

III. U.S. BANKING PROSPECTS: IT IS ALWAYS DARKEST BEFORE THE DAWN

The sharp rebound in bank share prices highlights a dramatic improvement in investor sentiment towards the sector. However, investors may be getting ahead of themselves, according to Chris Whalen, a widely-regarded expert on banking. Mr. Whalen is co-founder and Managing Director of Institutional Risk Analytics, a Los Angeles based firm that publishes ratings for all U.S. banks, and provides custom analytical tools and consulting services to public sector, commercial and institutional clients. In this month's *Special Feature*, Mr. Whalen discusses the challenging outlook still facing the major U.S. banks.

Over the past two years, the U.S. banking industry and the credit markets have experienced a level of instability and dysfunction previously thought a remote possibility, if not completely impossible. This difficult period suggests to some that the pain in the financial sector is now ended. The good news is that the credit cycle in the U.S. shows signs of maturation. The bad news is that credit loss rates for U.S. banks, already at record levels going back half a century, may not reach their zenith until well into next year.

Banks are economic laggards and will still be bringing out the dead long after the next party has already begun. To put the current crisis into a financial context, consider that the debt incurred in the form of bonds issued to fund the clean up the S&L crisis of the 1980s are still being paid off. Given the far larger cost of cleaning up the current crisis, a similar amortization of the debt could stretch well into the second half of the 22nd century. Judging by the duration of past credit loss peak cycles, U.S. banks may loiter at the highest loss levels for several quarters as the credit

bubble finally does unwind. This suggests that 2011 may be the real point of inflection for a rebound in industry-wide bank operating performance.

This credit cycle will not be as bad as the 1930s, but will be a good deal worse than the 1990s in terms of realized losses by FDIC insured banks. Twice the 1990 loss rate peak experience for all U.S. banks has been our projection for several years now. However, because of the significant differences between the banking crisis of the early 1990s and today, we may be conservative in our assumptions about cumulative losses and thus the burden on future bank earnings. The banking industry essentially cross-guarantees one another via membership in the FDIC insurance fund, and the cost of the cleanup to the fund will be subtracted from future bank earnings.¹

¹ The legal reality that the U.S. banking industry funds the deposit insurance fund as well as the operations of the FDIC, and state regulators, is often overlooked in political statements regarding the crisis. Most states also enforce a de facto rule of collective loss sharing on the insurance industry in the event of a failure by a regulated underwriter.

While officials hope for a quick economic recovery, banks are just starting to deal with the aftermath of the real estate bubble and related credit excesses, especially in terms of forward earnings and capital levels. In the Great Depression, for example, banks experienced average loan losses in excess of 5%, wiping out the equity of many institutions.² Banks in the 1930s, however, were not involved in securitization, and were not using derivatives and off-balance sheet vehicles to boost effective leverage. In this credit cycle, we estimate that aggregate loss rates for the banking industry could reach 4%, or twice the observed loss rate of the early 1990s.

One of the many problems in estimating forward losses is that the scale of the latest speculative binge in U.S. real estate was far larger than in the 1980s. As a result, the scale of price adjustment is extraordinary and, for now at least, there is little or no market secondary market for failed banks' collateral in relation to the overall supply. Cash markets for foreclosed properties are reaching saturation points – even though local real estate markets are now down as much as 50% from their 2005 valuations. Meanwhile, some blue-chip commercial real estate firms are walking away from equity in properties located in major markets due to a lack of financing. When the current backlog of foreclosed but not yet sold property comes online in the latter part of 2009 and into 2010, real estate values may dip further.

² See “*IMF Global Financial Stability Report*,” April 2009: www.imf.org

Another important point is that estimated losses for failed bank resolutions by the FDIC are running around one quarter of failed bank assets, a level much higher than between 1980 and 1995, when failures equaled an average of 11% of assets. Since total loans and leases held by all FDIC insured banks were around \$7.7 trillion as of 2009 Q2, our assumed loss rate of 4% represents over \$300 billion.

