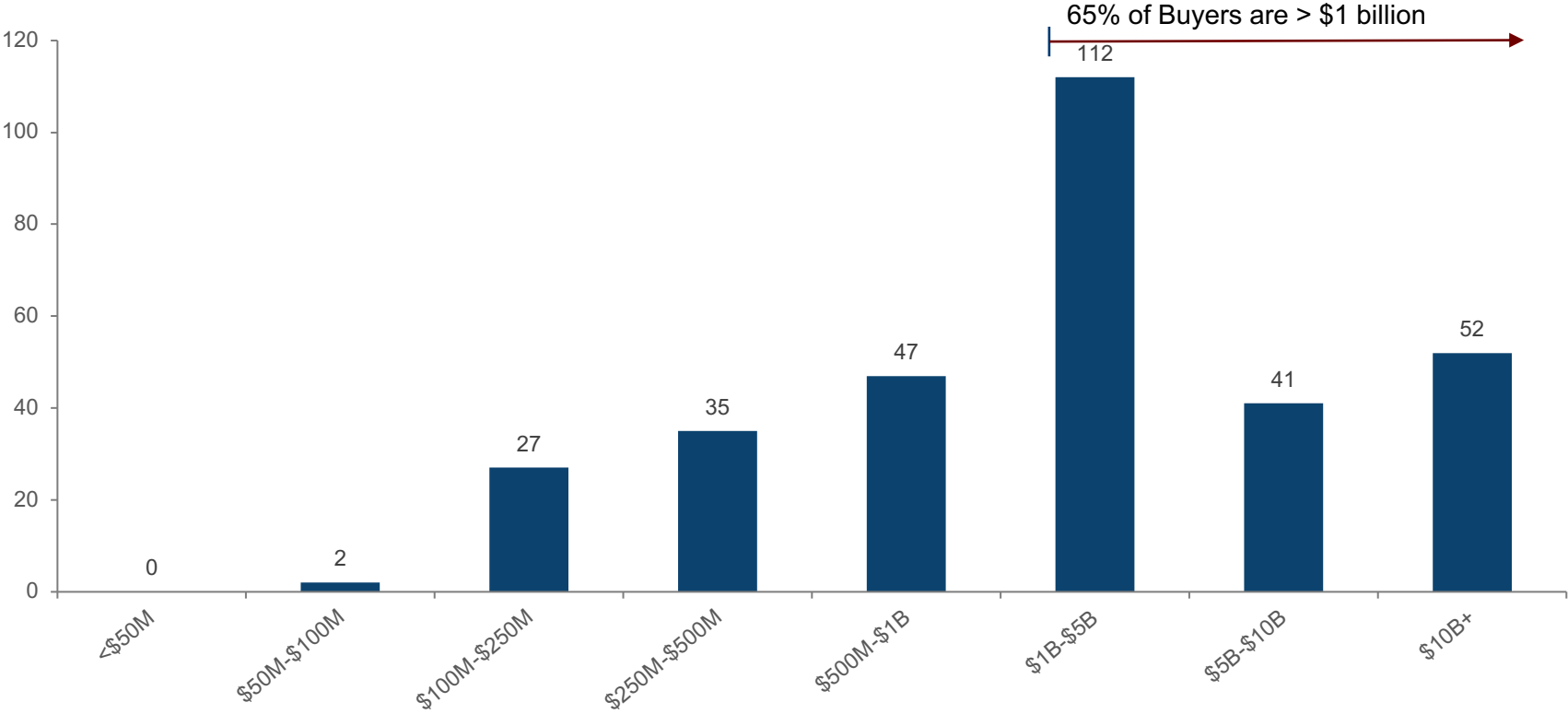
Median Buyer Size (\$M)

NUMBER OF COMMERCIAL AND SAVINGS BANKS BY STATE: \$200 MILLION – \$1 BILLION



Note: Institutions screened 12/31/2022; Includes all top tier consolidated regulated depositories; Grey = 0-30, Blue = 30-100, Red = >100
Source: S&P Global Market Intelligence

