



# The Condition of the Banking Industry

**Walter W. Eubanks**

Specialist in Financial Economics

November 30, 2008

Congressional Research Service

7-5700

[www.crs.gov](http://www.crs.gov)

RL32542

**CRS Report for Congress**

*Prepared for Members and Committees of Congress*

## Summary

After six years of continuous record-breaking profits, the effects of the deepening subprime mortgage foreclosures crisis have brought the record-breaking profit making streak to an abrupt end. On a year-over-year basis, net income of Federal Deposit Insurance Corporation (FDIC)-insured commercial and savings institutions declined by \$40.2 billion (27.6%) between 2006 and year end 2007. Some fourth quarter data were worse than they were during the 2001 recession. For example, the fourth quarter net income of \$5.8 billion was the lowest since 1991. In the 2001 recession, the return on assets (ROA) for the industry was 1.16%. By December 31, 2007, the ROA had fallen to 0.86%, 30 basis points below what it was during the 2001 recession. With expected significantly poorer earnings for 2008 and 2009 due mainly to subprime mortgage foreclosures, profitability for 2008 is expected to fall short of 2007.

The industry, in addition, continues to be more concentrated with fewer small banking institutions, which could lead to higher prices for bank services. Smaller banks are less able to garner cheaper funds for lending from wholesale markets and are less able to mitigate their credit and interest rate risks through participation in securitization and syndication markets. Even though the subprime crisis has a more limiting effect on large institutions' access to funding, smaller banks remain more vulnerable to the increased indebtedness of borrowers and stricter lending requirements. The three largest banking institutions have assets in the range of \$1 trillion each. Their combined assets represent 30% of FDIC-insured bank assets. The next four banks hold another 13% of these assets, and the top 25 banks hold more than 50% of the assets of FDIC-insured banks. Looking at the situation from the other side, the bottom 7000 commercial banks held only about 15% of the assets of the top 86 commercial banks at the end of 2007. Mainly because of mergers and acquisitions at the end of 2007, there were 148 fewer commercial and savings institutions than there were at the end of 2006.

Even though many smaller institutions were not active in the subprime and the derivative markets, they traditionally have higher levels of noncurrent assets to total assets ratios than larger institutions. Now that the subprime problem has brought an enormous rise in noncurrent assets ratios to the larger institutions, the overall noncurrent assets ratios are rapidly approaching the level of the 2001 recession. Furthermore, despite the overall growth in deposits in the banking system, deposits at smaller institutions continue to decline as deposits at the larger banks continue to grow. Between December 31, 2006, and December 31, 2007, deposits at large commercial banks grew 11.0%, and those at small commercial banks declined 5.0%. Similarly, while deposits grew at large savings institutions, they declined for the smaller savings institutions. In the fourth quarter of 2007, the data suggest that deposits at larger institutions are growing at a slower rate than in the fourth quarter of 2006, while deposits continue to decline at smaller institutions.

This report will be updated as developments warrant.

## **Contents**

The Bottom Line .....	1
The Risk Considerations.....	5
Credit Risk .....	5
Interest Rate Risk .....	6
The Subprime Credit Crunch .....	6
Competition in the Industry.....	7
Cost of Funds Is Lower for Large Banks .....	8
Some Comparisons with the 2001 Recession .....	9
Risk Management.....	10
Compliance with Basel II.....	11
Conclusion.....	12

## **Tables**

Table 1. September 30, 2008, FDIC-Insured Institutions' Numbers, Assets, Profits, Equity Capital Ratios, and Noncurrent Assets (2001 and 2008).....	2
Table 2. December 31, 2007, FDIC-Insured Institutions' Numbers, Assets, Profits, Equity Capital Ratios, and Noncurrent Assets (2001 and 2007).....	3

## **Contacts**

Author Contact Information .....	12
----------------------------------	----

## The Bottom Line

In the third quarter of 2008, the banking industry continues to be profitable despite the increasing number of bank failures. Ending September 30, 2008, Federal Deposit Insurance Corporation (FDIC)-insured depository institutions reported net income of \$32.6 billion, which is a dramatic drop from the \$100.7 billion the industry earned in the first three quarters of 2007. For the 2008 third quarter net income was only \$1.7 billion, a decline of 27.4 billion (94%) from the third quarter of 2007. In 2007, there were three bank failures as oppose to 25 so far in 2008, including the largest bank to fail in U.S. history – Washington Mutual Bank with assets totaling \$307 billion. Besides the subprime mortgage foreclosure turmoil that began in the second half of 2005, slower economic growth since then has increased bank exposure to credit risk, causing their reluctance to expand lending. At the same time, the price of bank equity, a main determinant of bank capital, has been rapidly declining as investors lost confidence in financial institutions. The combination of disappearing capital and declining value of bank assets has led to increased bank insolvencies.

Another critical determinant of the condition of the banking industry in the direction and pace of economy growth. The economic expansion since 2001 has been a key to the profitability of the industry. The National Bureau of Economic Research recent declaration that the U.S. economy has been in a recession since December 2007 would explain the decline in bank profits. For six years in a row, starting in 2001, profits in the U.S. banking industry have broken records. Profitability peaked in 2007 which coincided with the peak in the economic growth.<sup>1</sup> Economic expansions increase bank lending just as economic contraction reduces opportunities for lending growth. In 2007, real gross domestic product (GDP) grew at 5.6% in the first quarter but only 3.4% for entire the year and the forecast for 2008 is for about 1.7% growth. The declared recession is expected to increase the industry's exposure to credit risk as bank customers become less able to meet their financial obligations due to rising unemployment.

