Bank Exposure to Real Estate and It's Impact on Regulatory Capital Levels

For the past several weeks we have been hearing statements from government officials and economic pundits that we are now beyond the worst of what is to happen in the banking industry. We have heard that the industry has weathered and overcome its highest hurdles, including it's over exposure to troubled real estate assets. Government officials are citing a growing GDP, a stabilizing real estate market, and capital adequacy marks proved up by the SCAP testing done on the 19 largest U.S. banks, as indicators.

Over the most recent eighteen months I have been in and out of twenty-five or so banks, in all regions of the U.S., scrutinizing financial statements and pouring through real estate asset portfolios. What I have seen doesn't match up with this government rhetoric – at least as it pertains to addressing problem real estate loans, asset valuations and capital adequacy issues. I accept that perhaps U.S. GDP is now expanding, and that maybe real estate values are stabilizing in some parts of the country. What I don't agree with is the capital adequacy claims of the U.S. banking industry.

In a July 7th, 2010 Wall Street Journal article the author points out: "A big push by banks in recent months to modify loans – by stretching out maturities or allowing below market interest rates – has slowed a spike in defaults. It has also helped preserve banks' capital, by keeping some dicey loans classified as "performing" and thus minimizing the amount of cash banks must set aside in reserve for future losses."[1]

In my recent efforts to acquire real estate assets from banks, I have encountered a few common and recurring themes. First, each bank had a substantial number of loans more favorably classified than the circumstances warranted. Just as the WSJ article made reference, many "performing" loans were only performing because the loan was recently restructured and an update of the 2006-07 appraisal, supporting the original loan, was avoided. Second, the bank's carrying values for the individual real estate mortgages were always in excess of what they could be monetized for today - sometimes by a wide margin – 30-40% more than FMV. Any reasonable reasonable investor could/would never purchase the asset at the bank's carrying value, consequently the banks are left with these "performing" loans for a period of time, or until uncovered by their next examination. Third, not one of the banks I have worked with could have consummated any transaction that involved a significant portion of their loan portfolio since the collective discounts on carrying value to reach fair market value would have added up to more than the remaining capital on its financial statements. If the bank had the independent authority to consummate this transaction it would have been the equivalent of digging it's own grave and pulling the dirt over its head. After going through this more than 25 times I began to wonder whether I was a proxy for the rest of the banking industry and, if my experiences were a reasonable reflection, what does this mean for the current health of the banking industry, and what is the industry's ability to contribute to the burgeoning signs of economic rebound?

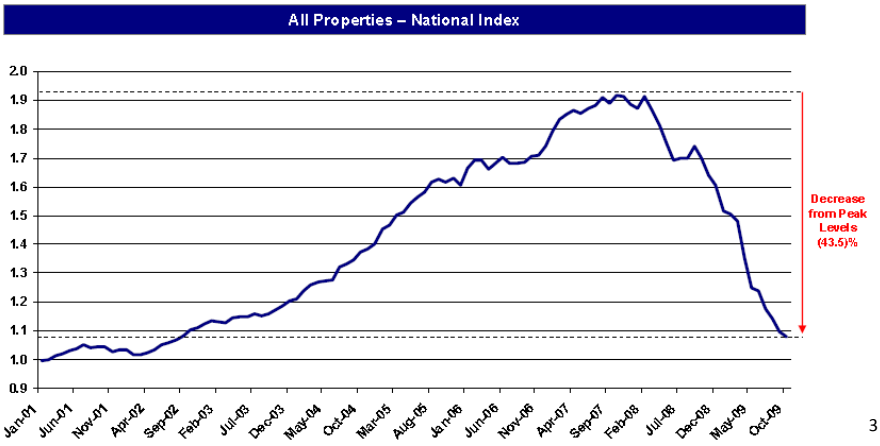
[1] Carrick Mollenkamp, Lingling Wei, To Fix Sour Property Deals, Lenders 'Extend and Pretend', Wall Street Journal, July 7th, 2010

For me, this meant answering the following question: Does the banking industry as a whole demonstrate adequate capital on it's balance sheet sufficient to absorb the inevitable future losses from its real estate assets. Without adequate capital and liquidity, banks will not be able to make the new loans necessary for businesses to hire additional workers. "This is especially relevant regarding small businesses who have accounted for roughly 45% of all job losses during the recent recession. Small businesses also have been responsible for about one-third of all jobs created growth during the last two economic expansions. The withdrawal of small business loans because of a disproportionate exposure to commercial real estate capital creates a negative feedback loop that suppresses economic recovery. Fewer loans to small businesses hamper employment growth, which could prolong commercial real estate problems by contributing to higher vacancy rates and lower cash flows".[2]

Given the strong correlation between job growth and real estate space absorption, without job growth, a real estate value rebound is only a pipe dream. In order for real estate values to gain back some of the 40% decline since the 2007 peak, the industry first needs to experience several quarters of positive net space absorption, which ultimately drives rental rates higher and cap rates lower, through capital flows wanting to ride the momentum up.