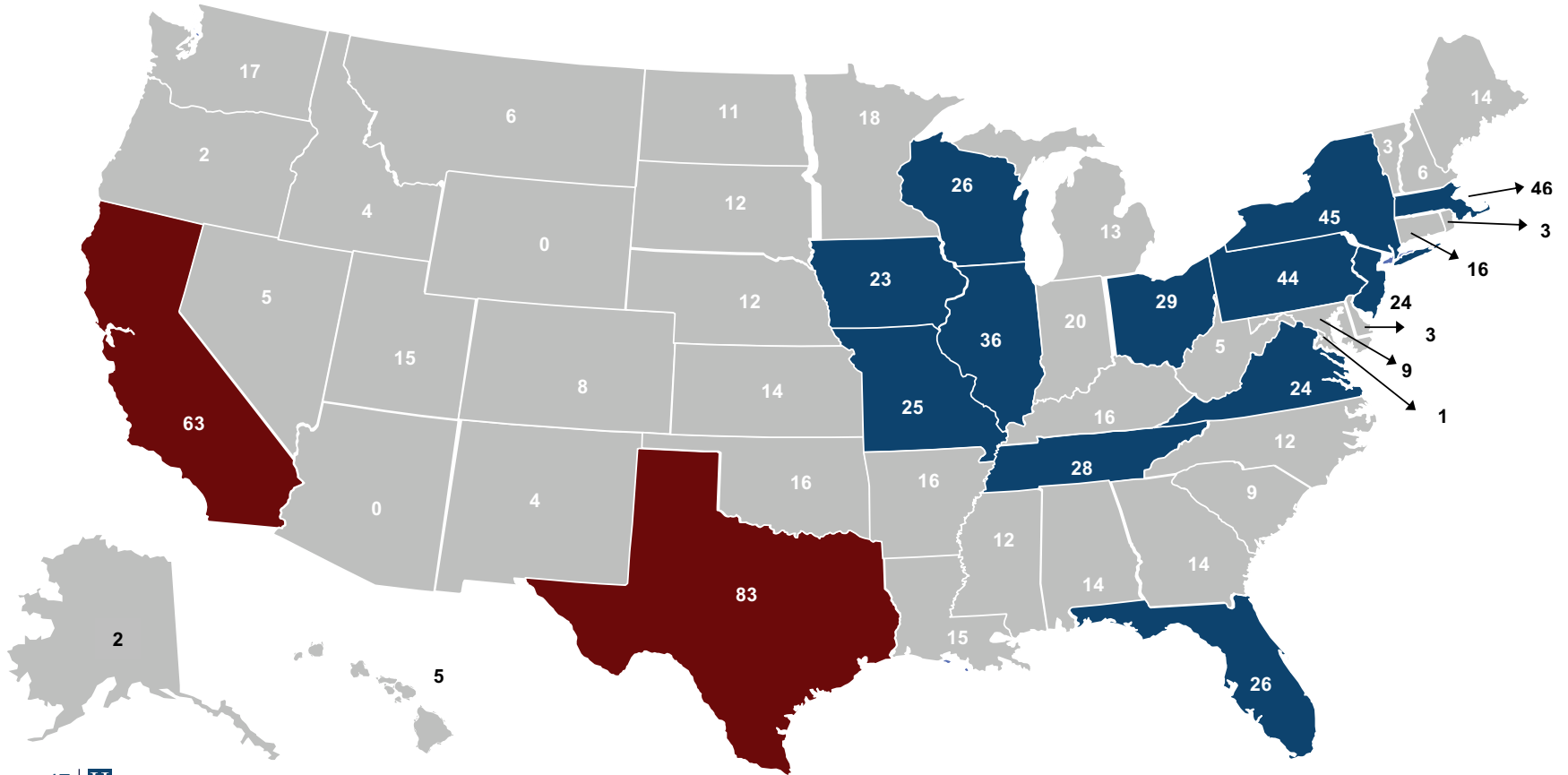
BUYERS BY SIZE OF BANK FOR 2021 AND 2022



Median Seller Size (\$M)