By the third quarter of 2008, the industry's profits had fallen to \$32.6 billion. This decline began in the second quarter of 2007 roughly a year and a half after the foreclosure turmoil started in August 2005. For the first three quarters of 2007, the industry reported net income of \$100.7 billion, which was \$11.7 billion (10%) less than it earned in the first three quarters of 2006. That was the second quarter in a row of lower net income, with, fewer than half the banks reported an increase in net income. The average return on assets (ROA) for the first three quarters of 2007 was 0.92%, down considerably from the 1.33% in the first three quarters of 2006. By the third quarter of 2008, the average ROA declined to 0.33% as shown in **Table 1**. The decline in earnings was due primarily to increased provisions for loan losses and increased non-interest expenses partly related to the subprime mortgage crisis.<sup>2</sup> The fourth quarter of 2007 generated net income of only \$5.8 billion. It was the lowest since 1991. In the 2001 recession, the return on assets (ROA) for the industry was 1.16%. **Table 1** shows that on September 30, 2008 the average ROA had fallen 83 basis points below what it was during the 2001 recession.

---

<sup>1</sup> On December 1, 2008, the National Bureau of Economic Research announced that the United States' economy has been in a recession since December of 2007, marking the end of the of the March 2001 to December 2007 economic expansion.

<sup>2</sup> For detailed analyses of the subprime crisis, see CRS Report RL34182, *Financial Crisis? The Liquidity Crunch of August 2007*, by Darryl E. Getter et al., and CRS Report RS22722, *Securitization and Federal Regulation of Mortgages for Safety and Soundness*, by Edward V. Murphy.

The historically high profits were also attributable to the low-interest-rate environment that has held since 2001, despite the Federal Reserve Board's (Fed's) policy of raising and lowering interest rates since then. Specifically, mortgage lending and non-interest income were the major contributors to the profitability of banking, mainly because of application and servicing fees. However, by the third quarter of 2008, net income of FDIC-insured commercial banks and savings institutions declined \$68.1 billion (67.6%) from the third quarter of 2007. Since December 2006, 18 months after the subprime crisis began in August of 2005, the banking industry has reported continuously quarterly growth in net charge-off.<sup>3</sup> In the third quarter of 2008, net charge-off totaled \$27.9 billion, an increase of \$17.0 billion. This is 154% from September 30, 2007. Two-thirds of these charge-offs

are loans backed by real estate. Looking at the losses from another perspective, The amount of loans and leases that were noncurrent (90 days or more past due) increased to \$184.3 billion in the third quarter of 2008. This is 121% more that was reported a year ago. Noncurrent loans were growing in other real estate-related sectors such as real estate construction and development loans, real estate loans secured by nonfarm nonresidential properties, and commercial and industrial loans. .

Like in 2001, when profitability declined more severely in larger banking institutions than in smaller one, in the current weakness in profitability is having a greater impact on the larger banks. **Table 2**, column 5 shows that return on assets for banks with assets greater than \$10 billion was 0.92% in the fourth quarter of 2007. For commercial banks with assets less than \$100 million, it was 0.68%. For the first three quarters of 2008, **Table 1**, column 5 shows respective figures of .44% and .56%. The negative change in the return on assets in 2007 is greater for larger institutions (0.48%) than for the smaller ones (0.12%), which could be explained by smaller banks participating less in the asset-backed securities and derivatives markets, the current financial turmoil is centered. Because of the devastating effects of the failure of the Washington Mutual Bank (WaMu) on September 25, 2008, the largest bank failure in history, the entire industry negative return on assets on

**Table 1. September 30, 2008, FDIC-Insured Institutions' Numbers, Assets, Profits, Equity Capital Ratios, and Noncurrent Assets (2001 and 2008)**

Institutions (1)	# of Inst. Sept. 2008 (2)	Total Assets (bil. \$), Sept. 2008 (3)	Total Profits (mil. \$), Sept. 2008 (4)	Return on Assets, %, Sept. 2008 (5)	Equity Capital Ratios, %, Sept. 2008 (6)	Non-current Assets to Total Assets 2001 (7)	Non-current Assets to Total Assets, Sept. 2008 (8)
<b>Commercial Banks</b>	<b>7,146</b>	<b>12,050</b>	<b>38,123</b>	<b>0.44</b>	<b>9.67</b>	<b>0.97</b>	<b>1.45</b>
Greater than \$10 billion	84	9,669	30,037	0.44	9.42	1.00	1.33
\$1 billion to \$10 billion	425	1,137	3,265	0.38	11.01	0.73	2.04

<sup>3</sup> Net charge-offs is the total loans and leases written off (removed from balance sheet because of uncollectibility, less amounts recovered on the loan and leases previously charged off.

