

Bank Valuations: a Tough Environment for Bankers *and* Valuators

by Scott B. McCallum, MBA

Over the past 20 months, an unimagined series of events has caused a meltdown for banks and their stock valuations. The sub-prime debacle, the demise of Bear Stearns, the bankruptcy of Lehman Brothers, the government takeover of AIG, the failure of Washington Mutual, the shotgun weddings of Wachovia with Wells Fargo and of National City with PNC Financial, Treasury's Troubled Asset Relief Program (TARP), and displacement of private equity capital in the banking sector were sobering events, indeed. Throw in a broad and deep recession, higher unemployment, low consumer and business confidence, dysfunctional credit markets, FAS 157 mark-to-market gyrations in bank investment portfolios, and declining values in residential and commercial real estate (the underlying collateral for bank loans and some structured investments), and you've got a recipe for one world-class problem.

For the first time in a generation, bank failures are on the rise and, consequently, banks have gone into survival mode—hunkering down, protecting precious capital, cutting or eliminating dividends, de-leveraging and reducing risk, steering through the storm with hopes of better days down the road.

I guess we shouldn't be that surprised to find that bank stocks are down 37 percent year-to-date through March 31,

2009—even after a significant rally during March—and off 64 percent over the prior 52 weeks.* The NASDAQ, by comparison, was down a “mere” 3 percent year-to-date and 35 percent over the past 52 weeks. The SNL Bank Index now stands at the same level as it was back in 1996. (See Chart 1, page 20, for publicly traded bank pricing comparisons.)

While all of those forces have affected the entire banking industry, the focus of this article will be on small and medium-sized banks—those with less than \$5 billion in assets—since they are mostly privately owned, closely held, or thinly traded. This article will provide some background on small and midsize bank valuation analytics, including the fundamental drivers of a bank's franchise value, key valuation metrics, and traditional bank valuation methodologies. With that foundation, the focus will turn to the characteristics of bank valuations prior to 2008, as compared with those in the more recent 2008-2009 timeframe, including implications on bank valuations of the recent deployment of TARP capital. Lastly, I'll address two questions:

- What does all this mean for the valuation analyst?
- What will trigger a return to the fundamentals for bank valuation?

Three Primary Valuation Drivers

A bank's franchise value is fundamentally a function of

* Source: SNL Financial LC.

three primary drivers: earnings, core deposits, and capitalization.

1. Earnings are defined in terms of *profitability* (return on average assets and return on average equity) and *growth* prospects. A bank's net income is derived from:

Revenues consisting of (a) interest income on loans and investments, minus interest expense on deposits and borrowings; and (b) fee income from the sale of financial services

Less: provision expense for expected loan losses (similar to a bad debt expense in a non-financial firm)

Less: operating expenses (with personnel expenses typically accounting for the bulk of them)

Less: income tax expense

Banks that show the ability to generate higher earnings growth rates tend to support higher valuation multiples.

2. Core Deposits represent the mix of stable, low-cost deposit funding that differentiates banks from other

financial institutions and non-financial firms. Core deposits, which typically exclude jumbo CDs and brokered deposits, are difficult to replicate, and they also produce fee income. Banks with a high mix of low-cost core deposits tend to trade at and sell for higher multiples.

3. Capitalization is a bank's tangible equity capital (equal to stockholders' equity less goodwill and intangibles). Profitability and valuation metrics can be influenced by the degree of under- or over-capitalization. Tangible equity capital, which is usually considered the foundation of the valuation building block, is significantly influenced by regulatory minimum guidelines (as a percentage of tangible assets), regulatory expectations (above the guidelines), investor expectations, board expectations, historical operating and financial results, the level of risk inherent in a particular bank's loan and investment portfolios and, of course, management's point of view. Because of the liquid and financial

nature of its assets, the bank enjoys "natural leverage" to a significant degree, even though there may not be any "borrowings" in the traditional sense of the term. For every dollar of equity, the bank can grow its assets to about \$12, which implies an equity/asset ratio of around 8 percent—normal for most banks. The incremental funding would be provided by growth in deposits (which are liabilities on the bank's balance sheet).