At Institutional Risk Analytics (IRA), we measure banking sector pressures via a five factor quarterly survey called the Banking Stress Index. The survey includes tests for: ROE, charge-offs, unused credit lines, capital, and efficiency, all based on data from the FDIC. The Banking Stress Index hit a new record high in 2009 Q2, although the rate of deterioration slowed from the previous two quarters. The industry aggregate average Bank Stress Index calculated by IRA was 1.8 at the end of 2008 Q4, 2.36 as of 2009 Q1 and 3.50 as of 2009 Q2 (1995=1). We segment the entire population of FDIC insured banks into “A+” through “F” letter grades:

- “A+” banks have overall stress less than the 1995 1.0 index baseline.
- “A” banks have stress slightly less than the industry average.
- “B” banks have stress slightly above the industry average.
- “C” banks have stress levels moderately above industry average.
- “D” banks have stress indicators well above the industry average.

TABLE III-1

IRA Bank Stress Index Distributions (FDIC Insured Banks)

Period	A+	A	B	C	D	F
2009 - 06	3518	1449	417	421	72	2256
2009 - 03	3959	1431	452	437	88	1820
2008 - 12	3918	1705	119	390	98	2003
2008 - 06	4884	1248	404	326	66	1458
2007 - 12	5556	610	884	315	70	1029
2007 - 06	6056	354	972	273	60	824
2006 - 12	6370	134	1165	204	39	697

SOURCE: FDIC/IRA BANK MONITOR

- “F” banks have stress levels at the extreme range of the industry average.

Looking at the data as a whole, the stresses on banks appear to be shifting to realized losses and degraded operating performance, and away from the ROE declines you would expect to see in the early part of the crisis – especially with mark-to-market accounting accelerating asset price volatility. The distribution of ratings from 2006 Q1 through 2009 Q2 is shown in the **Table III-1**. The number of banks rated “F” in Q1 actually fell from year-end 2008, but in Q2, the number of banks rated “F” was well above the 2008 levels. This was due to realized losses rather than just poor earnings performance.

The good news is that there are still over 5,000 U.S. banks with A+ or A ratings vs. 6,700 in 2006. The continued migration of banks from the A+ range into the A range indicates that more banks are now feeling the effects of economic conditions, regardless of how good their business practices. Whereas the undermining of earnings by poor ROE performance due to write downs of illiquid securities predominated in 2008,

charge-offs and degradation of bank efficiency seem to be the leading factors in higher Bank Stress Index scores in 2009. And this trend of deteriorating asset quality still seems far from its peak, suggesting that provisions will remain a significant expense item for many banks.

Capital adequacy is all the rage at the moment, but most investors and political leaders may not yet fully realize the full extent of banks’ capital deficit that must first be refunded. The Group of 20 finance ministers is discussing increased capital requirements for banks that would force many institutions in the U.S., Europe and Asia to raise tens of billions of dollars in capital.

Recent statements by Treasury Secretary Tim Geithner and other finance chiefs have emphasized the need for more bank capital, expecting that this will make the financial system more stable. Yet, missing from the discussion is any meaningful acknowledgment that: 1) it was the activities of banks, not their capital levels, that caused the financial crisis; 2) that larger banks as a group do not have the earnings

TABLE III-2

IRA Bank Stress Index Distributions (Assets of FDIC Insured Banks, \$B)

Period	A+	A	B	C	D	F	Total
2009 - 06	2,005	2,097	4,132	518	68	4,458	13,278
2009 - 03	3,202	3,131	3,587	729	86	2,784	13,519
2008 - 12	2,366	5,398	403	694	46	4,033	12,940
2008 - 06	2,897	5,256	400	695	51	3,983	13,282
2007 - 12	7,613	1,719	1,629	1,248	107	705	13,021
2007 - 06	8,619	2,804	98	497	56	170	12,244
2006 - 12	9,004	2,029	165	483	78	88	11,847

SOURCE: FDIC/IRA BANK MONITOR

power to support higher equity capital levels, at least capital provided by private investors; and 3) that large banks are well behind the rest of the industry in terms of capital, especially when assets are truly marked to market and off-balance sheet exposures are considered.