Institutions (1)	# of Inst. Sept. 2008 (2)	Total Assets (bil. \$), Sept. 2008 (3)	Total Profits (mil. \$), Sept. 2008 (4)	Return on Assets, %, Sept. 2008 (5)	Equity Capital Ratios, %, Sept. 2008 (6)	Non- current Assets to Total Assets 2001 (7)	Non- current Assets to Total Assets, Sept. 2008 (8)
\$100 million to \$1 billion	3,755	1,088	4,178	0.53	10.04	0.73	1.91
Less than \$100 million	2,882	156	644	0.56	12.83	0.81	1.39
<b>Savings Institutions</b>	<b>1,238</b>	<b>1,523</b>	<b>-5,555</b>	<b>-0.49</b>	<b>9.33</b>	<b>0.66</b>	<b>2.24</b>
Greater than \$5 billion	46	1,025	-5,975	-0.78	8.59	0.53	2.50
\$1 billion to 5 billion	119	230	230	0.14	10.48	0.79	2.03
\$100 million to \$1 billion	715	250	217	9.12	10.85	0.60	1.41
Less than \$100 million	358	19	-28	-0.20	15.85	0.78	1.41
<b>Total/Weighted Averages</b>	<b>8,384</b>	<b>13,574</b>	<b>32,569</b>	<b>0.33</b>	<b>9.63</b>	<b>0.77</b>	<b>1.54</b>

**Source:** FDIC *Quarterly Banking Profile*, Tables II-A, II-B, IV-A, IV-B, December 31, 2001 and September 30, 2008. Available at <http://www2.fdic.gov/qbp/2008sep/all2a.html>, <http://www2.fdic.gov/qbp/2001dec/all2.html>, and <http://www2.fdic.gov/qbp/2008sep/sav3.html>. Visited November 30, 2008

**Table 2. December 31, 2007, FDIC-Insured Institutions' Numbers, Assets, Profits, Equity Capital Ratios, and Noncurrent Assets (2001 and 2007)**

Institutions (1)	# of Inst. 2007 (2)	Total Assets (bil. \$) 2007 (3)	Total Profits (mil. \$) 2007 (4)	Return on Assets, % 2007 (5)	Equity Capital Ratios, % 2007 (6)	Non- current Assets to Total Assets 2001 (7)	Non- current Assets to Total Assets 2007 (8)
<b>Commercial Banks</b>	<b>7,282</b>	<b>11,176</b>	<b>99,511</b>	<b>0.95</b>	<b>10.24</b>	<b>0.97</b>	<b>0.85</b>
Greater than \$10 billion	86	8,838	75,905	0.92	10.00	1.00	0.80
\$1 billion to \$10 billion	425	1,113	11,517	1.08	11.54	0.73	1.05
\$100 million to \$1 billion	3,706	1,062	10,804	1.06	10.34	0.73	1.10
Less than \$100 million	3,065	163	1,282	0.82	13.38	0.81	0.94

Institutions (1)	# of Inst. 2007 (2)	Total Assets (bil. \$) 2007 (3)	Total Profits (mil. \$) 2007 (4)	Return on Assets, % 2007 (5)	Equity Capital Ratios, % 2007 (6)	Non- current Assets to Total Assets 2001 (7)	Non- current Assets to Total Assets 2007 (8)
<b>Savings Institutions</b>	<b>1,251</b>	<b>1,863</b>	<b>5,959</b>	<b>0.32</b>	<b>11.17</b>	<b>0.66</b>	<b>1.45</b>
Greater than \$5 billion	48	1,389	2,905	0.21	11.14	0.53	1.60
\$1 billion to \$5 billion	109	206	1,379	0.71	10.69	0.79	1.13
\$100 million to \$1 billion	719	248	1,636	0.68	11.29	0.60	0.89
Less than \$100 million	375	19	39	0.21	11.80	0.78	1.07
<b>Total/Weighted Averages</b>	<b>8,533</b>	<b>13,039</b>	<b>105,470</b>	<b>0.86</b>	<b>10.37</b>	<b>0.77</b>	<b>0.94</b>

**Source:** FDIC *Quarterly Banking Profile*, Tables II-A, II-B, IV-A, IV-B, for the Full Year 2001 and December 31, 2007. Available at <http://www2.fdic.gov/qbp/2007dec/all2a.html>, <http://www2.fdic.gov/qbp/2001dec/all2a.html>, and <http://www2.fdic.gov/qbp/2007dec/sav3.html>. Visited March 14, 2008.

According to the FDIC, “at the end of 2007, 99 percent of all insured institutions met or exceeded the highest regulatory capital standards.”<sup>4</sup> **Table 2**, column (6), shows one key measure of bank capital, bank equity capital—the owners’ invested money that is the first line of defense against bank failure. Bank equity capital has been building for years. Equity capital, however, has declined slightly in the most recent quarters because of declining equity prices, profits and the necessity to build reserves against future defaulting assets. **Table 1** shows the equity capital ratio for all FDIC-insured institutions had fallen to 9.63% for the first three quarters of 2008, which was 0.74% less than it was in the fourth quarter of 2007. These levels of equity capital are still near record levels. For example, on December 31, 2001, the equity capital was 9.09, which was high then. Still, there are reasons for concern.