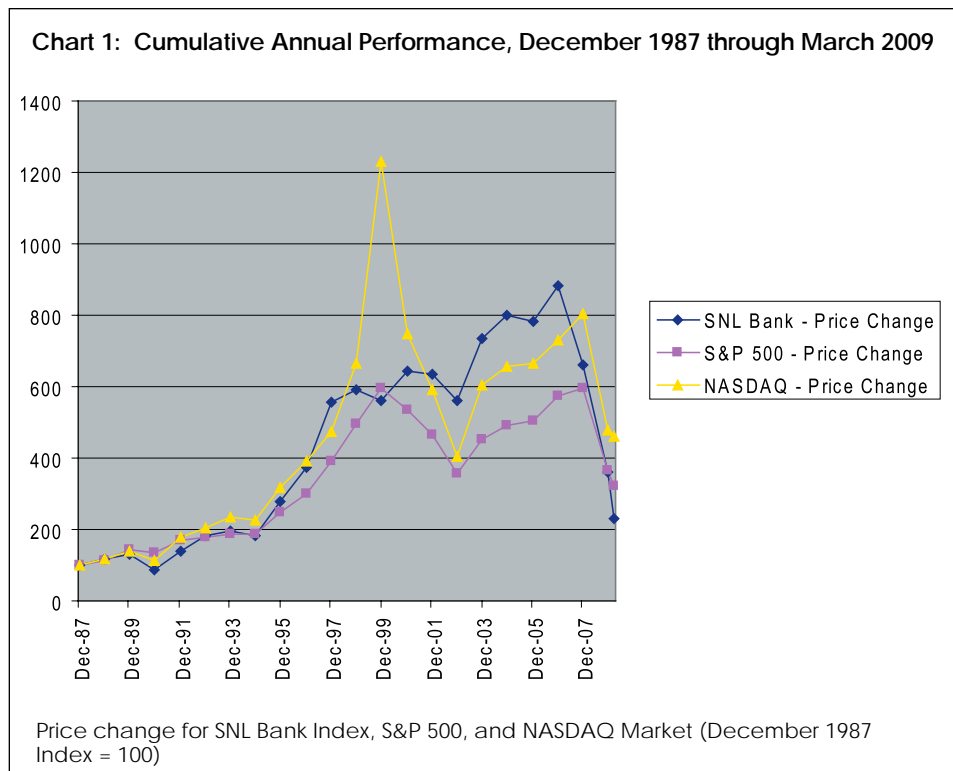
Good stewards of capital aim to strike a balance between having a big enough cushion for safety and soundness (from a durability perspective), managing with a return on equity mindset, and protecting against shareholder dilution.

Other important drivers of value include:

- Asset quality—in loan underwriting, ongoing monitoring, and problem-loan resolution. Banks with pristine asset quality tend to be more profitable and enjoy higher valuation multiples.
- Quality of management, which includes a strong risk management orientation, a positive reputation with regulators, and well developed board governance practices.
- Efficient operations, including smart utilization of outsourcing.
- Geography, i.e., local markets. Banks located in metropolitan statistical areas (MSAs) that have a combination of market density and growth elements often enjoy higher multiples. Banks located in rural or no-growth markets tend to have lower multiples when it comes to publicly held stock prices and takeover pricing.

Traditional Bank Valuation Methodologies

Bank valuation practitioners typically use five main methodologies, with



various weightings applied to each. The standard of value (fair value, fair market value, intrinsic value, etc.), the level of value (control, marketable minority, non-marketable minority interest), and the purpose of the valuation are important factors, as well. The five main methodologies are discounted cash flow, net asset value, guideline transaction for minority share trading, guideline transactions for sale of control, and market price.

Discounted Cash Flow

This approach takes annual earnings or free cash flow forecasted over a projection period (typically five years). Because of the forward-looking nature of this method, it is best used in a going-concern context. A target capital ratio is used to ensure normalized capitalization, in order to reduce the distorting effects of under- or over-capitalization. Dividends, stock repurchases, stock issuances, and the exercise of stock options are also factored into the analysis. The periodic flows are discounted back to the present based on an assumed cost of capital discount rate (typically based on the capital asset pricing model). Then a residual value is calculated based on either (a) capitalization of fifth-year earnings, or (b) a modeled sale of the bank earnings or book value multiples applied at the end of the fifth year. That residual value is also discounted back to the present. The present values are aggregated into a net present value-per-share calculation.