The Decline from the Peak

Historical Real Estate Asset Values. Moody's Investor Services estimates the peak in asset values was reached in October 2007, and since then prices have fallen 43.7%. The decline has been largely driven by declining cash flows that have resulted from increased vacancy rates and decreased rental income. A multiplier effect has come from rising cap rates.



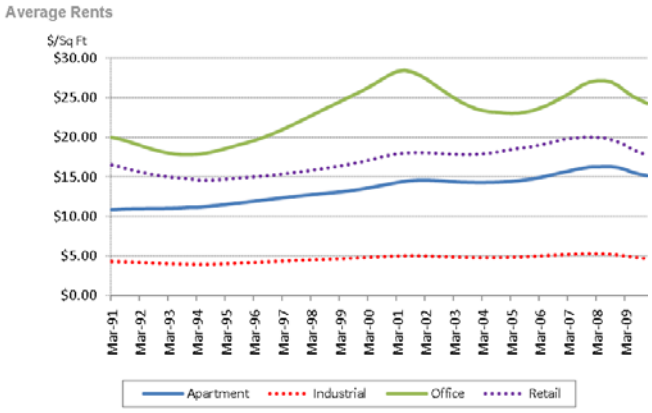
[3]

Historical Rental Rates – Rates in Decline. Since 2007 effective rental rates for all property types have been in decline, falling 25% to 30% depending on property type and geographic market. Keeping the declines in check has been the longer-term nature of leases for commercial properties. As these leases rollover there will be the threat of additional space offered for lease as well as additional downward

[2] Congressional Oversight Panel, February, 2010 Oversight Report

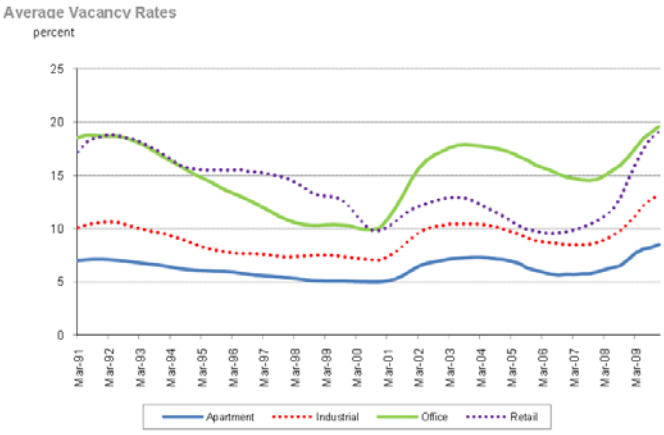
[3] http://web.mit.edu/cre/research/credl/rca.html

pressure on rents. Also not factoring into much of the statistical data on rents is the proliferation of landlord concessions. A recent report published by PIMCO states, "asking rates have clearly declined nationwide across all real estate sectors, however, these measures fail to capture the extent of the concessions landlords are offering to attract and retain tenants. Effective rents have dropped much further than asking rents."[4] Landlords have attempted to out-compete the marketplace by offering additional tenant improvement dollars as well as free rent. These factors detract from effective rents and quite often don't show up in the statistics.



Source: MBA Data Book: Q4 2009

Historical Property Vacancy Rates – Vacancies on the Rise. Since the peak of the market the real estate industry has been consistently experiencing negative net absorption for all property types. The Wall Street Journal reported, "Across the 82 metropolitan areas tracked by REIS, the total amount of occupied office space has dropped since early 2008 by 133 million square feet."[5] Furthermore, vacancy rates have also been buffered by the presence of long-term leases on some commercial properties, meaning that as existing leases rollover an increasing number of properties with vacancy issues will appear.

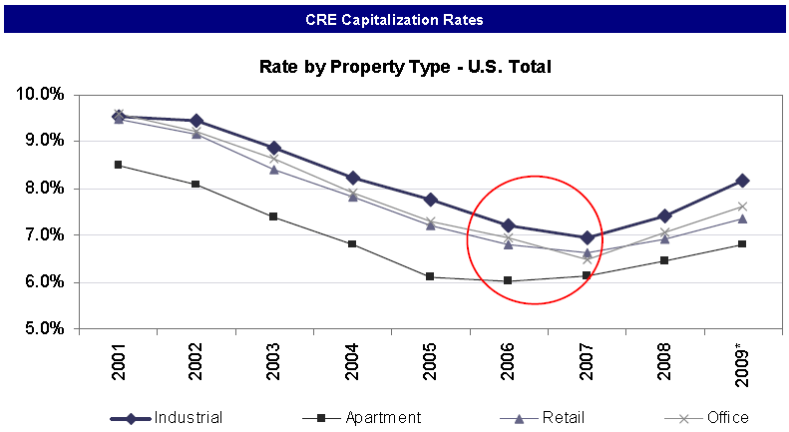


Source: MBA Data Book: Q4 2009

[4] PIMCO, U.S. Commercial Real Estate Project, June, 2010

[5] Anton Troianovski, Office Vacancy Rate Keeps Climbing, The Wall Street Journal, July 6th, 2010

Historical Cap Rates Trending Up. From the table below it appears that cap rates hit their low market the end of 2006 and the beginning of 2007. Since then, depending on property type, cap rates have increased from 50 basis points to 150 basis points.