Total equity capital fell by \$45.2 billion (3.3%) during the first three quarters of 2008. Almost all of the decline occurred in the third quarter \$44.2 billion. A \$14.6 of other income, consisting mainly of unrealized losses on securities held for sale, and the Washington Mutual Bank (WaMu) were significant factors in the decline in equity. The WaMu failure also had similar negative effects of total Tier one capital and total risk-based capital. In addition, almost half of all institutions reported a decline in their leverage ratios in the third quarter and more than half of all FDIC-insured institutions reported a decline in their risk-based capital ratio. To counter this capital deterioration, more than half of the other the reporting institutions lowered their dividend and more than 20% did not pay any dividend. Even though the industry increased loan-loss reserve by \$17 billion, the smallest since the crisis began, the industry’s ratio of reserves to total loans and leases increased from 1.81% to 1.95%, its highest level since the first quarter of 1995. The result is that reserve growth did not keep pace with the growth in noncurrent loans and leases. The coverage ratio of reserves to noncurrent loans fell from 89cents in reserve to every

<sup>4</sup> FDIC *Quarterly Banking Profile*, Tables II-A, II-B, IV-A, IV-B, for the Full Year 2001 and December 31, 2007. Available at <http://www2.fdic.gov/qbp/2007dec/all2a.html>

\$1.00 of noncurrent loans to 85 cents. For ten quarters, the bank reserves against loan losses have fallen short of noncurrent loans. It is now at the lowest level since 1993.

## The Risk Considerations

The appropriate level of equity capital depends on the total riskiness of assets, including credit and interest rate risk, in the banking institutions' loan portfolios. Meeting and even exceeding capital requirements are easier when the industry is making record profits. Today, even though capital is reasonably high as **Table 1** column (6) shows, the combination of the subprime liquidity crisis and the deterioration in macroeconomic conditions exposes the banking industry to increased portfolio risks at a time when it's increasingly difficult to raise capital. Like profits, bank equity prices have been declining despite the federal government's capital purchase program (CPP), which buys preferred shares in trouble banking institutions. Before turning to the government programs to stabilize the financial system below, it is useful to consider the two major categories of risk.

### Credit Risk

Credit risk is the risk that borrowers may fail to fully make the obligated payments of their loans. In short, credit risk is the probability of default. Credit risk is highly correlated with interest rate risk because higher interest rates tend to reduce borrowers' available income and increase the probability of default as borrowers take on new loans with higher required payouts.<sup>5</sup> The level of consumer indebtedness is a major credit risk factor. Total household indebtedness is at an historic high. Total outstanding household liabilities were more than \$14.4 trillion in the fourth quarter of 2007. At the same time, real estate holdings of households fell \$2.0 trillion, and homeowners' equity as a percentage of households' real estate mortgage debt fell to 47.9%.<sup>6</sup> For the first time since 1982 household mortgage debt exceeded homeowners' equity in real estate. Mortgage debt accounted for 73.1% of total outstanding debt in 2006.<sup>7</sup> In 2000, it accounted for 86% of total household debt. In the mid-1980s, total household debt was roughly 70% of household annual after-tax income. In 2007, that proportion had risen to more than 126%.<sup>8</sup> Rising household indebtedness has raised concerns about the sustainability of the growth in consumer spending, which accounts for almost 70% of the gross domestic product (GDP).

Even before the current credit crunch and the subprime turmoil, banks have been seeing a rise in noncurrent loans because households now have a greater exposure to rising variable-rate consumer loans and adjustable mortgages. In the two Tables, column 8, noncurrent assets to total assets went from 0.94% to 1.54% between the fourth quarter of 2007 and the third quarter of 2008. It is now higher than the 0.77% that was reached in the 2001 recession (**Table 1**, column 7). Some borrowers with weaker credit histories and balance sheets are clearly experiencing problems meeting their obligated payments, which discourages banks from lending causing a credit crunch.

---

<sup>5</sup> See Stuart I. Greenbaum and Anjan V. Thakor, *Contemporary Financial Intermediation* (New York: Dryden Press, 1995), p. 361.

<sup>6</sup> Federal Reserve Board, Flow of Funds data,

<sup>7</sup> See CRS Report RL30965, *Rising Household Debt: Background and Analysis*, by Brian W. Cashell.

<sup>8</sup> *Ibid.*, p. 6.



## **Interest Rate Risk**

The movement of the market rate of interest affects the affordability of consumer borrowing as well as the profitability of banks. Rising market interest rates often causes bank losses or reduces consumers' ability to make loan payments. The following example illustrates the problem for banks. Suppose a bank makes a two-year, \$1 million loan for which it charges 10% interest per annum. And, the bank faces the choice of market financing of the loan with a two-year time deposit at 9% per annum or with a one-year time deposit at 8% per annum.<sup>9</sup> The 9% choice would result in \$10,000 in certain interest earnings for each of the two years for a total of \$20,000. However, if the bank chooses the one-year financing, it will earn \$20,000 in year one. But its earnings in year two will depend on the currently unknown one-year interest rate that will prevail a year from now. Should the one-year interest rate remain unchanged at 8%, the bank will earn a second year of \$20,000 for a total of \$40,000. If in the second year the one-year interest rate falls to 5%, the bank would do even better and record a second-year earning of \$50,000 for a total of \$70,000. But if the market interest rate rises to 13%, the bank would suffer a loss of \$30,000 in year two, wiping out all profits plus \$10,000, or 50% of the earnings it made in the first year, and it would take an overall loss. This risk could be avoided by choosing the two-year financing of the loan. In the current market environment with declining interest rates, households as well as banks could benefit from lower cost of borrowing and lending. However, rising unemployment and capital shortage could more that offset the benefits of lower interest rates.