Net Asset Value

This method makes market adjustments to the accounting-based book values of balance sheet assets and liabilities. It is designed to provide a current snapshot and, as such, is used in a liquidation context when there is no going concern. For the most part, bank securities portfolios were marked to market regularly and fairly easily. The loan cash flows (principal and interest) are discounted using the current national loan rates observed at the time of the valuation. The result would

be either a markup or a markdown of the book value of loans. The loan loss reserve is adjusted if the expected loan losses are materially different from what can be absorbed in the reserve. Premises and equipment are adjusted to estimated fair market values. The liability for time deposits is valued using the same national market methodology mentioned above for loans.

Core deposits consist of the relatively stable non-interest-bearing demand deposits, interest-bearing checking deposits, savings accounts, and money market accounts. The net asset value (NAV) methodology for valuing core deposits consists of calculating a net earnings stream for each core deposit type, then calculating the net present values of those streams using a depletion schedule (using sum-of-the-years digits) for the expected lives of those account types. Often, that core deposit value is one of the largest markups to stated book value.

The market values for short- and long-term debt and other non-deposit liabilities are also derived. NAV is determined by starting with stated book value of equity, deducting goodwill and intangibles, and then adding the cumulative adjustments for the line items in both assets and liabilities.

Guideline Transactions for Minority Share Trading

This approach is based on observing recent and historical trading multiples for publicly traded peer groups of banks. Peer groups are often defined by size and growth rates of bank assets, geography, profitability, capitalization, asset quality, and business mix. Publicly traded prices are usually consistent with a marketable, minority-interest valuation level. Consequently, if the bank is privately held, these values may need to be adjusted downward for a marketability discount. Trading multiples for banks typically are expressed in terms of:

- Price to earnings ratio
- Price to book ratio
- Price to tangible book value ratio (book value less goodwill and other intangibles)

Guideline Transactions for Sale of Control

This approach is based on observing recent and historical M&A trading multiples for similarly situated banks. These values usually reflect control premiums, which may have to be estimated and accounted for, in order to compare with other methodologies. M&A multiples for banks typically are expressed in terms of:

- Price to earnings ratio
- Price to book value
- Price to tangible book value
- Premium as a percentage over core deposits (price less tangible book value, divided by total core deposits [which are total deposits less jumbo CDs and brokered deposits])

Market Price

This approach is based on observing recent and historical trading patterns (if public) or observed arms-length stock trades (if private). Market price data points can also be observed in recent stock issuances and/or buy-backs. The derived market price for the valuation is expressed in terms of:

- Price to earnings
- Price to book value
- Price to tangible book value
- Premium as a percentage over core deposits

Before and After

Let's look at the characteristics of small and medium-size bank valuations for the period leading up to 2008, versus those in 2008 and thus far in 2009.

Prior to 2008: This environment was characterized by a healthy economy, clean asset quality, strong asset growth, relatively strong net interest margins and profitability, high trading multiples (i.e.,

200 to 250 percent of book), coupled with high takeout multiples (250 to 300 percent of book). This was an era in which discounted cash flow (DCF) and NAV typically produced the lowest valuation results, while publicly traded comps and sale-of-control comps produced materially higher valuation amounts. This period was ripe with industry consolidation, with the number of banks falling by half over the previous 20 to 25 years. Consequently, many publicly traded banks had valuations that reflected some expectation for M&A built into the trading prices. (See Charts 2a, *below*, and 2b, *page 23*, for publicly traded bank pricing trends, segmented by asset size.)

M&A takeout multiples reached lofty levels. Healthy stock prices for many acquirers also facilitated their ability to pay higher prices, especially when they used their stock as currency for the acquisition of smaller banks or those with lower relative valuations. (See Charts 3a through 3c, *pages 24-25*, for M&A pricing trends for target banks with assets less than \$500 million.)

The DCF analysis, which relied on that valuator's forecast assumptions for growth and profitability and the selection of a discount rate determined by the valuation, often produced valuation results way below the comparables from minority share trading and sale of control comps (even after adjusting for control premiums). The discount rates (based on the capital asset pricing model) used were typically around 15 percent, with risk-free rates in the 6 to 7 percent range, market premiums of 5 to 6 percent, and only a couple percentage points accounted for in the Beta or in company-specific factors.