Both Lehman Brothers and Bear, Stearns & Co. had more than adequate capital, at least as governed by the marketplace. Citigroup also had levels of capital that, while below its peers, were still in the right neighborhood. But, in each case, risk-taking activities made whatever capital they had in place irrelevant - often by an order of magnitude. Since it is unlikely that private investors would accept the lower implied equity returns of the new capital regime described by Secretary Geithner, the implication of the G-20 announcement regarding bank capital is that larger banks must be government sponsored entities! Or put another way, more capital implies lower equity returns and higher risks than many private investors would be willing to accept.

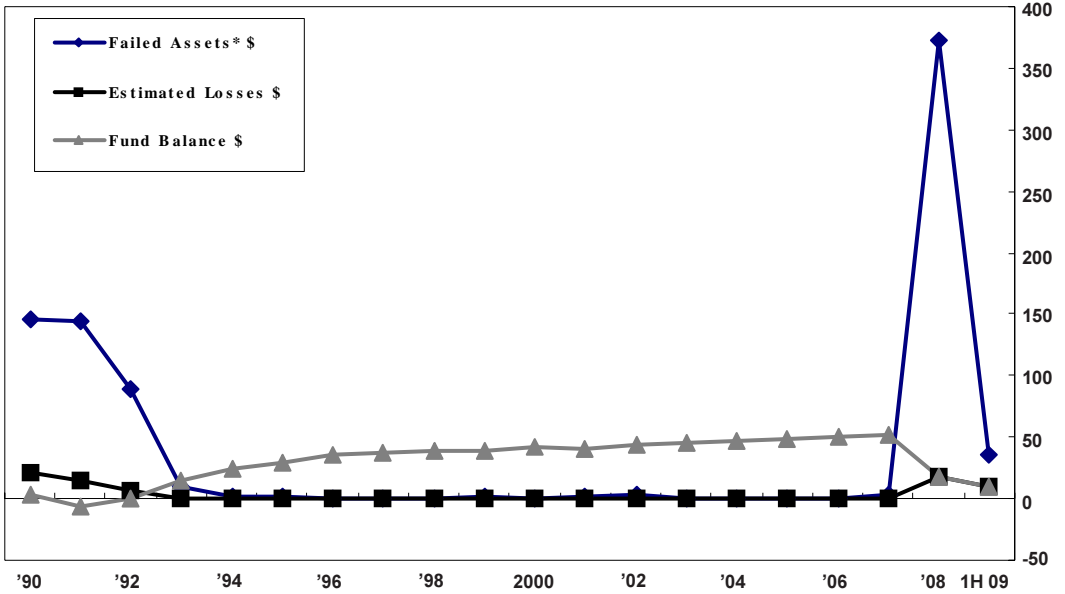
The inability of banks to support higher capital levels comes into even sharper fo-

cus given the size of losses to the FDIC insurance fund as a result of bank failures. As noted above, the banking industry will be taxed via deposit insurance premiums to fund the resolution of failed banks and then rebuild a positive balance in the fund. . When we look at the bank ratings distribution **Table III-1** based on assets, the problem quickly becomes apparent, as shown in **Table III-2**.

If you start with our assumptions that roughly half of the banks currently rated "F" (around 1,000 banks) will fail and/or be merged with another institution, and that the loss to the FDIC bank insurance fund will be approximately 20-25% of the total assets of those failed banks, then the cost of these resolutions to the FDIC through the full credit downturn could be in excess of \$400-500 billion. This alarming estimate does not include the other banks currently in ratings strata above "F", some of which also may fail. Our overall "worst case" or maximum probable loss for large U.S. banks above \$10 billion in assets is \$800 billion through the cycle.

CHART III-1

Historical Trends In FDIC Loss Experience (Billions of Dollars)



SOURCE: FDIC/IRAA BANK MONITOR

Of the top four U.S. banks, only Citigroup currently is rated “F” by the IRA Bank Monitor, and is under open bank assistance with the FDIC. It might be tempting to exclude Citigroup’s \$1 trillion in assets from the loss estimate, but most analysts expect the losses at Citigroup to be in excess of 25% of assets. A 25% loss rate applied to Citigroup would be almost half of the sector’s total loss estimate. For now, the other three banks in the top four – Bank of America, JPMorgan Chase and Wells Fargo – are not yet under formal loss sharing agreements with the US Treasury, Fed and FDIC, as is the case with Citigroup.³

³ In addition to a significant equity ownership by the US government, the FDIC and Treasury agreed to share the losses on a portion of Citigroup’s loan portfolio.

