Bank Valuation Basics

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Mercer Capital Depository Institutions Group

About Mercer Capital

Overview

Mercer Capital is a national business valuation and financial advisory firm.

Our clients include private and public operating companies, financial institutions, asset holding companies, high-net worth families, and private equity/hedge funds.

Mercer Capital's technical discipline of providing well-grounded valuation opinions is buttressed by real world experience gained in providing advisory services. Likewise, the market-centered orientation of financial advisory services has as its foundation a keen understanding of valuation drivers.

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- Corporate Transactions
- Financial Reporting
- Employee Benefit Plans
- Tax Compliance and Reporting
- Litigation Support

Financial Advisory

- Corporate and Strategic Advisory
- Mergers & Acquisitions
- Fairness Opinions

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Outline for Today's Presentation

Part One: Community Banks

- Overview
- Financial Statement Basics
- Recent Industry Trends

Part Two: Valuation

- Overview
- Guideline Public Company Method
- Guideline Transactions Method
- Discounted Future Benefits Method
- Special Issues

Q&A

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Community Banks
Overview

- Financial institutions include several kinds of financial entities
  - Depository Institutions - Banks, bank holding companies, saving banks, mutual savings banks, stock-owned thrift institutions, mutual thrift institutions, and credit unions
  - Asset managers – RIAs, hedge fund managers, PE managers, broker/dealers, etc.
  - Insurance companies – Agencies, Underwriters, Ancillary (Administrator/Claims Adjusters)
  - Specialty Finance and Real Estate Companies

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Community Banks
Overview

- Depository institutions have several common characteristics
  - Accept deposits from consumers and/or businesses
  - Deposits are generally insured by the federal government
  - Chartered by federal government or various states and regulated by agencies of these government
  - Generally deploy the acquired deposits by making loans to customers, either businesses or consumers, or making other investments that provide earnings
- Community banks are a subset of this group

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Community Banks
Overview

- What is definition of a community bank?
  - Lots of different definitions
  - Historically, definition has been banks with less than $1 billion in assets
  - FDIC definition is a bit more broad (FDIC Community Banking Study – December 2012)
    - Definition focuses on traditional lending and deposit gathering and limited geographic scope
    - Based on FDIC definition, 7,658 FDIC insured community banks operating within 6,914 separate organizations
    - Other interesting notes from FDIC study
      - Multi-decade consolidation trend - 17,901 federally insured banks in 1984 to 7,357 in 2011
      - Share of industry assets held by community banks has declined. Banks with assets greater than $10 billion control 80% of industry assets in 2011 compared to 27% in 1984

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Community Banks
Overview

- Banks vs. Operating Companies
  - Key Similarities
    - The goal is to provide a return on capital invested
  - Key Differences
    - A bank's success or failure has a more direct link to the balance sheet
      - In operating companies, this link is less clear as issues such as marketing, technological innovation and market position can be more important than financial structure

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Community Banks
Financial Statement Basics

Balance Sheet Overview

- Assets consist primarily of cash and equivalents (vault cash, deposits at other banks, Fed Funds sold), investment securities, and loans
- Liabilities mostly consist of deposits
- Banks do not have distinction between current and long-term assets and liabilities
  - Key difference from operating company
- Inherent leverage in business structure to support functioning of bank loans

Assets	Liabilities and Stockholder's Equity
Securities Portfolio	Demand Deposits
Loan Portfolio	Time & Savings Deposits
Loan Loss Allowance	Total Deposits
Earning Assets	Fed Funds Purchased
Cash	Long-term Debt
Plant, Property, and Equipment	Total Liabilities
Intangible Assets	Common Stock
Total Assets	Stockholder's Equity
	Total Liabilities and Stockholder's Equity