## **The Subprime Credit Crunch**

Banks were taking advantage of the low-interest environment by using short-term funds to finance higher-earning, long-term loans and mortgages while interest rate rose from mid-2004 to mid-2007. As short-term interest rates move higher, and adjustable mortgages reset to higher interest rates, depository institutions' profits declined as more households and business fail to keep current on their payments. Moreover, some analysts argue that banks and other financial firms financed their mortgage-backed securities with short-term commercial paper. When the availability of credit became more difficult, drying up the commercial paper market, banking institutions were forced to start writing off their losses in mortgage-backed securities due to a significant drop in purchasers of these securities. With rising short-term rates, the shortage of purchasers made the banks increasingly vulnerable to more loan losses and defaults.

FDIC Chairman, Sheila Bair, in announcing third quarter earnings of FDIC-insured banks and thrifts on November 28, 2007, said that "with more than 1.5 million adjustable rate mortgages scheduled to reset in 2008 and another 375,000 set for 2009, the immediate priority for banks and thrifts is to make it easier for homeowners to refinance, and to prevent as many foreclosures as possible . . ."<sup>10</sup> In their efforts to enhance their ability to offer more generous term mortgages to prevent foreclosures, many institutions have limited new lending in order to build up their loan loss reserves and capital. As a result, some analysts argued that the subprime mortgage crisis has turned into a credit crunch where banks and thrifts cannot afford to expand lending because of the rising expense of preventing foreclosures. For example, the banks have seen their interest income

---

<sup>9</sup> Market financing a loan means that the bank borrows the funds it uses for the loan from lenders in the financial market. The bank charges its borrower a higher interest than it pays for those funds in the market.

<sup>10</sup> Thecla Fabian, "'No Surprises,' But FDIC Q3 Earnings Report Again Highlight Subprime Meltdown Fallout," *BNA Banking Daily*, November 29, 2007, p. 1.

fall in order to allow borrowers to pay lower interest to prevent foreclosures. Since banks try to maintain or increase their capital asset ratio when faced with increasing non-current assets as shown in the tables, banks tend to reduce their mortgage lending to slow the deterioration of their capital positions.

A number of bills that would prevent foreclosures due to the subprime crisis are being debated in Congress. The ones that have been most noted in the press are the Mortgage Forgiveness Debt Relief Act of 2007 (H.R. 3648), the Mortgage Reform and Anti-Predatory Lending Act of 2007 (H.R. 3915), the Emergency Mortgage Loan Modification Act of 2007 (H.R. 4178), and the Emergency Mortgage Loan Modification Act of 2008, among other things. H.R. 3648 would exclude forgiven mortgage debt from taxable income. It would allow canceled debt from home equity loans and lines of credit to be excluded as taxable income. H.R. 3915 would require a licensing and registration system for participants in the mortgage finance industry, set new mortgage origination standards, establish rules governing liability for loan assignees and securitizers, lower the points and fee triggers for loans defined as high-cost, and establish a new Office of Housing Counseling at the Department of Housing and Urban Development. H.R. 4178, which would offer participants in mortgage debt restructuring a form of “safe harbor” from investor law suits for six months, was replaced by H.R. 5579 which would directly help loan servicers that face lawsuits for modifying loans to help borrowers.

The Paulson plan (HOPE NOW ALLIANCE) for subprime mortgages modifications is the Bush Administration’s subprime mortgage relief plan. Details of this plan were not fully worked out at the time of announcement. But, as outlined by the Secretary of the Treasury at the December 3, 2007, National Housing Forum in Washington, D.C., it would assist subprime borrowers by freezing their mortgage payments at the pre-reset level. These borrowers would have to be current with their adjustable rate mortgages (ARM) but facing substantial rate resets.<sup>11</sup> While the plan would require major subprime lenders, servicers, and investors to buy into it, critical issues such as how long the frozen payment would last, and what role legislation in Congress would play in preventing investor law suits.<sup>12</sup> With expected significantly poorer earnings for 2008 and 2009 due mainly to subprime mortgage foreclosures, profitability for 2008 is expected to fall short of 2007.

## Competition in the Industry

If the subprime crisis were to have an impact on the banking industry competitiveness, it would be to slow the rate of bank concentration. In terms of priorities, the mortgage crisis has moved managing loan losses ahead of mergers and acquisitions. Over the last two decades, the banking industry has been rapidly consolidating through mergers and acquisitions, which means that there are fewer but larger banks. Since the former chairman of the FDIC made the following statement, there are even fewer banks.

---

<sup>11</sup> Richard Cowden, “The Paulson Suprime Loan Modification Plan Would Extend Resets on Systemic Basis,” BNA Banking Report, December 3, 2007, p. 1. [<http://ipubs.bna.com/NWSSTND/IP/BNA/bar.nsf/SearchAllView/08CD9B5DB62FBC47852573A40015597D?Open&highlight=THE,PAULSON,PLAN>]. Visited December 5, 2007.