Chart III-1 shows the historical performance of the FDIC deposit insurance fund in terms of failed assets, estimated losses, and the fund balance, which essentially is an accounting between estimated losses, deposit insurance premiums and recoveries from failed institutions. While failed bank assets reached \$150 billion in 1990 and 1991, the loss rates and fund balances were not extraordinary compared with the present crisis. The reasons for this included the lower loss rate (11%), the smaller size of the institutions that failed, and the relatively short period of peak losses, roughly six quarters. Obviously, a triple digit deficit in the FDIC fund balance would be an extraordinary development, and would challenge assumptions that the present crisis is not as severe as the 1930s. But, whereas in the 1990-1991 peak loss rate cycle no money center

banks were resolved, today at least Citigroup seems headed for a formal restructuring. Moreover, it is possible that at least one more of the top four banks could be placed under a loss sharing agreement with the FDIC.⁴

Of note, the skew visible in the failed assets series in 2008 reflects the failures of Washington Mutual, but does not include Wachovia, which was acquired by Wells Fargo late last year. Due the effects of purchase accounting and the survivor bias in the FDIC historical data, the pre-close charge-offs from the Wachovia acquisition are not reflected in the loss data. Also, the charge-offs from the Washington Mutual transaction are not fully represented, which has the effect of understating the aggregate industry loss rates.⁵

The implication of a cumulative, triple-digit billion dollar deficit in the FDIC bank insurance fund is grim for forward bank earnings. At the very least, it implies that future earnings will be significantly below the past decade, even if the economy recovers at a pace well above consensus estimates. But, such insights

have been largely ignored by investors, who appear to believe that the crisis is over and that the banks will be free to share in the upside of total earnings.

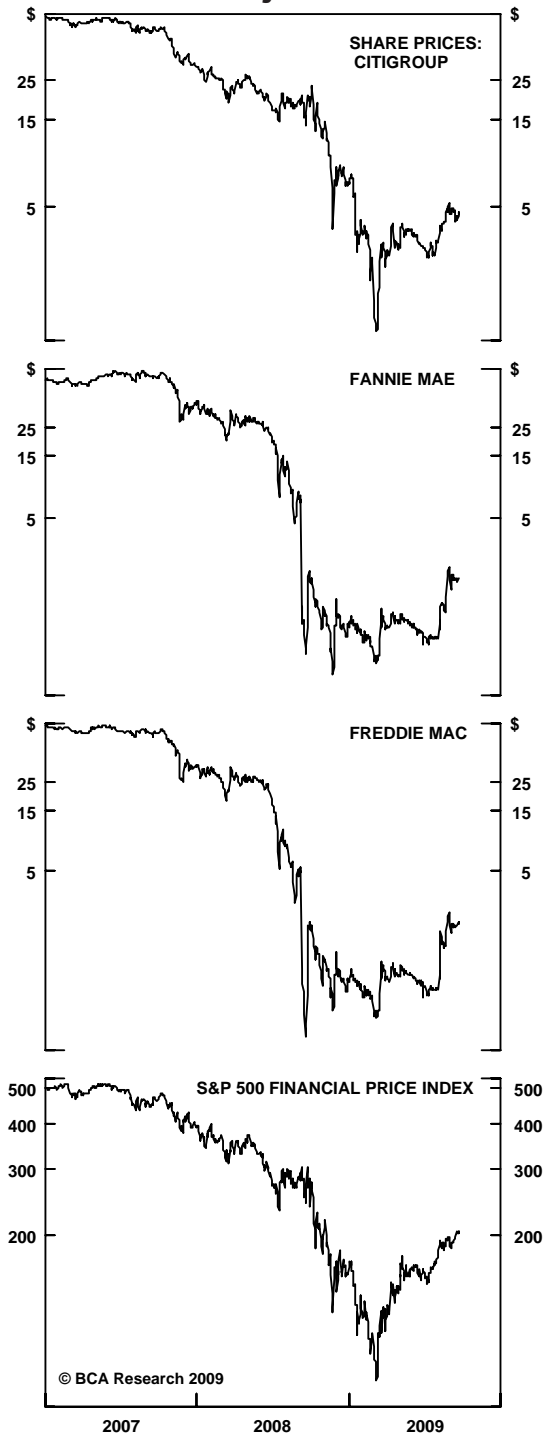
With most investors severely underweight financials in the second half of 2008 and early 2009, the banks rallied by around 70% in the past six months. When we recall that financials were almost 20% of the earnings in the S&P 500 in 2007, the desire of investors to return to the good old days is understandable – albeit badly considered. Especially helpful to this process was the announcement in the spring of 2009 by several analysts that the “small banks” were in far worse shape than the larger institutions, a statement that, while true, depended upon billions of dollars in public subsidies. These subsidies are the primary reason that only Citigroup, so far, has been forced to seek official assistance on a permanent basis. Going forward, however, the earnings of the smaller banks may be a good bit more valuable if larger institutions are taxed proportionately for their higher risk profiles.