\$31.8	\$75.1	\$169.6	\$345.0	\$686.6	\$1,506.9	\$6,896.6	\$24,005.4
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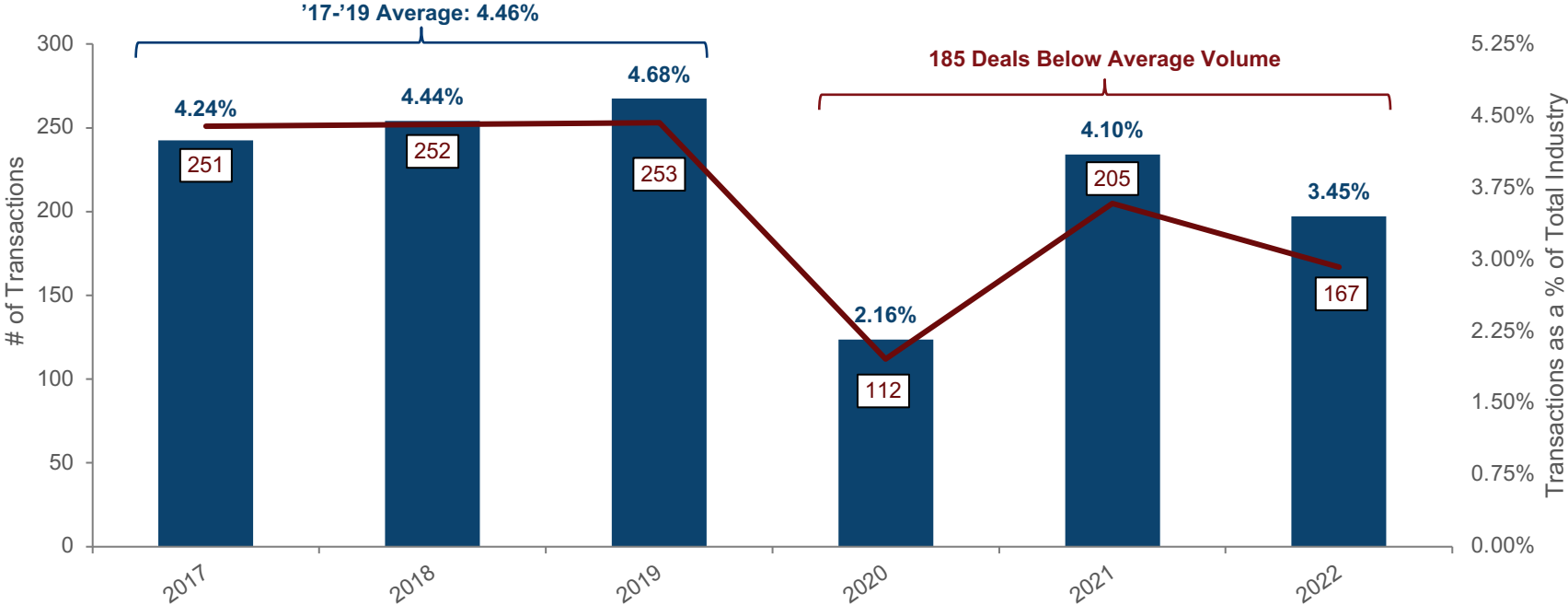
NUMBER OF COMMERCIAL AND SAVINGS BANKS BY STATE: \$1 BILLION – \$50 BILLION



Note: Institutions screened 12/31/2022; Includes all top tier consolidated regulated depositories; Grey = 0-20, Blue = 20-50, Red = >50
 Source: S&P Global Market Intelligence