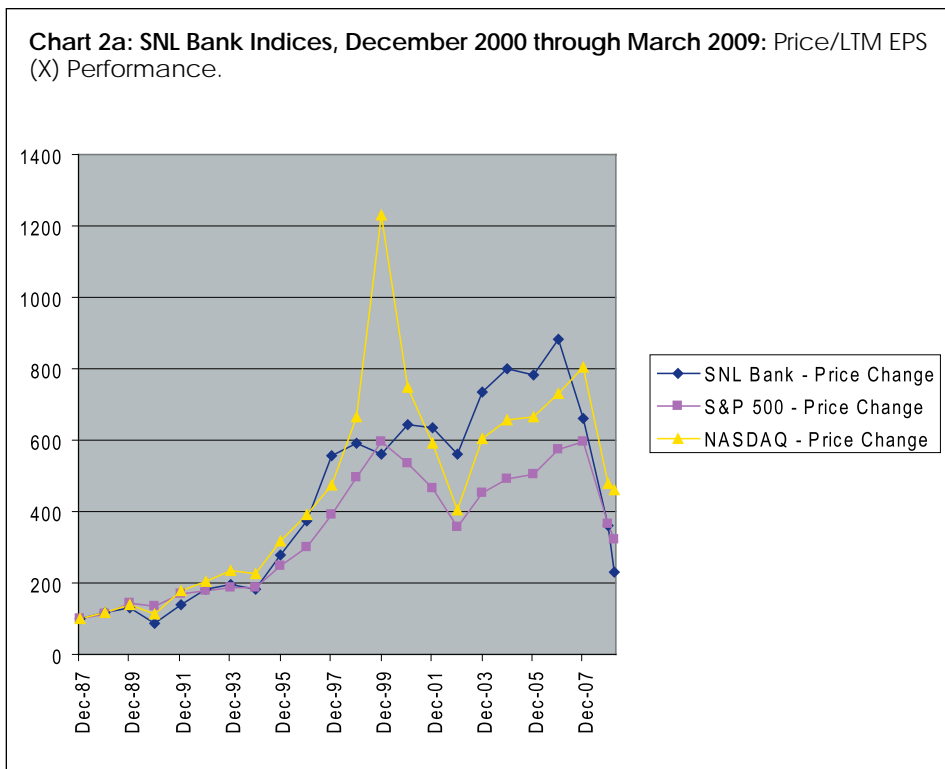
The NAV methodology was not deemed to be an important or particularly relevant approach at the time, because of the big disconnect between NAV and other valuation approaches. NAV was viewed more as a liquidation value, relevant only when asset quality was severely compromised and going-concern was a legitimate question.

In the worst-case scenario, a bank was ultimately viewed as worth its tangible book value (at 100 percent price

to tangible book multiple) plus something for its core deposits. Even the weakest banks often sold for 120 to 140 percent of tangible book value.

2008-2009: The tide for the economy, and for banks in particular, started to turn very negative in the third quarter of 2007. From that point until now, the environment has been characterized by a severely troubled economy, rapid and deep deterioration of asset quality, a scramble for liquidity, dysfunctional capital markets, declining asset (collateral) values, falling stock prices, Fed easing, concerns about survivability, and consumer concerns over the safety of their deposits. Consequently, NAV has emerged as the *de facto* methodology, because of severely diminished (or no) earnings streams to value, for the last four quarters and prospectively. Presently, in valuing small and medium-size banks, investors are not giving much weight to future earnings and core deposits, due to the lack of visibility and confidence in finding the bottom of asset quality deterioration.

Today bank executives have to defend their tangible book values, based on the magnitude of problem (non-accrual) loans, other real estate owned, fresh delinquencies (31 to 89 days past due) that turn into problem loans, additional operating losses, and impaired investments in the securities portfolio. Bank mergers and acquisitions are virtually non-existent, so bank stocks no longer trade with any M&A premium. As a result, there have been more discussions today involving so-called mergers of equals, which typically transact at little or no premium. While merger *discussions* are occurring, with capital scarce and many markets in decline, very few whole-bank merger *transactions* have been consummated, as due diligence and reverse-diligence of the loan portfolios put management teams and boards in an uncomfortable position of having to advocate for the merger and to take on the counterparty's



credit risk. FDIC-assisted transactions that facilitate relatively seamless transfers from bad banks to good banks are on the rise.

For the first time since the late 1980s and early 1990s, DCF valuations are now running higher than most of the other methodologies. For the DCF methodology, discount rates are averaging 11 to 14 percent for bank valuations, and the composition has changed. For example, today the risk free rate (10-year Treasury) is approximately 3 percent. Add to that a market risk premium of 5 to 6 percent, and a 3 to 7 percent premium for Beta and company-specific risk factors.