The fact that in 2009 Q1, dealers were preparing to issue tens of billions of dollars in new equity for the large banks at the behest of regulators was a blessed coincidence, combining to push financials back up to the levels of August 2008 (Chart III-2). But, keep in mind that the sector’s fundamentals have been deteriorating all the while that the public equity markets have been climbing. It is often argued that the Street is forward looking and that investors are prepared to maintain exposure through 2010 to eventually get back to a steady earnings stream.

⁴ Bank of American canceled a proposed loss sharing agreement with the FDIC related to the 2008 acquisition of Merrill Lynch, but rising loss rates may force the bank to seek new assistance.

⁵ In the *Quarterly Banking Profile* published by the FDIC for 2009 Q1, it states: “Amended financial reports received since the publication of the fourth quarter 2008 *Quarterly Banking Profile* caused the industry’s fourth-quarter net loss to widen from \$32.1 billion to \$36.9 billion. The amendments included higher expenses for goodwill impairment and increased loan-loss provisions.” Our internal estimate for the overall economic loss by the banking industry in 2008 is roughly \$50 billion.

CHART III-2
A Powerful Rally In Financials



However, given the speculative tenor of today's markets, defending current valuations for US financials may be quite a task. The three most problematic, government-controlled names - Citigroup, Fannie Mae and Freddie Mac - turned in the best equity market returns over the past six months, and with huge increases in volume for all three names.

The large swings in U.S. banks' share prices should not be a particular surprise to observers who recall that the larger banks had equity volatility and credit default spreads measured in triple digits at the end of 2009 Q1. The big upswing in trading volume from Q1 onward suggests a large speculative component to recent price action by yield-starved investors. These are banks, after all, not high-growth technology stocks, but the fact is that investors have been sufficiently confident about the prospects for these enterprises as going concerns that their stocks have traded like the GSEs. If, as we suspect, the government will continue to backstop the largest banks, but the forward ROE for banks over the next five years is lower than in the previous five year period, then equity volatility should continue to trend down as well. This suggests a business model closer to a utility than to a technology stock, incentivizing investors to look elsewhere for speculative returns.

In a lengthy study of risk-adjusted returns on capital for the top 100 U.S. banks prepared for a Big Four audit firm last year, we observed that the industry's risk-adjusted return on capital (RAROC) seemed to be falling, espe-

cially during the past five years when financial “innovation” and nominal equity returns were at peak levels. The difference between the banks in our study also seemed to be growing less, imitating other types of consumer product and services industries where competitors are converging on certain product and price combinations and pushing down real prices.⁶ The relatively tight credit environment is currently allowing banks to burden their customers with all manner of fees, but in a stabilizing marketplace, competition will return with a vengeance, and RAROCs likely will trend lower in 2010.

Not surprisingly, regulators are scrambling to find ways to bring new capital into the bank resolution process, where traditional measures for resolving bank failures are already greatly strained. The default option by the FDIC for larger bank insolvencies seems to be an assisted merger with a larger institution. But, there are a growing number of larger banks where credit costs are eating almost all of operating profits, making mergers difficult, even with government assistance. Indeed, in many banks, the cost of credit is approaching levels where it is starting to consume large chunks of net-interest revenue.