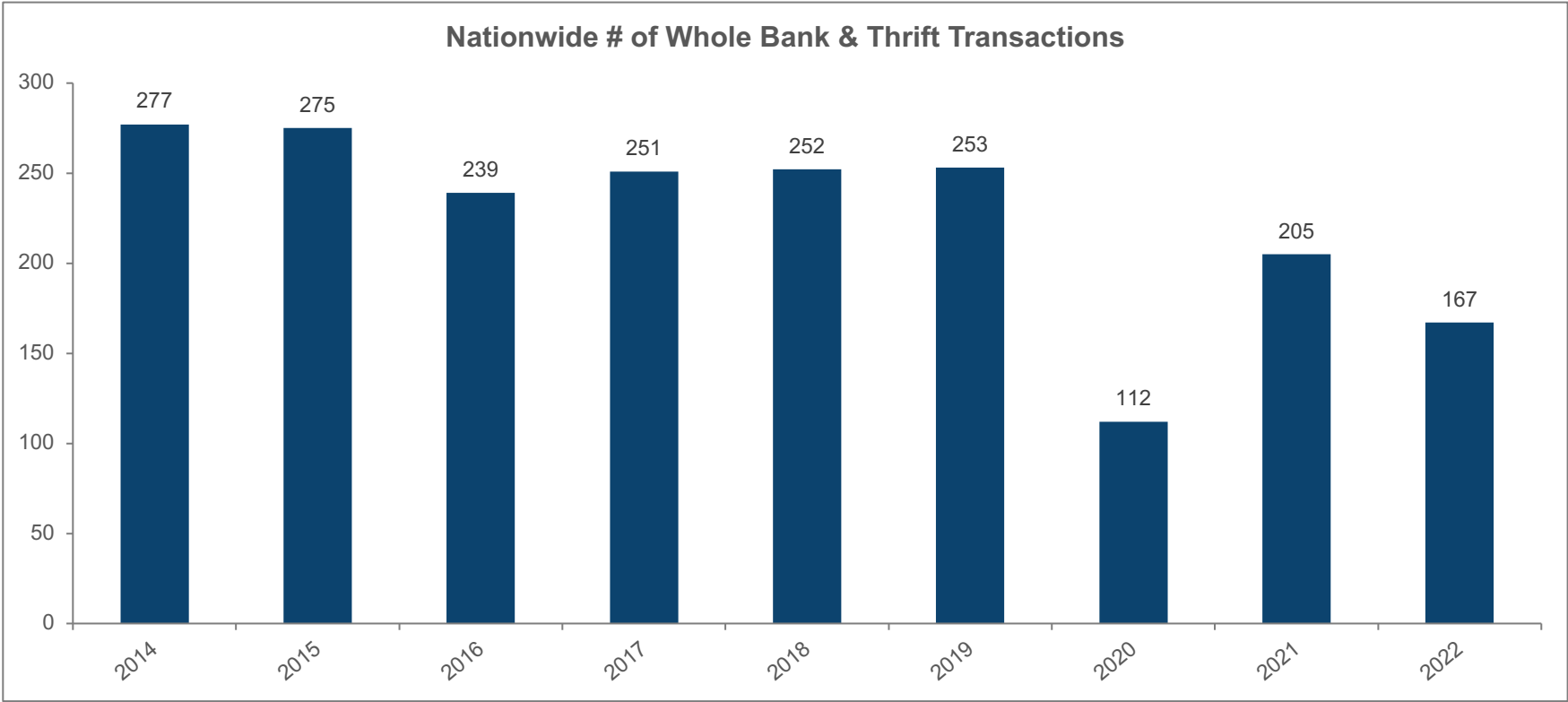
BACKLOG OF PENT UP SELLER DEMAND

Nationwide # of Whole Bank & Thrift Transactions

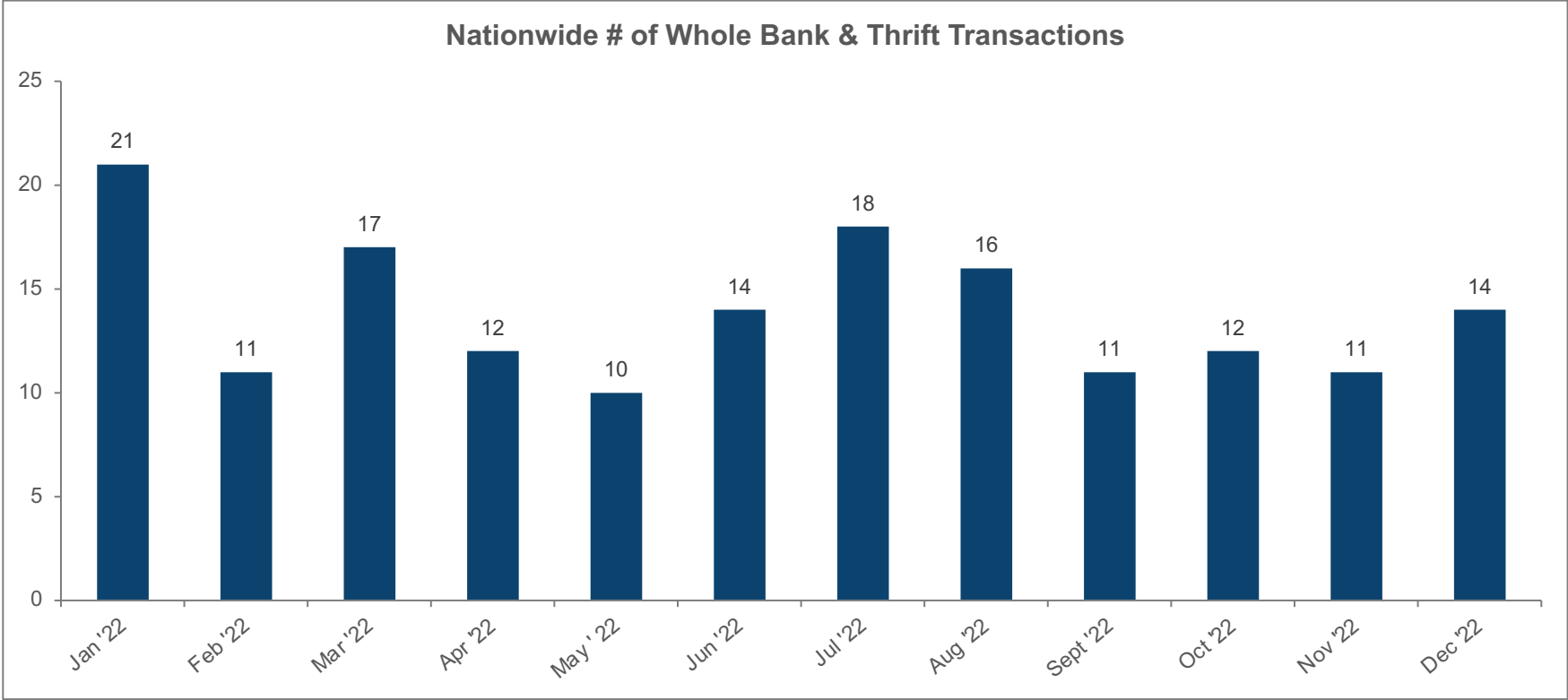


Note: Transactions as a % of Total Industry is based on the total number of FDIC-insured institutions for the previous year
Data as of 12/31/2022
Source: S&P Global Market Intelligence