TARP: Implications on Common Shareholder Value

Once the second quarter 2008 financials for both publicly held and privately owned banks were available for analysis, the first evidence emerged of capital pressures building in banks, both large and small. Banks showed substantial earnings declines, deteriorating asset quality, and mark-to-mar-

ket impairments in the investment portfolio, mainly in the larger banks. Bank stock prices had been heading south all year. Against this backdrop, private equity capital was starting to line up in response to the coming needs. Late in the third quarter, conditions worsened—hastened by the government takeover of AIG, the demise of Lehman Brothers, and the continued decline in real estate values.

In September, the U.S. Treasury and Federal Reserve announced the TARP plan to provide Tier 1 capital to “healthy” banks. Virtually all private equity capital raising immediately came to a halt. The nine largest banks were called to Washington, DC, and were told by Fed Chairman Bernanke and then-Treasury Secretary Paulson to take initial allocations as a show of solidarity and “endorsement” of the plan.

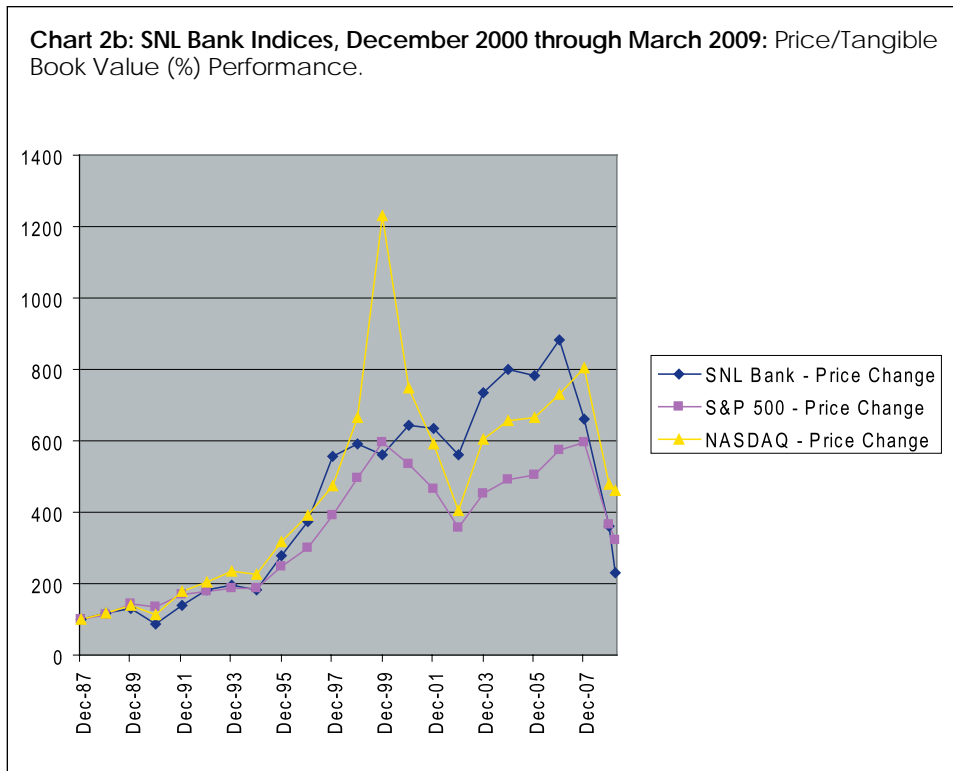
TARP capital that has been deployed to date has been in the form of preferred stock, either with warrants convertible to common (for publicly held banks) or with warrants immedi-

ately convertible into additional preferred stock (for privately held banks). The preferred dividends, while at a relatively attractive after-tax cost of 5 percent per annum for the first five years (excluding the effects of the warrants) are, nonetheless, additional cash flow burdens at a time when earnings, cash flows, liquidity, and capital are all stressed. New TARP capital deployments may take the form of convertible preferred, with more potential dilution. All forms of TARP capital rank senior to common shareholders (who continue to take “first dollar” loss risk) and are on the same level of seniority as other preferred shareholders. TARP preferred ranks junior to trust preferred securities (which are junior subordinated debentures that pay tax-deductible interest, but are treated as qualifying Tier 1 capital for regulatory purposes) and to subordinated debt and senior debt.