[6]

Translating Real Estate Losses into Loan Losses. Now let's take a look at the effects of lower rental rates and lower occupancy rates when they are combined with a change in valuation metrics – specifically terminal capitalization rates – on the value of a real estate mortgage, as expressed in terms of a loan to value ratio. The higher the loan to value ratio, the less the value of such mortgage.

Current LTV: Current Cap Rate vs. NOI Change
Assuming starting cap rate of 6% and LTV of 75%

Change in NOI	Current Cap Rate 6.00%	7.00%	8.00%	9.00%
0%	75%	88%	100%	113%
-10%	83%	97%	111%	125%
-20%	94%	109%	125%	141%
-30%	107%	125%	143%	161%
-40%	125%	146%	167%	188%

[7]

As cap rates increase from 6% to 9%, and concurrently, net operating income drops 20-40%, resulting loan to value ratios skyrocket. The initial threshold for the mortgage going underwater is a 20% decrease in NOI and a 100 basis point increase in cap rate – at that point the loan to value ratio exceeds 100%. Thus, a banks plan to foreclose on the collateral, and then selling such collateral to recoup its loan principal is no longer feasible. When factoring in foreclosure costs, the thresholds drops below the 100% LTV mark.

Two other points are worth mentioning is this analysis. First, and not surprising, the greatest amount of loan losses will be concentrated in loans originated very late in the cycle, 2006 – 2007. During this timeframe loan underwriters became progressively more aggressive to win business from an over-

[6] *RCAnalytics and KBW research*

[7] RCAnalytics and KWB research

abundance of competing lenders, and were basing their tighter ratios and spreads on ever-increasing collateral values. Second, deteriorating property values were so significant in this cycle that even loans made early in the cycle and at reasonable loan to value ratios (65-75%) are potentially going underwater.

Assuming 35% Value Loss					
		Original Loan to Value			
		65%	75%	85%	95%
Year of Origination	2001	55%	64%	72%	81%
	2002	57%	66%	75%	83%
	2003	62%	72%	81%	91%
	2004	70%	81%	92%	103%
	2005	84%	97%	110%	123%
	2006	91%	105%	119%	133%
	2007	100%	115%	131%	146%

Assuming 50% Value Loss					
		Original Loan to Value			
		65%	75%	85%	95%
Year of Origination	2001	72%	83%	94%	105%
	2002	74%	86%	97%	108%
	2003	81%	93%	106%	118%
	2004	91%	105%	119%	134%
	2005	109%	126%	143%	159%
	2006	118%	136%	155%	173%
	2007	130%	150%	170%	190%

[8]

Losses for Raw Land

As bad as the deteriorating values have been for commercial real estate, the impact on raw, undeveloped land has been many multiples worse. As with the commercial real estate asset class, raw land value deteriorations have varied by region, with the coastal regions faring far better than others. In many non-coastal markets I have personally witnessed raw land value declines from 50% to 85% of their peak values, with little prospect for regaining that lost value any time soon. The matrix below shows how sensitive land values are to stabilized net operating figures developers and investors will reasonably proforma in a market.

	At Loan Origination 2007	Change In Percent	In Distress 2010
Land Value	$ 1,000,000	-100%	$ -
Hard Costs	$ 10,000,000	-10%	$ 9,000,000
Soft Costs	$ 3,000,000	-10%	$ 2,700,000
Total Project Costs	$ 14,000,000	-16%	$ 11,700,000
Net Effective Rents	$ 24	-8%	$ 22
Occupancy Rate	93%	-9%	85%
Net Operating Income	$ 1,119,600	-16%	$ 936,100
ROI	8.00%		8.00%

Holding the required return constant, and factoring in reduced construction costs during the lull in construction starts, a 16% drop in proforma net operating income is all it takes to relegate the land value to zero. If a 16% decline in NOI were all we were faced with I think we would all be very happy. Not a good portent for land values.

Implied Loss on Loans

[8] RCAnalytics and KBW research

What the decline in real estate values implies about loan losses at banks is very much up for debate, and only time will tell who's assumptions are correct. To date, losses have been estimated for the industry by using one of three sets of assumptions:

1. The Government SCAP Test
2. Keefe, Bruette, and Woods Revision of the SCAP Test
3. Empirical losses encountered by the FDIC when selling foreclosed banks

These loan loss assumptions have been used to determine capital adequacy for all banks.

The Supervisory Capital Assessment Program ("SCAP") took place in the spring of 2009 during the financial crisis of 2008-2009 and was intended to measure the financial strength of the nation's 19 largest financial institutions going forward. It also was an implied proxy for the health of the rest of the banking industry.