Since the 2004-2006 period, when credit was essentially a zero-cost activity for many banks, until today, we have seen a

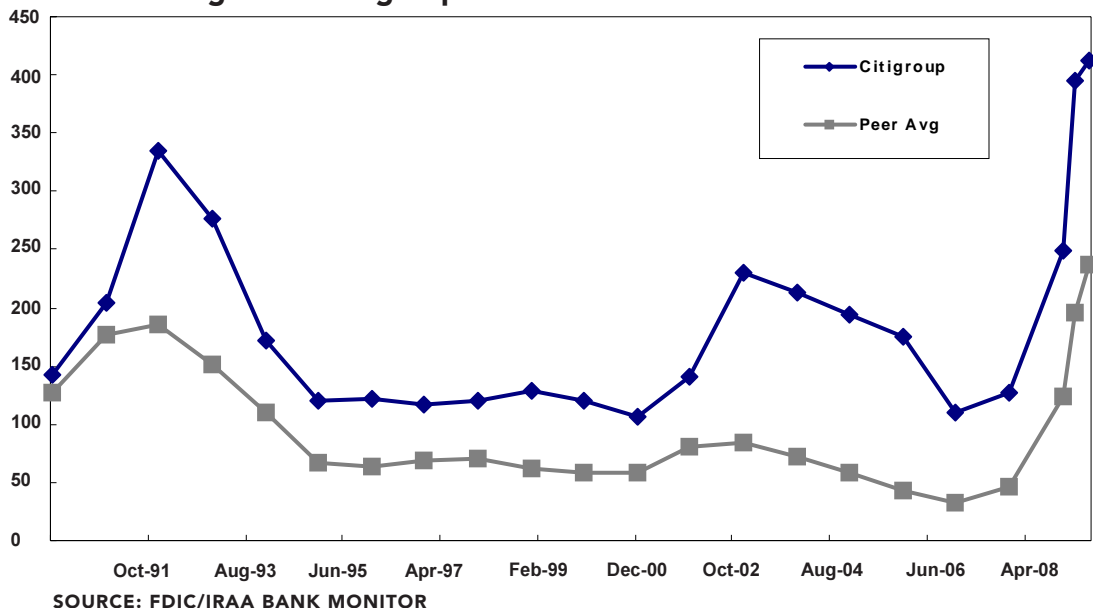
dramatic increase in the ratio of provisions for loss to net interest income as credit costs have become the chief issue facing the industry. In some cases such as Citigroup, realized losses and provision expense rose so rapidly and so severely that the situation provoked a partial nationalization in order to reassure investors and stabilize the institution.

In 2008, Citigroup put nearly \$33 billion into loss provisions, which when added to \$69 plus billion in general operating expenses left virtually nothing of the bank’s \$109 billion in 2008 net revenue, resulting in a \$20 billion operating loss. The alarm bells rang in Washington and, by 2009 Q2, the bank’s annualized revenue run rate was pushed up artificially toward \$160 billion, inflated by billions of subsidies provided by the Fed via low interest rates and repurchase agreements, and loss sharing with and debt guarantees from the FDIC. Of note, as the FDIC was ending its debt guarantee program, Citigroup was among the final issuers of subsidized debt.

Citigroup’s net revenues rose from \$29.7 billion in 2008 H2 to \$54.5 billion in the first six months of 2009. The U.S. government now owns one third of the company’s common equity. But, with gross credit losses running at about twice last year’s level (\$16 billion in the first half of 2009), and just \$35 billion in accumulated loss allowances as of that date, it seems reasonable to ask whether it can continue to fund these or even higher levels of losses without further capital injections during 2010. **Chart**

⁶ For a general discussion of our findings, see “Talking About RAROC: Is “Financial Innovation” Good for Bank Profitability?” *The Institutional Risk Analyst*, June 10, 2008. Copies can be obtained at www.institutionalriskanalytics.com

CHART III-3
Gross Charge-Offs: Citigroup vs. Peers



III-3 shows the bank-only gross credit losses from 1989 through 2009 Q2.