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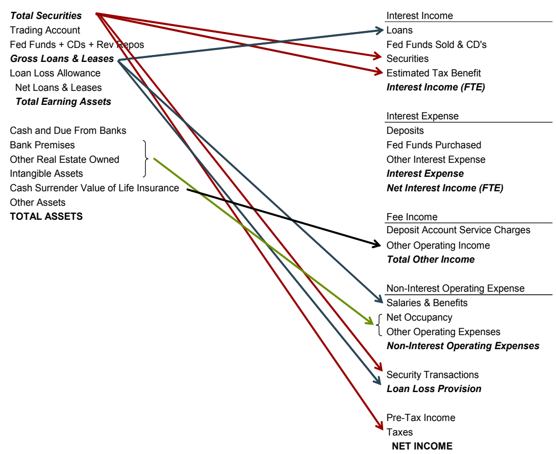
Community Banks

Financial Statement Basics

Since a bank's balance sheet drives its income statement, let's start with the balance sheet



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Community Banks

Financial Statement Basics

Key Balance Sheet Items

- Loan/Deposit or Loan/Asset Ratios – one measure of the risk of a bank. A high loan/deposit ratio signals potentially higher liquidity risk. Low ratios signal less liquidity and credit risk, but at the expense of lowering profitability
- Loan Portfolio Composition – extent of diversification among multiple types of loans
- Loan Loss Reserve - reserve to cover probable loan losses in the portfolio. The loan loss reserve is reduced by loan losses and replenished by a charge to earnings
- Non-Performing Assets – an asset that the bank has deemed to present greater-than-average risk of loss
- Capital – the "cushion" available to absorb losses that occur or expand the bank's assets. Banking regulations provide benchmarks for capital levels
  - Capital adequacy is key

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Community Banks
Financial Statement Basics

Net Interest Income
- Interest Income-Interest Expense
- Most of banks' revenues
- Must maintain spread between rates earned and rates paid

(+) Non-Interest Income
- Complements interest income and helps offset expenses
- Important for growth and diversification

(=)Total Revenues

Total Revenues

(-) Non-Interest Expenses
- Expenses not related to interest often occur during expansion and can be analyzed using the efficiency ratio

(-) Loan Loss Provision
- Charge to replenish loan loss reserve

(-) Income Taxes

(=) Net Income

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Community Banks
Financial Statement Basics

Key Ratios
- Return on Equity
  - Net Income/Equity
  - Measures how productively the bank invests its capital
- Return on Assets
  - Net Income/Total Assets
  - Measures the productivity of the assets deployed by the bank

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Community Banks
Financial Statement Basics

Risk Factors

- Credit Risk - potential that some of a bank's investments, in either loans or securities, may not be repaid according to their terms
- Interest Rate Risk - changes in net interest income or the change in the value of net assets caused by changes in market interest rates
- Liquidity Risk - bank's ability to meet its obligations, such as commitments to fund loans or deposit withdrawals, in the ordinary course of business
  - Results from loans not being immediately marketable, such that a highly "loaned-up" bank may not be able to pay off maturing deposits

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Community Banks
Financial Statement Basics

- Banks are highly regulated entities
  - Another key difference from most operating companies
- Key regulatory agencies include:
  - Federal Deposit Insurance Corporation (FDIC) - guarantees safety of insured deposits with banks, through the Deposit Insurance Fund
  - Office of the Comptroller of the Currency (OCC) - chief regulator officer for national banks and is responsible for governing the operations of national banks; assesses financial condition, soundness of operations, quality of management, and compliance with federal regulations
  - Federal Reserve - central banking system of the U.S.; also regulates bank holding companies
  - U.S. Securities and Exchange Commission (SEC) - enforcing the federal securities laws and regulating the securities industry, the nation's stock and options exchanges, and other electronic securities markets

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Community Banks
Financial Statement Basics