Table 1: Indicative Loss Rates Provided to BHCs for SCAP (cumulative two-year, in percent)

	Baseline	More Adverse
First Lien Mortgages	5 – 6	7 – 8.5
Prime	1.5 – 2.5	3 – 4
Alt-A	7.5 – 9.5	9.5 – 13
Subprime	15 – 20	21 – 28
Second/Junior Lien Mortgages	9 – 12	12 – 16
Closed-end Junior Liens	18 – 20	22 – 25
HELOCs	6 – 8	8 – 11
C&I Loans	3 – 4	5 – 8
CRE	5 – 7.5	9 – 12
Construction	8 – 12	15 – 18
Multifamily	3.5 – 6.5	10 – 11
Nonfarm, Non-residential	4 – 5	7 – 9
Credit Cards	12 – 17	18 – 20
Other Consumer	4 – 6	8 – 12
Other Loans	2 – 4	4 – 10

[9]

The stress tests were limited to banking organizations with assets in excess of $100 billion dollars; banks that the Fed considered "too big to fail". The requirements of the stress tests measured each institution's Tier 1 common capital against a baseline scenario and a hypothetical scenario that was deemed more adverse. The final results showed that 10 of the 19 banks were deemed to have inadequate capital, eventhough every bank tested met the legally mandated capital requirements. The test, "allowed supervisors to measure how much of an additional capital buffer, if any, each institution would need to establish today to ensure that it would have sufficient capital if the economy weakens more than expected."[10]

[9] Board of Governors of the Federal Reserve System, The Supervisory Capital Assessment Program: Overview of Results, May 7, 2009

[10] Board of Governors of the Federal Reserve System, The Supervisory Capital Assessmsnt Program: Overview of Results, May 7, 2009

The SCAP test apparently identified a few capital inadequacies, but nothing to alarming for the industry as a whole. The trouble with this analysis was two-fold: First, the test was conducted on only the 19 largest banks in the U.S. whose real estate concentrations are far less than the vast majority of small to mid-sized U.S. banks, and second, the estimated loss estimates for those real estate assets were unrealistically low.

Bank analyst Keefe, Bruyette and Woods also looked at the SCAP tests and compared those results with it's own proprietary bank industry data, gathered in a rather granular way at the bank level. What KBW found was a dramatically understated potential cumulative loss estimate if we were to use the SCAP Test as a true proxy for the entire banking industry. KBW estimates an additional $121 billion of industry losses above the SCAP maximum. The vast majority of these losses are likely to come from Non-Farm, Non-Residential ("True") CRE loans (which were only assigned a 9% loss rate in the SCAP test). The results are below:

Cumulative Loss Rates (%)				**Cumulative Losses ($Billions)**			
	TRUE	Multi-	Total		TRUE	Multi-	Total
C&D	CRE	Family	CRE	C&D	CRE	Family	CRE
KBW Model							
33%	16%	11%	22%	$ 154	$ 116	$ 10	$ 280
SCAP Test - More Adverse Scenario							
18%	9%	10%	12%	$ 84	$ 65	$ 10	$ 159
Difference Between KBW Model Midpoint vs. SCAP Test							
12%	9%	0%	9%	$ 56	$ 65	$ -	$ 121

Anecdotally, KBW's higher cumulative loss percentage seems to be supported by the FDIC's average loss rates on their closed banks, which are running approximately 30% of total assets for each institution closed. Since the beginning of 2008 the FDIC has closed more than 200 banks and sold those banks to healthier banks. Over that time frame the FDIC has estimated their average losses per failed bank to be approximately 30% of the failed institutions assets.

The apparent conclusion is that there remains a significant amount of unrealized losses on the collective balance sheets of U.S. banks. The decision by any bank to not make any new loans would be smart as a bank tries to preserve any existing capital and deploy it against future losses that may appear to be inevitable.

The deteriorating value of the real estate collateral has clear and direct ramifications on the value of the loans secured by such collateral. The following matrix numerically demonstrates the compounding effect of negative changes in rental rates, occupancy rates, terminal capitalization rates and finally new underwriting standards, and supports the higher end of assumed losses in the set of assumptions used.

	At Loan Origination 2007	Change In Percent	In Distress 2010
Occupany Rate	92%	-15%	78%
Net Rental Rate	$ 22.00	-15%	$ 18.70
Net Operating Income	$ 1,000,000	-28%	$ 722,500
Capitalization Rate	6.50%		8.00%
Implied Value	$ 15,384,622	-41%	$ 9,031,254
LTV Constraint	85%		65%
Loan Amount	$ 13,076,929	-55.11%	$ 5,870,315

For those of us bound by mark to market accounting rules, the Supportable Loan Amount would represent the current fair value of a particular real estate mortgage asset.