<sup>12</sup> CRS Report RL34369, *Constitutional Issues Relating to Proposals for Foreclosure Moratorium Legislation That Affects Existing Mortgages*, by David H. Carpenter.

Once the recently announced mergers are complete, there will be three banking companies whose assets are in the range of one trillion dollars each. Their combined assets will account for approximately 30 percent of the assets of FDIC-insured institutions. The next four largest holding companies will have assets in the range of \$200 billion to \$400 billion, and they will account for another 13% of industry assets. The top 25 banking companies hold over one-half of the industry's assets, while the top 100 hold almost three-quarters.<sup>13</sup>

As a result of bank consolidation, between the end of the fourth quarter of 2006 and the end of the fourth quarter of 2007, there were 148 fewer banks 120 commercial banks and 28 fewer thrifts.<sup>14</sup> In terms of chartered FDIC-insured institutions, there were 181 newly chartered institutions and there were 321 institutions absorbed in mergers. Three institutions failed in 2007.

## **Cost of Funds Is Lower for Large Banks**

In the low-interest-rate environment, larger banks clearly have an advantage over smaller banks in raising deposits that fund loans. The subprime crisis suggests that the suppliers of these funds overpriced the assets they received for these funds. Consumers have been taking advantage of declining mortgage rates to extract funds from the once increasing value of their homes. A sizeable part of these funds from refinancing and home equity loans has been used to pay off higher credit card and installment debts.<sup>15</sup> Smaller banks have a greater reliance on retail funding, which mainly comes from their customers' deposits. The interest rate difference between the lower mortgage loan rates and the rates banks pay for deposits has narrowed considerably. Bankers call this an erosion in smaller banks' net interest margins. In a low-interest-rate environment, deposits continue to flow into banks, particularly to larger banks because the rate of return on alternative money market instruments is lower. Consequently, deposits at commercial banks continue to grow at 8.5% and at 1.1% at savings institutions between December 31, 2006, and December 31, 2007. For all FDIC-insured commercial and savings banks with less than \$100 million in assets, deposits declined by 5.1% and 4.0% respectively, while deposits grew 11.1% and 3.1% respectively at commercial and savings institutions with greater than \$10 billion in assets. The 116 largest depository institutions of the 8,533 FDIC-insured institutions held 74% of all deposits in the fourth quarter of 2007.<sup>16</sup>

Because of the destruction of banks' balance sheets, the government has implemented several programs to reverse the increased insolvencies in the industry.

The major government programs to counteract the financial turmoil are centered in the Department of the Treasury, the Federal Reserve Board and the Federal Deposit Insurance Corporations. The Treasury Department's Capital Purchase Program (CPP) purchases equity in

---

<sup>13</sup> Testimony of Chairman Federal Deposit Insurance Corporation Donald E. Powell, in U.S. Congress, Senate Committee on Banking, Housing and Urban Affairs, *An Examination of the Condition of the Banking and Credit Union Industry*, April 20, 2004, p. 8, at [[http://banking.senate.gov/\\_files/powell.pdf](http://banking.senate.gov/_files/powell.pdf)]. Visited May 20, 2005.

<sup>14</sup> See Quarterly Banking Profile, September 30, 2007, [<http://www2.fdic.gov/qbp/2007sep/cb1.html>], and [<http://www2.fdic.gov/qbp/2006sep/sav1.html>]. Visited December 18, 2007.

<sup>15</sup> Testimony of John D. Hawke, Jr. before the Committee on Banking, Housing, and Urban Affairs, *An Examination of the Condition of the Banking and Credit Union Industry*, April 20, 2004, p. 6 [[http://banking.senate.gov/\\_files/ACF23F.pdf](http://banking.senate.gov/_files/ACF23F.pdf)]. Visited May 11, 2005.

<sup>16</sup> FDIC Quarterly Banking Profile, Table III A, December, 31, 2006, and December 31, 2007. [<http://www2.fdic.gov/qbp/2006dec/all4a2.html>], and [<http://www2.fdic.gov/qbp/2007dec/all4a2.html>]. Visited March 18, 2008.

financially troubled institutions with the expectation that this will prevent the decline depository institutions' stocks. The Troubled Asset Relief Program (TARP) buys or guarantees residential and commercial mortgages to raise the price or slow the declining value of these bank assets. The Federal Reserve Board has also implemented programs including the Term Auction Facility that allow banks with liquidity concerns to borrow directly from the Fed for about a month, and the Term Securities Lending Facility that allow securities firms to borrow directly from the Federal Reserves. The Federal Reserve Board has just announced Term Asset-Backed Securities Loan Facility that will provide liquidity to issuers of asset-backed securities (ABS) collateralized by Student loans, auto loans, credit card loans, and loans guaranteed by the Small Business Administration. Now Congress is expected to pass a government spending program to stimulate the economy and increase economic growth.