Basel III Capital Regulations

- Core equity requirements are increasing
  - Minimum 7.0% tier one common with 2.5% buffer
  - Minimum 8.5% tier one and 10.5% total capital
- Push to reduce parent company leverage
  - Trust preferred phase-out
  - Parent companies to hold more liquidity
- Reworking of asset risk weights creates potential issue
  - Heavier risk weighting for NPAs creates pro-cyclical capital requirements
  - Community banks are heavily invested in CRE

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Community Banks
Recent Industry Trends

Current challenges

- Yields under NIM compression via Fed's zero interest rate policy
- Loan demand weak in most regions
- Mortgage gains are supporting fee income, but the refi wave may fade
- Operating leverage is tough to achieve given pressure on revenues and rising compliance expenses
- Regulatory expectations regarding higher capital ratios (and more common equity within the capital structure)

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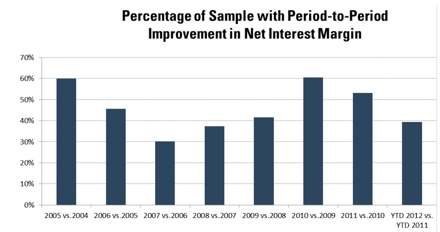
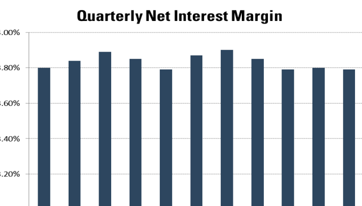
Net Interest Margin

61% of the banks had a lower YTD NIM vs. last YTD thru 9/11

More pressure to come given loan pricing competition and low reinvestment rates for bond cash flows, while COF leverage is limited





	1Q10	2Q10	3Q10	4Q10	1Q11	2Q11	3Q11	4Q11	1Q12	2Q12	3Q12
Net Interest Margin	3.80%	3.84%	3.89%	3.85%	3.79%	3.87%	3.90%	3.85%	3.79%	3.80%	3.79%

Peer group consists of approximately 3,600 banks with assets between $100 million and $5 billion

Source: Mercer Capital Presentation at AOBA Conference "Capital Management: Alternatives & Uncertainties"

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Efficiency Ratio

Operating leverage is directionally negative post-crisis

Small banks are at a competitive disadvantage

Efficiency Ratio = Non-Int't Expenses / (Net Int't Income + Non-Int't Income)

Source: Bank Holding Company Performance Reports

Source: Mercer Capital Presentation at AOBA Conference "Capital Management: Alternatives & Uncertainties"

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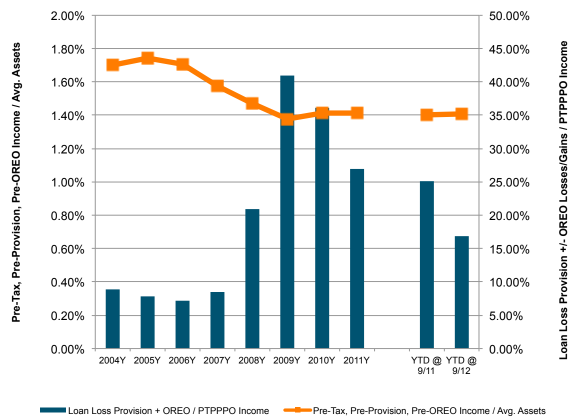
Credit Costs

Credit-related costs have trended down, offsetting pressure on PPOI

But … credit leverage is limited going forward



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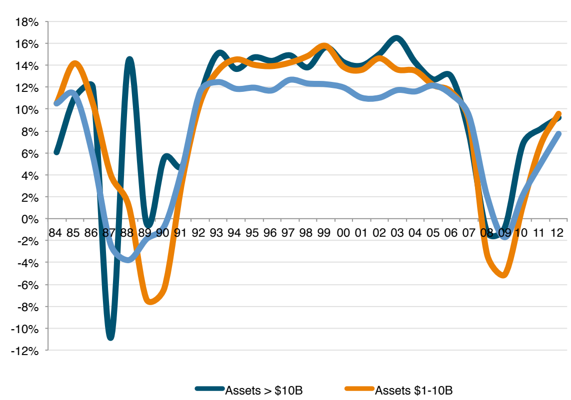
Return on Equity