Deteriorating Real Estate's Impact on the Bank Industry

So what does this significant drop in real estate values mean for the banking industry and for the greater economy? More specifically, I am concerned with what it means for the more than 7,000 small to mid-sized banks that show heavy concentrations of real estate assets, but also represent America's small business lending machine.

Capital Adequacy for Banks Holding $100 Million to $10 Billion in Assets. First, it's important to note that bank exposure to real estate is not evenly spread among all banks. Banks with assets between $100 Million and $10 Billion – small to mid-sized banks have a far greater exposure to real estate, expressed as a ratio of their capital, and are less well capitalized against the risks of substantial commercial real estate loan write-downs. This group represents well over 7,000 banks and is clearly the weak spot within the banking industry.

These small to mid-sized banks also represent the bulk of small business lending (estimates are around 40% of all small business lending), and any type of systemic failure of the group could cause some significant capital constraints to small businesses needing capital to grow and hire workers.

The loss of small business lending creates a negative feedback loop that suppresses economic recovery as fewer loans to small businesses hamper employment growth, which could prolong commercial real estate problems by contributing to higher vacancy rates and lower cash flows. There is a considerable impact on the overall economy here. Small businesses have accounted for around 45% of net job losses in the current recession and have contributed to around 1/3 of net job growth in the past two economic expansions.[i]

Troubled loans have a significant negative effect on the capital of the banks that hold them; the two operate jointly. A bank's capital strength is generally measured as the ratio of specified capital elements on the firm's consolidated balance sheet (e.g., the amount of paid-in capital and retained earnings) to its total assets. Decreases in the value of assets on a bank's balance sheet change the ratio by requiring that amounts be withdrawn from capital to make up for the losses. Losses in asset value that are carried directly to an institution's capital accounts without being treated as items of income or loss have the same effect.[11]

[11] Congressional Oversight Panel, Oversight Report, February, 2010

As of March 31st, 2010 banks ranging in size from $100 million to $10 billion in assets reported the following capital on their collective financial statements. By historical standards these amounts and ratios are strong, and give a very healthy appearance to this sector of the banking industry. However, keep in mind that these capital amounts are based on the banks' methodology for valuing their assets. Any overstatement of the value of their assets is an overstatement of their capital.

Commercial Banks (by asset size)	Number of Banks	Total Assets	All RE & C & I Loans	RE&CI Loans % of Assets
Less Than $100 Million	2,975	158,980,017	79,345,479	49.91%
$100 to 300 Million	2,521	446,026,589	259,552,634	58.19%
$300 to 500 Million	708	273,088,254	167,022,934	61.16%
$500 Million to $1 Billion	551	378,986,387	233,154,680	61.52%
$1 to 10 Billion	419	1,111,199,868	671,120,523	60.40%
TOTALS	7,174	2,368,281,115	1,410,196,250	59.55%

Source: FDIC Statistics on Depository Institutions Report 3/31/10

A typical banking institution will categorize their real estate assets into six main buckets, as follows:

1. 1.Construction, Land and Development
2. Commercial Real Estate
3. Multi-Family Residential
4. 1-4 Family Residential
5. Farm Land
6. Commercial and Industrial
7. Unsecured Real Estate Loans

As of March 31st, 2010 these banks reported the following holdings in each real estate asset bucket:

Commercial Banks (by asset size)	Constr. and Land Develop.	Commercial Real Estate Mortgages	Multifamily Residential Mortgages	1-4 Family Residential Mortgages	Farm Land Mortgages	Commercial & Industrial Loans	Unsecured CRE Loans
Less Than $100 Million	9,438,223	20,239,814	1,378,344	24,072,318	8,699,402	15,516,677	668,624
$100 to 300 Million	26,820,325	87,357,709	7,433,109	78,977,195	17,091,583	41,863,431	1,099,095
$300 to 500 Million	21,302,356	61,596,794	6,658,510	45,189,555	7,097,856	25,177,863	614,689
$500 Million to $1 Billion	31,251,270	87,321,531	9,421,722	60,082,826	8,551,889	36,504,241	1,251,502
$1 to 10 Billion	140,950,082	199,341,498	25,617,627	151,529,705	11,317,944	139,843,921	4,065,975

Source: FDIC Statistics on Depository Institutions Report 3/31/10

In order to assess capital adequacy we must apply an assumption of future losses for each asset bucket and compare those fair values to book values. Positive differences add to banks capital and negative differences detract from capital.

The three previously mentioned loss estimate assumptions are either too theoretical or too generic. In order to perform a more precise estimate of the difference between fair value and book value, I have utilized 3/31/10 Call Report data for bank real estate assets and applied my own experiential loss estimates for each specific bucket of assets. Asset amounts are stated in current book value terms. I have added back all net charge offs from January 2008 through March, 2010 (adjusted for asset sales), as well as current loss allowances currently posted (ALLL). This sum gives an approximation of the original principal balance at the time the loan was issued. Since bank loans are usually short-term, any amortization would be negligible. I have then made my estimate of the total write down from original principal balance, as it correlates with the deteriorating value of the real estate collateral. That figure represents my Fair Market Value of the asset, which is compared to the current carried Book Value, and the difference is assessed. That calculated difference represents necessary asset write downs to get to fair value. Any write-downs represent an overstatement of capital on the books of these banking institutions.