The FDIC has a number of programs as well. Besides extending the limit of account deposits it guarantees from \$100,000 to \$250,000, the FDIC has extended its guarantees: FDIC Temporary Liquidity Guarantee (TLG) Program. On October 23, 2008, in the midst of the current financial crisis, the Federal Deposit Insurance Corporation announced its Temporary Liquidity Guarantee program to help unfreeze the U.S. short-term credit markets. At the time, financial institutions were not lending to each other, especially in the commercial paper market, which was almost completely frozen. The two-part program temporarily guarantees all new senior unsecured debt and fully guarantees funds in certain non-interest-bearing accounts at FDIC-insured institutions issued between October 14, 2008 and June 30, 2009 with guarantees expiring no later than June 30, 2012. The FDIC expects these guarantees would restore the necessary confidence for investors to begin investing in obligations of depository institutions. Evidence suggests that these short-term markets are slowly returning to normal after the TLG program was implemented.

The second part of the FDIC's TLG program is to guarantee 100% of non-interest-bearing transaction accounts held in insured depository institutions until December 31, 2009. This addresses the concern that many small business accounts, such as payroll accounts, frequently exceed the current maximum deposit insurance limit of \$250,000. The TLG program is being paid for by additional fees placed on depository institutions that use these guarantees, not taxpayers.<sup>17</sup>

Economic growth has been the key to the profitability of the banking industry. For the sixth year in a row, profits in the U.S. banking industry have broken records. Profitability peaked in 2007, which practically coincided the peak growth of the economy<sup>18</sup> (real GDP grew 5.6% in the first quarter but only 3.4% in 2007 and the forecast for 2008 for about 1.7% 2008) increased the industry's exposure to credit risk – bank customers unable to meet their financial obligations.

## **Some Comparisons with the 2001 Recession**

The high liquidity and profits in the banking system are being reduced rapidly by the subprime crisis due to lending constraints being imposed by regulators and the banks trying to build loan loss reserves and slowing the drain on capital. In the recession of 2001, smaller banks had not heavily lent to nonfinancial, high-tech companies, which became financially troubled during the

---

<sup>17</sup> Thecla Fabian, "FDIC Board Approves Formal Notice of Temporary Liquidity Guarantee Program," BNA Banking Report, October 27, 2008, p. 714, and FDIC website at [<http://www.fdic.gov/news/news/press/2008/pr081105.html>].

<sup>18</sup> On December 1, 2008 the National Bureau of Economic Research Announced that December 2001 was the peak of the March 2001 to December 2007 expansion.

recession. Large banks were doing most of that lending, but they were better prepared than smaller banks because of their broader sources of funding. In that recession, the noncurrent loan ratio for all FDIC-insured institutions (loans at least 90 days past due) went up to 1.00% for commercial banks with assets greater than \$10 billion (see **Table 1**, column 7). After falling for almost seven years, **Table 1**, column 8, shows that for the fourth quarter of 2007, these same large banks' noncurrent asset ratio has declined to 0.80%, which is still significantly below what it was in the 2001 recession. However, it was 30 basis points above what it was a year ago, 0.50% (**Table 2**, column 8). It is a different story for the other large and small commercial banks shown in these tables. For the large commercial banks, noncurrent assets are now higher than they were during the 2001 recession. For example, in the fourth quarter of 2007, all commercial banks, except the largest, noncurrent assets were higher than they were in the 2001 recession. The same is true for savings institutions where the noncurrent asset ratios went from 0.66% in 2001 to 1.45% at the end of the fourth quarter of 2007. That is up from the low of 0.48% at the end of the third quarter of 2006. In short, the large banks' noncurrent assets are rapidly deteriorating, while the smaller banks and thrifts are deteriorating as well, which suggests that the current turmoil is more serious than in the 2001 recession.

## Risk Management

Bank regulators have been encouraging banks to take specific steps to ensure the safety and soundness of the banking system. Banks and thrifts overall have maintained high levels of equity capital (see **Tables**, column 6). The regulators are now placing great emphasis on improving credit-risk management, developing and improving their methods of measuring risk on a transaction-by-transaction basis and holding the appropriate level of capital for that risk. These new methods are to better quantify risk and establish more formal and disciplined processes to recognize, price, and manage risk. To ensure compliance, bank regulators have been moving from the traditional regime of periodic examinations to in-house examiners. The Office of the Comptroller of the Currency, for example, has placed resident examiners in the 24 largest national banks. These examiners and specialists in areas such as commercial and retail credit, capital markets, bank technology, and asset management, provide the regulators with real-time risk management information. Despite these measures, the institutions and their regulators were unable to foresee the subprime crisis.

Even though the subprime crisis has called into question the effectiveness of these new approaches to risk management, large banks are still expected to take a holistic, portfolio view of management using advances in technology to garner information to help them underwrite and manage their credit risk. Regulators claimed that larger institutions have reduced their credit risk exposure to concentration by using the syndicated loan markets which broadly distribute credit exposure within the U.S. banking system as well as to foreign bank and non-banking organizations.<sup>19</sup> Similarly, the greater use of securitization markets has provided another way to manage risk concentration and to diversify funding sources to provide greater access to underserved markets. Moreover, the growth of derivatives markets has provided larger banks tools to manage their interest risk exposures. For example, because residential real estate lending is typically associated with low credit risk because of diversification, solid collateral, and borrowers' vested interest, banks are able to reduce this exposure by using hedges like interest rate swaps and options, which then enable banks to manage future shifts in interest rates while