With the potential dilution and politicization risk for TARP capital takers, the banks should view TARP capital as a bridge loan to give themselves the time and resources to weather the storm. TARP capital should be refinanced with private sources as soon as feasible, which will be predicated on the broader assembling of capital for injecting in banks, and, of course, the particular bank’s circumstances, performance, and prospects.

Implications for Bank Valuers

For the foreseeable future, TARP capital is the only source of equity funding. Because of the presence of TARP, along with other preferred and convertible preferred instruments on the balance sheet, the investor community has started to focus more on the level of “tangible common equity,” and as a *percentage* of tangible assets (or risk-weighted assets). TCE/TA is now becoming the measure of choice for capital adequacy among investors and regulators.



There has been a lot of belly-aching by banks, bank investors, and analysts about the distorting effects of FAS 157, particular as it has been applied to difficult-to-value private label collateralized mortgage obligations, trust preferred collateralized debt obligation (CDO) tranches, and other structured finance securities in bank portfolios.

The question of what constitutes other-than-temporary impairments (OTTIs), which have the effect of decreasing a bank's capital levels, has been mostly a large-bank phenomenon, until now. Berkshire Hathaway chairman Warren Buffett recently suggested that mark-to-market accounting be suspended for banks for *regulatory capital purposes*, while keeping it in place for GAAP purposes,

since it is the regulatory capital haircut that is front and center for most banks today. In early April, the FASB approved an amendment to FAS 157 that follows Buffett's suggestion. The new guidance addresses how companies account for assets whose market value has fallen below the reported balance sheet value, but it does not change the fair value accounting treatment. Banks can split off that portion of the mark-to-market loss that constitutes "credit loss" (attributed to bad debt or declining cash flow fundamentals of the instrument) and take an OTTI hit to earnings and capital. The remaining portion of the mark-to-market loss is called "noncredit loss" attributed to other conditions, such as liquidity and the uncertainty associated with the government bailout plans and changes in interest rates. The banks can book non-credit losses into other comprehensive income on the balance sheet, thereby not flowing through the income statement or impacting regulatory capital.

A continuing deterioration of asset quality will put pressure on tangible book (and tangible common equity) value. A bank's capital and its loan loss reserve are the only protections against loan losses and securities write-downs.

With all of the noise created by mark to market, asset quality, and TARP, more attention will need to be paid to banks' core earnings power—defined as pre-tax, pre-provision (for loan losses) earnings, minus the pre-tax effect of preferred dividends. Stronger banks will need to show core earning power coverage of potential loan losses by at least, say, 3 percent of average loans.

Fewer M&A transactions in the recent pricing compression era will make peer-group M&A data selection difficult. Furthermore, if more M&A deals occur in the form of mergers-of-equals, to be completed at prices closer to tangible book, the downward pressure on M&A comps will continue.

Increased bank failures are going to have an impact on the appropriate

Chart 3a: Completed Bank and Thrift M&A Transactions Announced, January 2000 through March 2009: Showing number of deals and aggregate deal value (\$ million) for sellers with total assets < \$5 billion as of announcement date.