Construction and Land Development Loans. In a July 30th, 2009 report published by Deutche Bank, author Richard Parkus states, "Construction loans will be the epicenter of bank loan problems. They are by far the riskiest type of loan product in bank portfolios, since a substantial portion of those loans have been made to homebuilders. Also problematic is that newly constructed, or partially constructed, properties are over-burdened with vacancy issues, and the market is currently severely penalizing properties with vacancy. Values of most newly constructed properties are down massively, and we should expect an extremely high default rates and high loss severity rates, both likely to be in excess of 50%. Expect total losses of 25% or more." I have been a bit kinder to CLD loans and estimated a 20% total loss to the CLD portfolio.

Commercial Banks (by asset size)	Constr. and Land Develop.	Net Loan Charge Offs 2008-10	Allocation of ALLL 3/31/2010	Gross Amt CLD Mortgages	Total Marks to FMV	Current FMV	Difference Between BV & FV
Less Than $100 Million	9,438,223	295,152	160,278	9,893,653	20%	7,914,922	(1,523,301)
$100 to 300 Million	26,820,325	1,916,061	543,680	29,280,066	20%	23,424,053	(3,396,272)
$300 to 500 Million	21,302,356	1,654,609	463,992	23,420,957	20%	18,736,766	(2,565,590)
$500 Million to $1 Billion	31,251,270	2,943,060	709,131	34,903,461	20%	27,922,769	(3,328,501)
$1 to 10 Billion	140,950,082	12,388,572	2,434,762	155,773,416	20%	124,618,733	(16,331,349)
TOTALS	**229,762,256**	**19,197,454**	**4,311,843**	**253,271,553**		**202,617,242**	**(27,145,014)**

Source: FDIC Statistics on Depository Institutions Report 3/31/10, Analysts Judgement

Commercial Real Estate Loans. With the proliferation of the CMBS market, especially from 2004 to 2007, the banking industry was unable to compete for higher quality, cash flowing properties. The efficiency and the drive to put dollars out made the CMBS machine unbeatable on price and proceeds for the properties it wanted. That left the banking industry to lend against less desirable and riskier assets. CRE lending was much more oriented toward transitional assets, which are more vulnerable to an economic downturn. Furthermore, a much greater proportion of bank loans were originated at the peak of the market and will mature at the bottom of the market, expected to be in the 2010 to 2012

window.[12] Thus, loss rates are expected to be much higher for bank CRE than for CMBS. I believe a total loss rate of 15% is very justified for this asset bucket.

Commercial Banks (by asset size)	Commercial Real Estate Mortgages	Net Loan Charge Offs 2008-10	Allocation of ALLL 3/31/2010	Gross Amt CLD Mortgages	Total Marks to FMV	Current FMV	Difference Between BV & FV
Less Than $100 Million	20,239,814	149,704	343,708	20,733,226	15%	17,623,242	(2,616,572)
$100 to 300 Million	87,357,709	743,090	1,770,845	89,871,644	15%	76,390,898	(10,966,811)
$300 to 500 Million	61,596,794	527,598	1,341,657	63,466,049	15%	53,946,142	(7,650,652)
$500 Million to $1 Billion	87,321,531	768,856	1,981,435	90,071,822	15%	76,561,049	(10,760,482)
$1 to 10 Billion	199,341,498	2,793,704	3,443,412	205,578,614	15%	174,741,822	(24,599,676)
TOTALS	**455,857,346**	**4,982,952**	**8,881,057**	**469,721,355**		**399,263,152**	**(56,594,194)**

Source: FDIC Statistics on Depository Institutions Report 3/31/10, Analysts Judgement

Multi-Family Residential Loans. Although multi-family assets have had their share of trouble, they have also been the greatest benefactor of government subsidies out of all the real estate classes. The government subsidy I am referring to is the Freddie and Fannie lending programs that have continued on strong through the darkest days of the financial market crash. With low interest rates as a tool, GSE financing can mitigate higher vacancies and lower market rents. Another benefit of the GSE lending has been the somewhat active buying and selling of multi-family assets, leading to price discovery and confidence in market values. However, that confidence could quickly disappear pending any dissolution of the GSE lending programs. Based on available financing and experiential loan underwriting, I am using a total loss rate of 8% for the multi-family portfolio.