---

<sup>19</sup> Ibid. Hawke, pp. 9-11; Greenspan, pp.6-8.

expanding lending. The apparent failure of these sophisticated instruments has brought these larger institutions' profitability closer to those of smaller institutions, which are unable to take advantage of these tools because of the higher cost of these instruments.<sup>20</sup>

The use of these risk-mitigating instruments to protect against risks poses two challenges for regulators. First, risk-mitigating tools are complicated contingency instruments whose hedge value is extremely difficult to determine or to price beforehand. Regulators as well as bankers often rely on judgment to estimate their protective value against risks. The subprime crisis suggests that these assets were less valuable than the banking institutions thought they were. Second, if these derivative instruments are truly effective protection against rate risk, smaller banks are disadvantaged by their availability almost exclusively to larger banks. On the other hand, if they are not effective, smaller banks might be better off without using them. Some analysts have argued that most smaller banks do not have enough assets to enter these markets, or their management is not sophisticated enough to understand how to use them successfully. Evidently, the same may be said for some larger banks.

## **Compliance with Basel II**

With historically high level of capital currently, U.S. banks in general have adequate levels of capital to comply with the new Basel accord. However, the expected decline in profits and the need for more loan loss reserves could cause a rapid decline in capital despite the institutions efforts to prevent capital loss. Regulators are in the process of implementing the capital rules under Basel II. Federal banking regulators will require some U.S. banks to use new methods of calculating their minimum regulatory capital requirements. Both houses of Congress have held hearings on the Basel II Capital Accord. Basel II sets a more comprehensive framework for judging and containing bank risk than the existing framework, and it is more closely tuned to changes in risks that affect capital adequacy. Basel I, the existing capital framework under which most countries' banks are currently operating, is less sophisticated in calculating the appropriate minimum capital requirement given the riskiness of a bank's assets. Mainly for this reason, federal banking regulators are in the process of writing a Notice of Proposed Rulemaking (NPR) for Basel I as they did for Basel II. Basel II final ruling is expected to be implemented in the issued in the Spring of 2008. With this NPR, most federal regulated banking institutions could have three methods of calculating their minimum regulatory capital requirements: the Basel II advanced approach for large international banks, all other banks may have to choose between the Basel II standardized approach or remaining on Basel I method. The Basel II standardized approach will add more transparency and disclosure to Basel II, making it more difficult to game standard, which some analysts argue motivated the actions that brought about the subprime crisis under Basel I.

Basel II is slated for implementation in January 2009, which will apply to the largest 11 U.S. international banks, but more banks may voluntarily participate. Basel II is of interest to Congress for several reasons. It would change the safety and soundness standards for U.S. banks, and it

---

<sup>20</sup> Both commercial and saving institutions borrow through advances from the Federal Home Loan Banks (FHLBs) at very low interest rates to make mortgage loans. In 2003, FDIC-insured commercial banks borrowed \$245.3 billion from the FHLBs; thrift institutions borrowed \$234.3 billion, but thrift institutions' advances from the FHLBs grew 8.3% between 2002 and 2003, while the commercial banks' advances grew about half as fast, or 4.8%, according to FDIC data. This suggests that the larger commercial banking institutions have been more successful at garnering funding from more competitive non-FHLB sources than the generally smaller institutions.

may receive direct legislative action as well as require new regulatory oversight. Moreover, it has serious implications for the world's financial system in ways that would affect the U.S. economy. For such reasons, the United States Financial Policy Committee for Fair Capital Standards Act (H.R. 1226) was introduced in the 109<sup>th</sup> Congress and could be reintroduced in the second session of 110<sup>th</sup> Congress. It would establish a mechanism for developing U.S. positions on Basel Committee issues. The Basel II standardized approach seeks to enhance the risk sensitivity of Basel I, while avoiding the complexity of Basel II advanced approach, and eliminate competitive distortions between adopting and non-adopting Basel II banks.

## **Conclusion**

The banking industry had record-breaking profits in 2006 as it has for the previous five years. Now, there are clear signs that profit growth has slowed dramatically, and has turned negative for most institutions. At the same time, the industry's safety and soundness in terms of capital is still better than it has been since the late 1930s. However, this soundness comes from an industry that is becoming more concentrated. Larger banks clearly have advantages over smaller banks in funding assets and mitigating credit and interest rate risks. Developments in the subprime lending crisis have brought these advantages in to question. These processes have left large banking institutions vulnerable to increased credit and interest rate risks now that regulatory requirements on lending are more restrictive and the rate of growth in the economy has slowed. Consumers are spending a larger portion of their disposable income on financial obligations and their mortgage debt now exceeds their equity in their home, which exposes the banks to increased credit risk. Banks are also vulnerable to interest rate risk because of the declining interest rate margin between the interest the banks pay for funds they lend out and the interest they receive from their borrowers. Rising interest rates could result in accelerating reduced profitability. Larger banks that used these advanced methods of funding mortgages are beginning to see their profitability approaching those of the smaller banks that rely heavily on retail funding.

## **Author Contact Information**

Walter W. Eubanks  
Specialist in Financial Economics  
weubanks@crs.loc.gov, 7-7840