WHOLE BANK & THRIFT M&A TRENDS

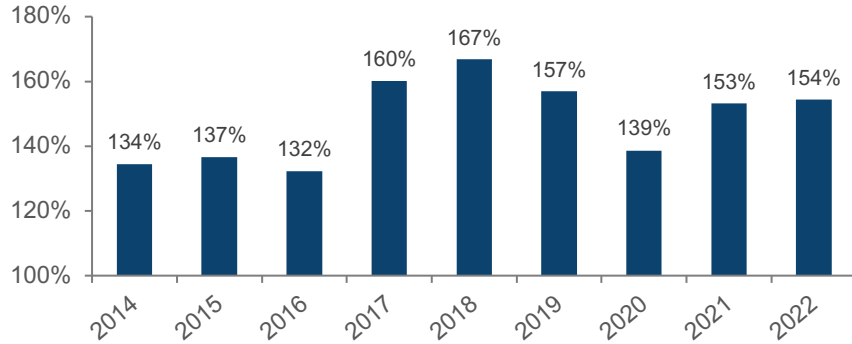


MONTHLY WHOLE BANK & THRIFT M&A TRENDS

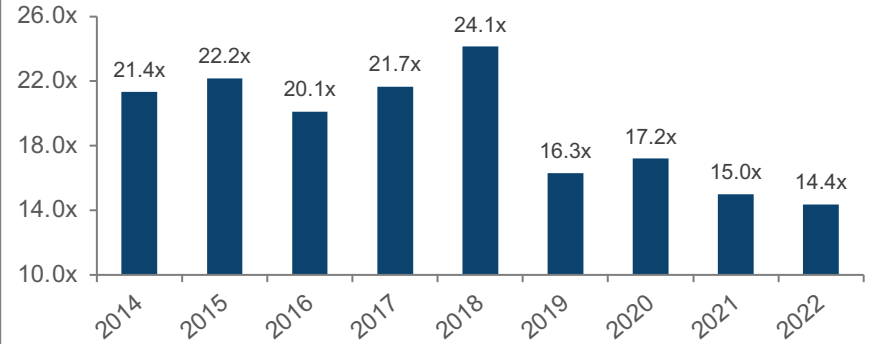


WHOLE BANK & THRIFT M&A TRENDS

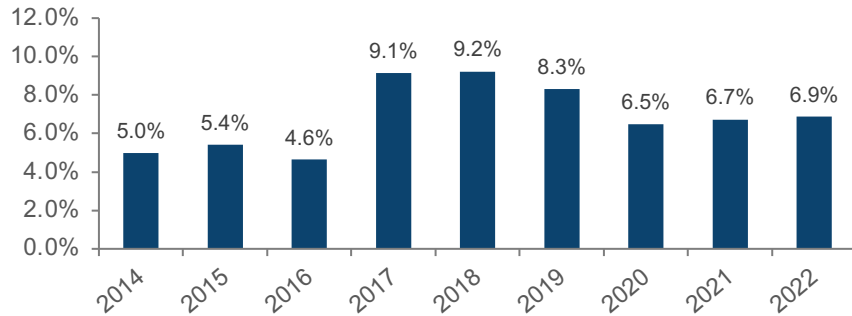
Nationwide Median Price-to-Tangible Book Value