While Citigroup’s more than 400bp of charge-offs is well-above its peers, most large banks are seeing recovery rates, or loss given default (LGD) in Basel II parlance, over 90%. Citigroup is an outlier in the large bank peer group and is still an extreme case compared to the largest banks. But, measured by indicators such as realized loss and LGD, the fact remains that U.S. financials, which, as stated before, are a lagging indicator, show no signs yet of enjoying the economic “recovery” that is now widely reported. Indeed, before the cleanup of this crisis is complete, Citigroup could be joined by at least one more large money center bank requiring additional government assistance.

The Outlook For 2009 H2 And Beyond

The Great Mortgage Bust of 2007-08 will require a lengthy period of time to heal the wounds. Government ownership of banks, financial assets and real property may become a medium-term necessity as prices and demand are brought back into alignment. The consensus expectation seems to be for the loss and non-performing loan rate for banks to continue to slow and even decline over the next year, but that assumption is not well supported for the reasons already discussed. Two deflationary factors suggest a longer period of recovery: the lack of credit available for all classes of borrowers, and the weak market for foreclosed assets of all descriptions as a result of that credit shortfall.

The annualized net charge-off rate for the whole industry in the second quarter of 2009 was 2.55%, eclipsing the previous quarterly record of 1.95% reached in the fourth quarter of 2008, according to the FDIC. Also, the noncurrent loan rate in 2009 Q1 was at the highest level since the second quarter of 1991 and Q2 levels are even higher, albeit rising at a slower pace. At the start of the second quarter, elements of the investment community convinced itself that the worst was over in financials, but the anecdotal and analytical indicators do not support this analysis.

Most of the bullish Wall Street recommendations on banks seems to discount the future cost of credit losses, but the latest data from the FDIC suggest that, at best, we face a few more quarters of credit reserve build and poor earnings performance. This sober view of reality is reflected in the most recent conference calls by the major banks, with no CEOs or CFOs ready to call the peak in terms of either credit loss rates nor provisions, and few even willing to describe the duration of loss rate peaks. Since most banks are shrinking their balance sheets, it is not unreasonable for bankers as a group to remain cautious. Indeed, the banking industry's assets shrank by almost \$300 billion in the second quarter, again raising the issue of credit availability

Conclusion

The situation facing the U.S. banking industry is complex and remains very serious. We are still closer to the begin-

ning of the unwinding process than the end, especially judging by the reluctance of the industry to embrace the new regime of fair value accounting and off balance sheet disclosure regarding mortgage-related assets and other OBS exposures. Despite abundant credit and liquidity from the Fed, the willingness of banks to lend with or without collateral remains muted, and this is a function of the lack of liquidity in many of the asset classes that once served as important sources of income and liquidity for banks. In the near term, banks must raise sufficient capital via earnings or new issuance to meet the credit losses imbedded in bank portfolios.

At present, we expect to see 1,000 banks restructured or merged by the FDIC through the credit cycle as the question of bank solvency is addressed. At the same time, there needs to be a dialog between banks, investors and regulators about how to repair the market for securitization and thus restore income and liquidity to bank operations. Many banks, large and small, may yet be forced to raise additional capital before the end of the credit cycle, and overall soft conditions in the economy will depress bank earnings below current consensus expectations.

For investors, picking the winners in financials is going to be about quality before size, with the better managed regional and community banks likely to emerge from the credit adjustment process first. As noted earlier, the largest banks will be required to bear at least their fair share of the cost of cleanup

and maintain higher capital for risk-taking activities. This suggests that the earnings of smaller institutions may be of higher quality to investors in the future. The captains of the largest banks have a lot of lobbyists in Washington, but their political stock is depressed at present as is that of the Federal Reserve Board, the chief protector of the big banks. But, as thousands of smaller banks mass their forces in Washington before the 2010 election, we suspect that the political balance will shift against Wall Street even more and that the smaller banks will be given dispensation in the final scheme to finance and repay the cost of the financial crisis.

Christopher Whalen
Co-founder and Managing Director
Institutional Risk Analytics
chris@rcwhalen.com