Commercial Banks (by asset size)	Multifamily Residential Mortgages	Net Loan Charge Offs 2008-10	Allocation of ALLL 3/31/2010	Gross Amt CLD Mortgages	Total Marks to FMV	Current FMV	Difference Between BV & FV
Less Than $100 Million	1,378,344	12,872	23,407	1,414,622	8%	1,301,453	(76,891)
$100 to 300 Million	7,433,109	94,664	150,678	7,678,451	8%	7,064,175	(368,934)
$300 to 500 Million	6,658,510	88,206	145,031	6,891,747	8%	6,340,407	(318,103)
$500 Million to $1 Billion	9,421,722	157,789	213,791	9,793,302	8%	9,009,838	(411,884)
$1 to 10 Billion	25,617,627	746,376	442,517	26,806,520	8%	24,661,999	(955,628)
TOTALS	**50,509,312**	**1,099,907**	**975,424**	**52,584,642**		**48,377,871**	**(2,131,441)**

Source: FDIC Statistics on Depository Institutions Report 3/31/10, Analysts Judgement

1-4 Family Residential Loans. Single family residential loans are where the whole story started, and I don't think we have found the bottom yet. Loan defaults continue to rise in almost all regions and inventories of vacant homes continues to exert downward pressure on home values. Government subsidy programs have mitigated some of the foreclosure challenges here, but the recidivism rate is high and caused by record unemployment. When people aren't working they don't pay their bills, and meaningful job creation is not yet on the horizon. Therefore, I have used a total loss rate of 20% for this asset bucket, resulting in a $62 billion overstatement of asset values for these banks.

[12] Richard Parkus, The Outlook for CRE and its Impact on Banks, July 30th, 2009

Commercial Banks (by asset size)	1-4 Family Residential Mortgages	Net Loan Charge Offs 2008-10	Allocation of ALLL 3/31/2010	Gross Amt CLD Mortgages	Total Marks to FMV	Current FMV	Difference Between BV & FV
Less Than $100 Million	24,072,318	141,159	408,791	24,622,267	20%	19,697,814	(4,374,504)
$100 to 300 Million	78,977,195	837,465	1,600,962	81,415,622	20%	65,132,498	(13,844,697)
$300 to 500 Million	45,189,555	585,014	984,286	46,758,855	20%	37,407,084	(7,782,471)
$500 Million to $1 Billion	60,082,826	885,239	1,363,355	62,331,420	20%	49,865,136	(10,217,690)
$1 to 10 Billion	151,529,705	2,868,526	2,617,514	157,015,745	20%	125,612,596	(25,917,109)
TOTALS	**359,851,599**	**5,317,403**	**6,974,908**	**372,143,910**		**297,715,128**	**(62,136,471)**

Source: FDIC Statistics on Depository Institutions Report 3/31/10, Analysts Judgement

Farm Land Mortgages. I have not involved myself in the evaluation of farm land, mainly because it usually represents such a small portion of a bank's real estate asset portfolio. Given that all real estate assets have been affected by the constrained capital markets I have applied a total loss factor of 15%.

Commercial Banks (by asset size)	Farm Land Mortgages	Net Loan Charge Offs 2008-10	Allocation of ALLL 3/31/2010	Gross Amt CLD Mortgages	Total Marks to FMV	Current FMV	Difference Between BV & FV
Less Than $100 Million	8,699,402	6,877	147,731	8,854,010	15%	7,525,908	(1,173,494)
$100 to 300 Million	17,091,583	34,177	346,467	17,472,227	15%	14,851,393	(2,240,190)
$300 to 500 Million	7,097,856	24,483	154,600	7,276,940	15%	6,185,399	(912,457)
$500 Million to $1 Billion	8,551,889	47,301	194,053	8,793,243	15%	7,474,257	(1,077,632)
$1 to 10 Billion	11,317,944	98,617	195,505	11,612,066	15%	9,870,256	(1,447,688)
TOTALS	**52,758,674**	**211,455**	**1,038,357**	**54,008,486**		**45,907,213**	**(6,851,461)**

Source: FDIC Statistics on Depository Institutions Report 3/31/10, Analysts Judgement

Commercial and Industrial Loans. The vast majority of C&I loans I have reviewed over the past two years have been heavily real estate oriented, usually collateralized by a single-tenant office/warehouse building. From the recession of the past two years, multitudes of small businesses have folded, and vacancy in these buildings has escalated dramatically. My experience tells me that the total loss to the C & I portfolio will be slightly greater than the core CRE portfolio. As such, I have used a total loss estimate of 20% for this asset bucket.