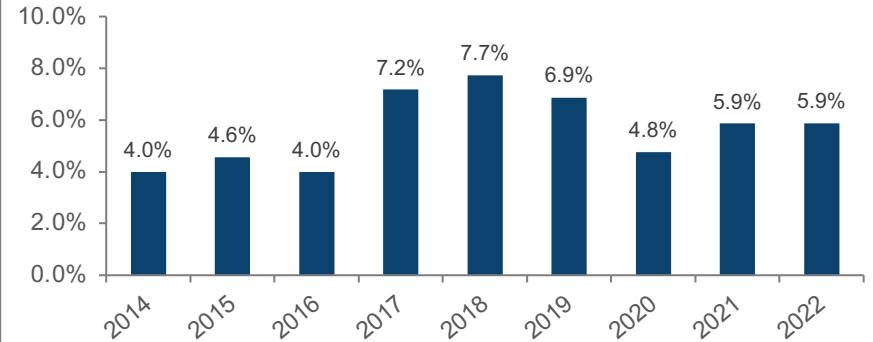
Nationwide Median Price-to-LTM Earnings



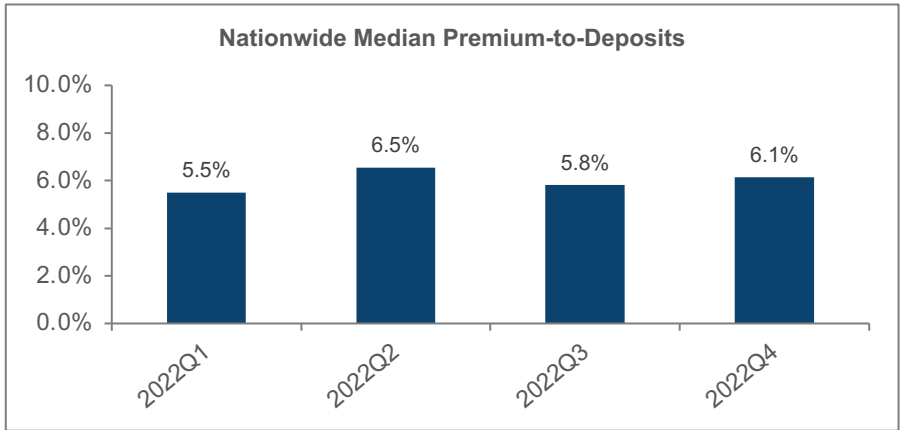
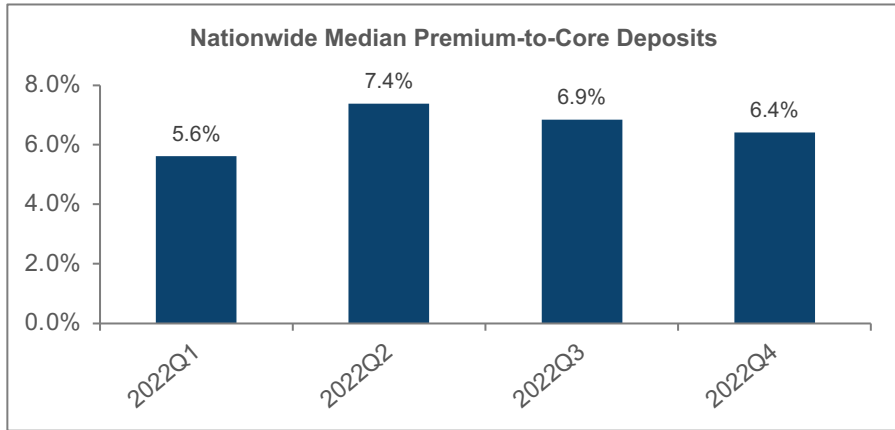
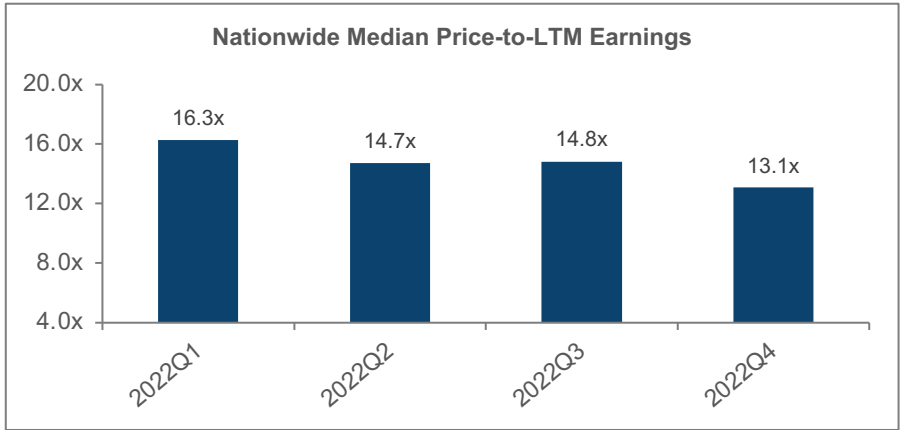
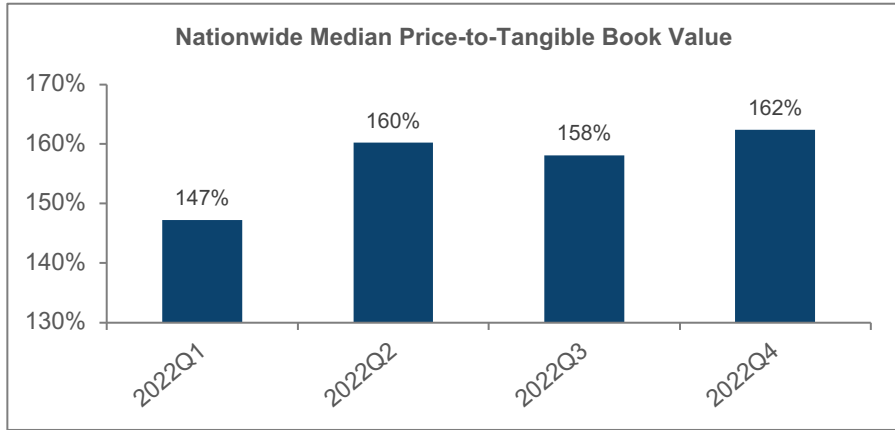
Nationwide Median Tangible Book Premium-to-Core Deposits



Nationwide Median Tangible Book Premium-to-Deposits



QUARTERLY BANK & THRIFT M&A TRENDS



M&A DEALS MEDIANS SINCE SEPTEMBER 1ST

WHAT DEALS ARE GETTING DONE IN THIS ENVIRONMENT?

19 Transactions

Median Seller
Assets:
~\$1 Billion

Median Seller
Loans/Deposits:
86.3%

Median Seller
LTM ROAA:
1.19%

Median Seller
TCE:
9.33%

MEDIAN PRICING MULTIPLES

Median
Price-to-Earnings:
14.1x

Median
Price-to-TBV:
176.1%

Median
Deposit Premium:
7.37%

MEDIAN FINANCIAL IMPACT

TBV Earnback:
2.6 years

TBV Dilution:
(4.3%)

Gross Loan
Interest Rate Mark:
(2.0%)

THE SHAPE OF M&A DEALS IN THE CURRENT ENVIRONMENT

SHAPING M&A DEALS IN THE CURRENT ENVIRONMENT



WHAT CREATES VALUE FOR BANKS?