ROE has rebounded

70s & 80s saw ROE volatility via three recessions and sharp rate moves

90-06 "great moderation"



Source: FDIC

Source: Mercer Capital Presentation at AOBA Conference "Capital Management: Alternatives & Uncertainties"

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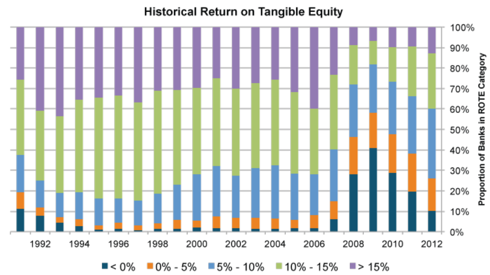
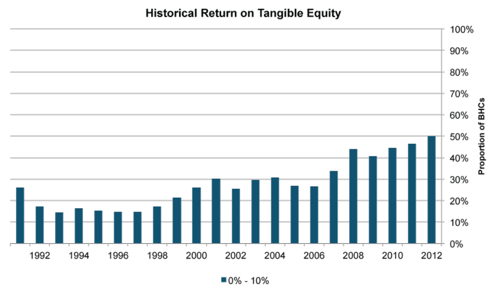
Return on Tangible Equity

YTD through September 2012, ~50% of the bank holding companies surveyed reported ROTE of 0-10%, representing the highest proportion over the 1991 to 2012 period

Proportion with negative ROEs fell from 41% in 2009 to 10% in 2012

Data set includes bank holding companies filing Form FR Y-9C with less than $5 billion of assets at September 30, 2012 (approximately 1,000 holding companies)





Source: Mercer Capital Presentation at AOBA Conference "Capital Management: Alternatives & Uncertainties"

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Three Key Elements of Valuation

Cash Flow	Risk	Growth

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Valuation
Overview

- Valuation is, by its nature, forward looking
  - Value is a function of estimates of future cash flows, risk and growth, which may or may not necessarily coincide with historical performance
- However, historical measures can often help predict (or confirm other estimates of) future cash flows, risk, and growth
- Any prediction of the future depends on the quality of the inputs
  - Appropriate adjustments to historical financial metrics can aid in making better predictions of future earnings
  - But what is an "appropriate" adjustment?
- Valuation is a range concept

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Valuation
Overview

- There's also an interaction between the three valuation elements
  - Short term cash flows and growth can be enhanced by taking more risk (of the credit or interest rate variety)
    - Keep in mind that earning power is in some sense a long-term concept, not necessarily a prediction of the next quarter's or year's earnings.
    - Impact of assuming an inappropriate level of risk is usually not immediately evident

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Valuation
Overview

- Community banks differ from larger banks
  - Composition of revenues – non-interest income often accounts for a smaller proportion of total revenue
  - Composition of loan portfolio – greater dependence on particular type of lending (often commercial real estate and construction loans)
  - Capital structures – not as leveraged. Regulatory capital requirements filled to a greater extent by components other than common equity
  - Diversification – not as diversified, as measured by geography, customer, etc.
    - Can cut both ways. A number of largest banks very diversified by product and geography but had major write-downs in financial crisis. Community banks may know their customers and understand the risks they are assuming better

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Valuation
Overview

- Community banks can differ from publicly traded community banks
  - Capital structure – private banks are more likely to have inefficient capital structures (excess equity over public banks and regulatory requirements)
  - Returns – more likely to see poor returns persist for longer periods of time
    - No activist shareholders to push them to sell
  - Location – rural vs. metropolitan. Most of the larger, public banks have pushed to expand in metro markets
  - More "weird" stuff