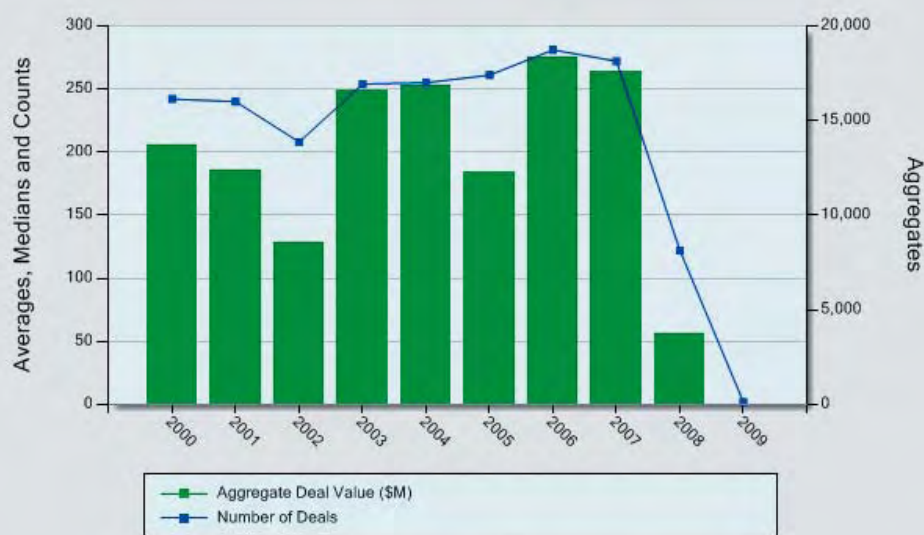
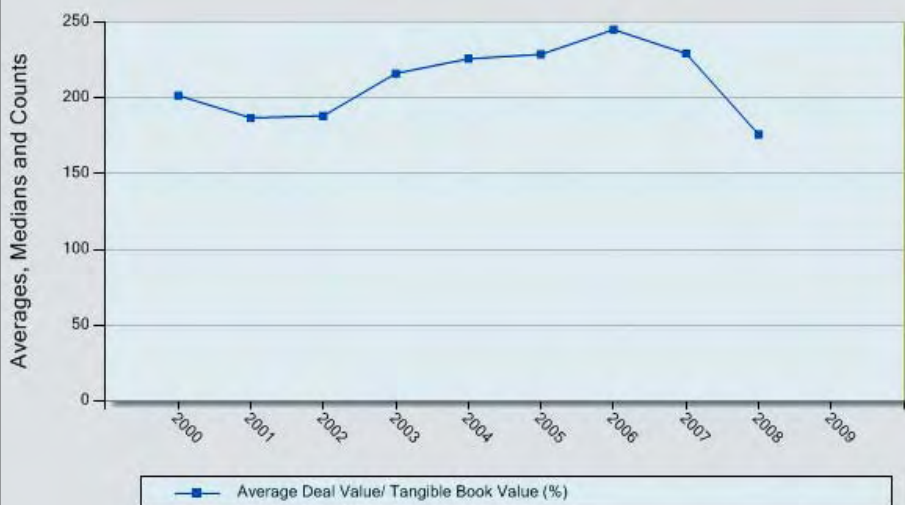


Chart 3b: Completed Bank and Thrift M&A Transactions Announced, January 2000 through March 2009: Showing average deal value/tangible book value (%) for sellers with total assets < \$5 billion as of announcement date.



discount rate for DCF valuations. That should be reflected in either higher Betas or company-specific risk premiums.

Triggering a Return to Fundamentals

Investors should see at least two consecutive quarters of demonstrated stabilized core earnings power by banks, as well as some evidence of stabilizing asset quality, in order for bank valuations to start thawing. The Financial Stability Plan, announced by Treasury Secretary Geithner in February, called for establishing the Public-Private Investment Fund to facilitate the movement of toxic “legacy” assets off the books of banks and into this quasi-public fund. While this program could help larger banks or those with an abundance of toxic assets, the prices offered by the PPIF may not be high enough relative to the DCF values calculated by banks, should they continue to hold onto those assets.

Net interest income, the lifeblood revenue for most banks, is a function of earning asset mix and growth, and net interest margin. While the prospects for balance sheet growth are limited in the near term, given the poor economic conditions, the net interest margin environment is improving, thanks to such factors as

- The positive yield curve
- The use of floors in floating rate loans
- Higher loan yields (relative to risk)
- An ample re-intermediation opportunity (out of mutual funds and money market funds, back into bank deposits)
- Lower deposit costs

Getting bank M&A on track again will require a dose of John Maynard Keynes’s notion of “animal spirits”; and a shot of increased confidence by suitors that (a) the asset quality at the target banks is stabilizing, (b) the suitors’ shares reflect stronger multiples, and (c) the tangible benefits of incremental

earnings growth, aided by cost savings, and the core deposit pickup are sustainable and worthwhile in light of the target bank’s current and prospective risk profile and integration risk.

Current M&A pricing for the relatively few transactions being completed is around tangible book value—somewhat higher for clean and profitable targets, and around 50 percent of tangible book for banks reporting modest losses and with peer-average asset quality measures. M&A pricing will not firm up until the broader economy show signs of stability, suitors get access to capital markets (other than the U.S. government), and the risk/reward quotient becomes more suitor-friendly.

As for that new notion of “tangible common equity,” Dick Bove, a banking analyst at Rochdale Securities, in a commentary dated March 18, 2009, concluded that the use of tangible common equity “is not helpful in determining which healthy bank is better run” and “is of no help in determining what a bank’s value is at time of liquidation.” He went on to say, “It is time for investors and policymakers to drop the fad of the moment and re-concentrate on

where value lies in a bank; this would be in its cash flow and deposits.”

Amen to that! **VE**

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