CHARACTERISTICS ENHANCING VALUE

- History of organic growth
- Core profitability from NIM and fee income
- Market with organic loan demand
- Core low-cost depository relationships
- Synergies with buyer
- Willingness to take stock as consideration – especially publicly traded
- Wealth management income
- Strong management bench

CHARACTERISTICS LIMITING VALUE

- Non-organic growth
- Markets with low or negative growth demographics
- Transactional earnings (mortgage and asset sales)
- High funding costs or non-core funding
- Reliance on key individual(s) with flight risk
- Specialty lending or other niche or ethnic focus
- Requirement of cash as consideration

V WHAT IS NEXT?



DEPOSITS ARE THE NEW BATTLEFIELD – FINTECH CAN BE AN ALLY

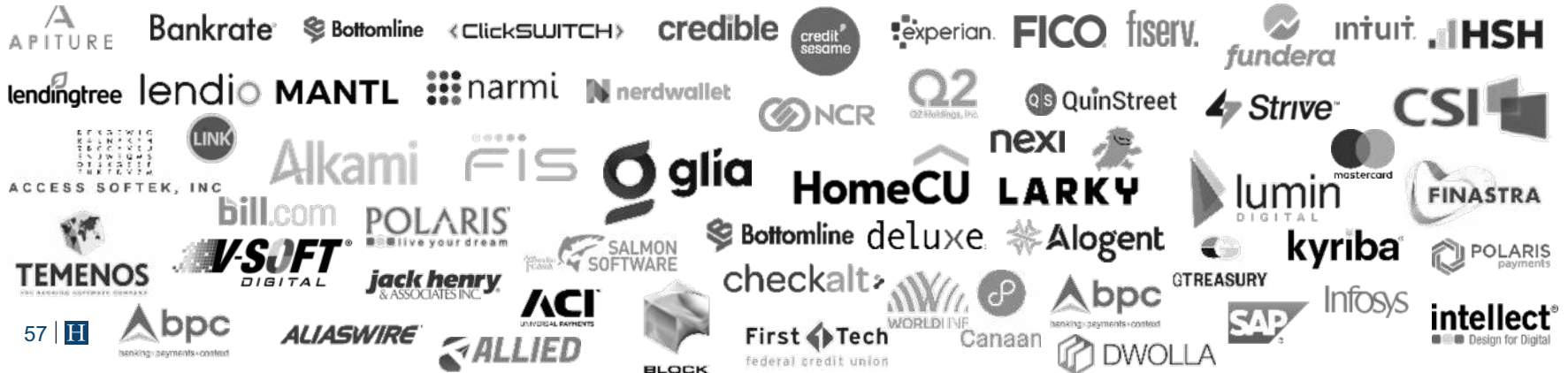
COMMUNITY BANKS

VS.

BIG-5 BANKS,
LARGE REGIONALS &
CREDIT UNIONS

Community Banks have approximately a 10% to 14% market share of primary checking accounts.

DEPOSIT-ORIENTED FINTECH PARTNERS AROUND



FINAL THOUGHTS FOR 2023

OBSERVATIONS

- Bank capital strains could potentially intensify with credit and/or liquidity developments
- Focusing on percentage ownership vs. nominal price can identify favorable merger opportunities
- We are in the lowest tax environment for the rest of our lifetimes

ACTION STEPS

- Raising additional capital while the window is open appears wise
 - ✓ Transformational opportunities may be available to those with capital
 - ✓ The risk/reward analysis favors having it on hand
- Strategic planning is critical – keep your board informed and ready to act

HOVDE GROUP PROFESSIONALS & CONTACT INFORMATION

HOVDE GROUP OVERVIEW

Hovde Group, LLC is a leading U.S. financial advisory group that provides a full-service suite of investment banking, capital markets, financial advisory, sales and trading, and equity research services focused exclusively on the banking industry. It has been a leading advisor in the banking sector for over 35 years.

Hovde's experienced professionals advise banks across all 50 states and provide the expertise, resources and focus necessary to structure, negotiate and successfully close the most complex strategic M&A and capital transactions.

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