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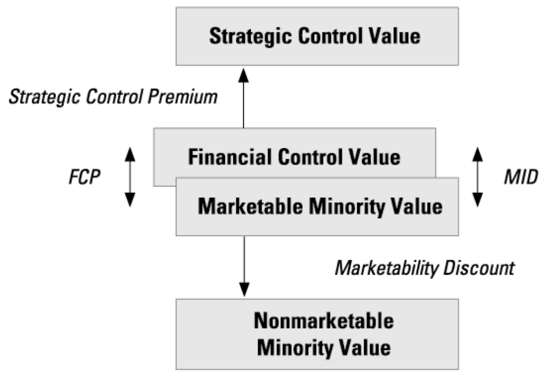
Valuation
Overview



Source: www.mercercapital.com

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Valuation
Overview

Valuation Approaches

- American Society of Appraisers (ASA) recognizes three general approaches to valuation
  - Asset Approach
  - Income Approach
  - Market Approach
- Within each approach, there are a variety of methods that appraisers use to determine value

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Valuation
Overview

Asset Approach

» "… a general way of determining a value indication of a business, business ownership interest, security, or intangible asset using one or more methods based on the value of the assets net of liabilities."

» Methods include: Net Asset Value

Income Approach

» "… a general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods through which anticipated benefits are converted into value."

» Methods include: Discounted Future Benefits

Market Approach

» "… a general way of determining a value indication of a business, business ownership interest, security, or intangible asset by using one or more methods that compare the subject to similar businesses, business ownership interest, securities, or intangible assets that have been sold."

» Methods include: Transactions, Guideline Public Company, and Guideline Transactions

Source: ASA Business Valuation Standards, Published in November 2009

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Valuation
Overview

Common Valuation Methods Applied When Valuing Banks

- Market Approach
  - Transactions Method
  - Guideline Public Company Method
  - Guideline Transactions Method
- Income Approach
  - Discounted Future Benefits Method

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Valuation
Guideline Public Company Method

- Value equals product of following inputs
  - Financial Metric
  - Multiple
- Both the financial metric and/or multiple may be subject to adjustment
- Typically consider multiples of earnings, forward earnings (i.e., budgeted), and tangible book value

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Valuation
Guideline Public Company Method

- Start with universe of public banks
- Segment further by screen for
  - Size
  - Geography
    - Difficult to find a good group for more rural banks
  - Profitability (ROA, ROE, etc.)
  - Loan composition
  - Growth (loans, EPS, etc.)

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Valuation

Guideline Public Company Method

- What if there is still no good group of comparable companies?
  - Start with a group of banks that is at least somewhat comparable (say, $300 - $500 million in assets and a ROE > 10%)
  - Select a multiple
    - Statistical approach (pick a multiple at the lower quartile instead of the median)
    - Adjust the median/average multiple judgmentally
  - Guideline transactions (i.e., merger and acquisition activity) can also sometimes serve as a reference point

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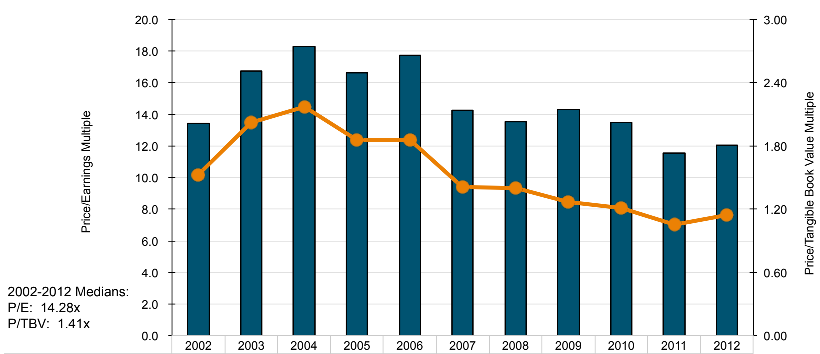
Guideline Public Company Method

Public Market Historical Trends

Price/Earnings and Price/Book Value Multiples
Banks with Assets of $500 Million - $5 Billion & Return on Tang. Equity Between 5% and 15%



	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Price / Earnings	13.4	16.8	18.3	16.6	17.7	14.3	13.5	14.3	13.5	11.6	12.0
Price / Tang. Book Value	1.53	2.03	2.17	1.86	1.86	1.41	1.40	1.27	1.21	1.05	1.14

Source: Mercer Capital Research, SNL Financial

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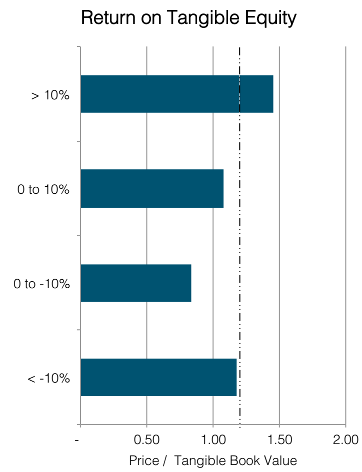
Valuation

Guideline Public Company Method

Price/Earnings
X Return On Tangible Equity
= Price/Tangible Book Value



Source: Mercer Capital Research & SNL Financial

Pricing as of February 15, 2013 (Financial info through Dec. 31, 2012)

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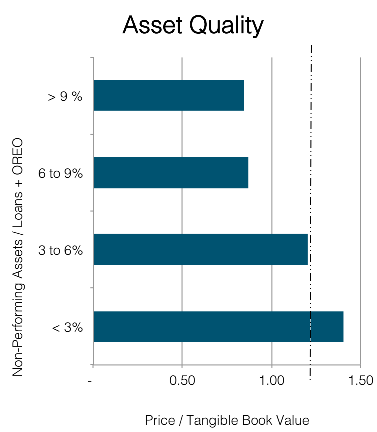
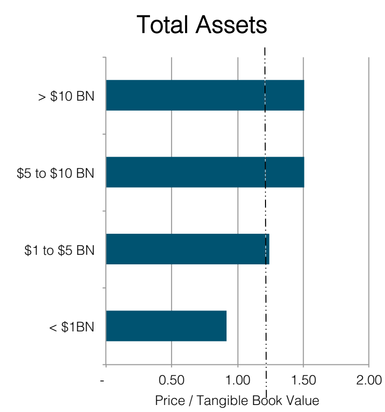
Valuation

Guideline Public Company Method





Source: Mercer Capital Research, SNL Financial, Pricing as of February 15, 2013 (Financial info through Dec. 31, 2012)

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Guideline Transactions Analysis

- Perhaps easier to apply to a small bank than a larger bank due to fact that most transaction activity involves smaller banks
- Can tailor the analysis relatively closely to the subject bank's location, size, performance, etc.
  - Trade-off is the timeliness of data.
- Consider multiples of earnings, tangible book value, and core deposits

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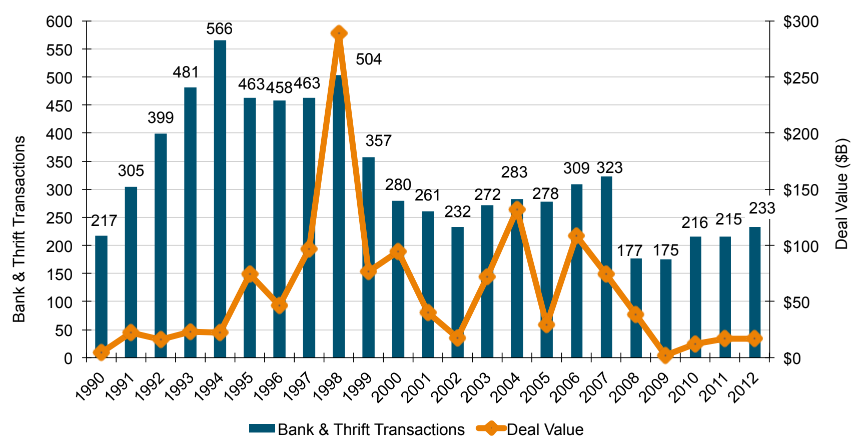
Guideline Transaction Analysis

Non-Assisted Bank & Thrift Acquisitions 1990-2012



Source: Mercer Capital Research ("Outlook for Bank M&A in 2013 Presentation") & SNL Financial

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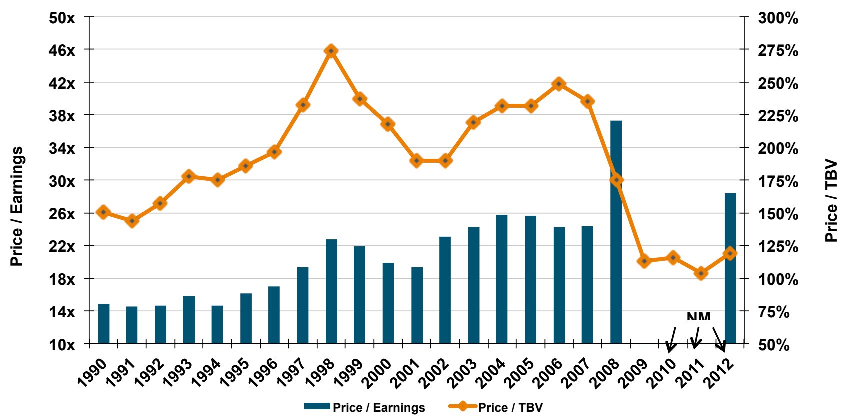
Guideline Transaction Analysis

M&A Multiples – P/E and Price/TBV



Source: Mercer Capital Research ("Outlook for Bank M&A in 2013 Presentation") & SNL Financial

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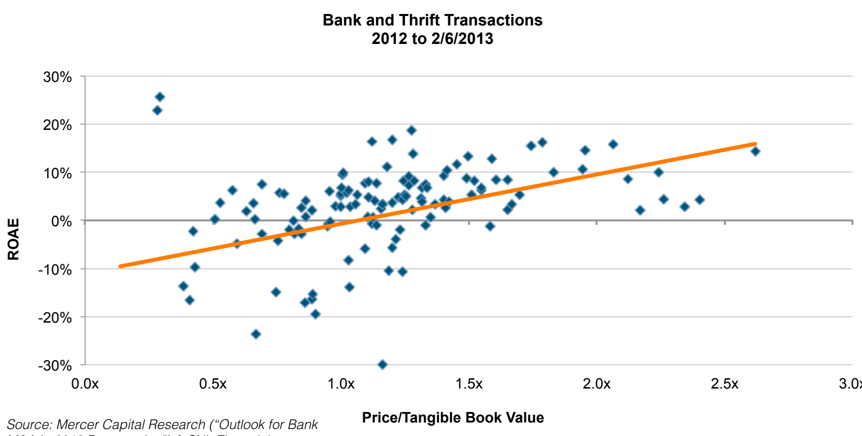
Guideline Transaction Analysis

Price/TBV vs. ROTE



Source: Mercer Capital Research ("Outlook for Bank M&A in 2013 Presentation") & SNL Financial

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Valuation
Discounted Future Benefits Method

- Relies upon a projection of future financial performance
  - Requires following inputs
    - Interim cash flows to shareholders/investors (dividends)
      - Amount necessary to be retained for the bank to achieve its target capital structure (based on a target capital ratio)
    - A “terminal” or “residual” value
      - Represents value of all cash flows received after the end of the forecast period
    - Discount rate
    - Discounting convention
  - Value equals the sum of the present value of the cash flows (#1 and #2 above), discounted at the discount rate

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Valuation
Discounted Future Benefits Method

- DCFs are helpful in certain circumstances:
  - Near-term growth is expected to exceed long-term expectations
  - Near-term profitability is low/high and is expected to revert to a mean
  - Capital structure may change in the future

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Valuation
Special Issues

- Possible ways to handle need for an adjustment:
  - When Estimating Financial Metric
    - Adjust the subject bank's income statement and balance sheet
    - Estimate earning power via normalized ROA or ROE
  - When Estimating Multiple
    - Adjust multiple derived to account for risk and/or growth differentials
  - Carve out part of the business and value separately

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Valuation
Special Issues – Common Adjustments

Income Statement

» Eliminate non-recurring gains and losses

» Eliminate other income and expense items

» Recognize normalized loan loss provision (i.e., greater than net charge-offs)

» Normalize tax rate

» Purchase accounting amortization

» Life insurance proceeds

Balance Sheet

» Adjust for unrealistic valuation of assets
  - Securities
  - Investments in other companies carried at cost or equity

» Recognize estimated cost of settling contingent liabilities

» Normalize loan loss reserve

» Adjust intangible assets

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Valuation
Special Issues

- S corporation banks
  - Bank itself records no corporate income taxes (taxes "pass through" to and are paid by shareholders)
    - Tax effect earnings as if it were a C corporation, because multiples are derived from public C corporations
    - Benefit of S election (avoidance of double taxation on shareholder distributions can be captured in the marketability discount)

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Valuation
Special Issues

Marketability Discount

- Market Approach – Restricted stock studies, pre-IPO studies
- Income Approach – Project cash flows over the expected holding period of the investor. Discount cash flows to present at a higher rate that reflects incremental risk of illiquidity

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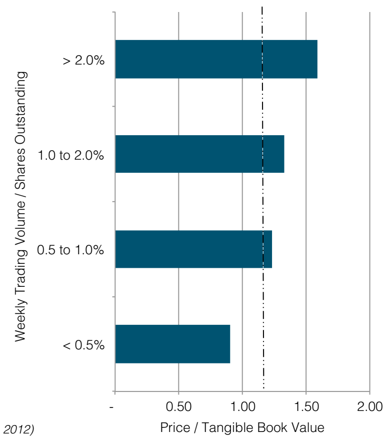
Valuation
Special Issues

Weekly Trading	Assets	NPAs / Loans+OREO	ROTCE
< 0.5%	733,895	4.01	5.83
0.5 to 1.0%	1,700,931	3.10	9.81
1.0 to 2.0%	2,823,692	3.07	9.82
> 2.0%	14,913,012	2.08	11.65

Trading Volume



Source: SNL Financial, Pricing as of February 15, 2013 (Financial info through Dec. 31, 2012)

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Valuation
Special Issues

- Weightings
- Holding Company & Bank
- Options
- Unique Capital Structure
  - Trust Preferred, Preferred (TARP, SBLF, Other), Types of Common (Voting/Non-Voting, Different Classes)

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Web Resources

www.fdic.gov

- Contains deposit market share data for all FDIC insured banks by geographic area
  - www.fdic.gov/sod/index.asp
- Contains the FDIC Quarterly Banking Profile, which provides a comprehensive summary of financial results for all FDIC-insured institutions and trends in banking industry
  - www.fdic.gov/qbp/index.asp

www.ffiec.gov

- Provides access to regulatory filings (Call Reports, FR Y-9Cs, FR Y-9LP and FR Y-9SPs for FDIC-insured financial institutions
  - www.ffiec.gov/reports.htm
- Provides Uniform Bank Performance Report, a report detailing performance and composition data for subject bank relative to peer group
  - www.ffiec.gov/UBPR.htm

www.snl.com

- Subscription site
- Provides data and industry news (comparable to Bloomberg but primarily dedicated to financial institutions)

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Questions?

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