Commercial Banks (by asset size)	Commercial & Industrial Loans	Net Loan Charge Offs 2008-10	Allocation of ALLL 3/31/2010	Gross Amt CLD Mortgages	Total Marks to FMV	Current FMV	Difference Between BV & FV
Less Than $100 Million	15,516,677	288,784	263,501	16,068,962	20%	12,855,169	(2,661,508)
$100 to 300 Million	41,863,431	1,191,943	848,622	43,903,996	20%	35,123,197	(6,740,234)
$300 to 500 Million	25,177,863	738,014	548,406	26,464,283	20%	21,171,427	(4,006,436)
$500 Million to $1 Billion	36,504,241	1,196,626	828,327	38,529,194	20%	30,823,355	(5,680,886)
$1 to 10 Billion	139,843,921	4,187,466	2,415,655	146,447,041	20%	117,157,633	(22,686,288)
TOTALS	**258,906,133**	**7,602,833**	**4,904,510**	**271,413,476**		**217,130,781**	**(41,775,352)**

Source: FDIC Statistics on Depository Institutions Report 3/31/10, Analysts Judgement

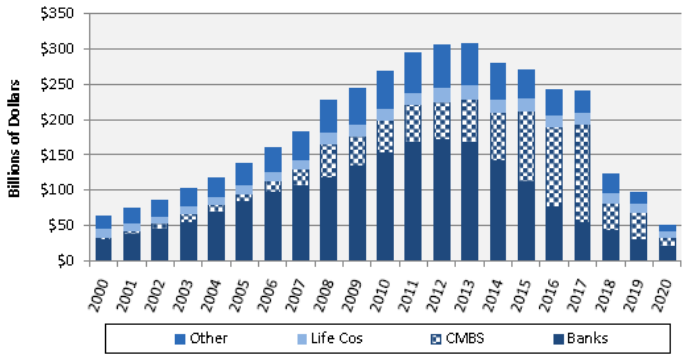
Summary of Write Downs and Restated Capital. Through the use of my total portfolio loss estimates for each individual asset bucket, I have estimated a total overstatement of real estate value, held by banks with $100 million to $10 billion in assets, to be approximately $196 billion. As I stated earlier, any reduction in asset carrying value will cause a reduction in banks regulatory capital. Deducting my value overstatement of real estate assets from banks stated capital levels nearly wipes out such capital. A current marking of assets to market means that banks hold capital just a tick more than 1% of its assets.

This is a precarious position for banks and portends a long stretch of capital conservation by banks to return to reasonable levels of capital cushion.

Commercial Banks (by asset size)	Total Assets	Current Tier 1 RBC	Tier 1 RBC as % Assets	Constr. and Land Develop.	Commercial Real Estate Mortgages	Multifamily Residential Mortgages	1-4 Family Residential Mortgages	Farm Land Mortgages	Commercial & Industrial Loans	Total Reduction to Capital	Restated Tier 1 Capital	As a Pct of Total Assets
Less Than $100 Million	158,980,017	20,361,184	12.81%	(1,523,301)	(2,616,572)	(76,891)	(4,374,504)	(1,173,494)	(2,661,508)	(12,426,270)	7,934,914	5.0%
$100 to 300 Million	446,026,589	43,124,942	9.67%	(3,396,272)	(10,966,811)	(368,934)	(13,844,697)	(2,240,190)	(6,740,234)	(37,557,139)	5,567,803	1.2%
$300 to 500 Million	273,088,254	24,729,998	9.06%	(2,565,590)	(7,650,652)	(318,103)	(7,782,471)	(912,457)	(4,006,436)	(23,235,710)	1,494,288	0.5%
$500 Million to $1 Billion	378,986,387	33,898,355	8.94%	(3,328,501)	(10,760,482)	(411,884)	(10,217,690)	(1,077,632)	(5,680,886)	(31,477,076)	2,421,279	0.6%
$1 to 10 Billion	1,111,199,868	100,215,204	9.02%	(16,331,349)	(24,599,676)	(955,628)	(25,917,109)	(1,447,688)	(22,686,288)	(91,937,738)	8,277,466	0.7%
TOTALS	2,368,281,115	222,329,683	9.39%	(27,145,014)	(56,594,194)	(2,131,441)	(62,136,471)	(6,851,461)	(41,775,352)	(196,633,932)	25,695,751	1.1%

Real Estate Mortgage Maturity Schedule. The most challenging obstacle to banks hoping for time to heal their wounds is the short-term maturities of their loan portfolio. Banks typically lend for 3 to 5 years, with balloon payments due at maturity. The most often assumed method for banks to resolve troubled real estate assets is to delay the recognition of the asset write-down and to hope for a future rebound in asset valuation. Restructurings of nonresidential loans stood at $23.9 billion at the end of the first quarter, more than three times the level a year earlier and seven times the level two years earlier.[13] The hope is to be able to ignore the problem long enough for it to be washed away by recovering property and credit markets. Unfortunately, the banking industry's ability to continue to ignore deteriorating values is significantly hampered by the remaining short term to maturity on most of its real estate assets.

Banks hold some $176 billion of souring commercial real estate loans, according to an estimate be research firm Foresight Analytics. About two thirds of bank commercial real estate loans maturing between now and 2014 are underwater.[14]



Source: MBA Data Book: Q3 2009

According to the Real Estate Roundtable, the total rolling maturities for vulnerable commercial real estate loans for CMBS, insurance companies, and banks and thrifts are $1.3 trillion through 2013 and $2.4 trillion through 2018. The refinancing risk is particularly significant from 2010 to 2013. As a result,

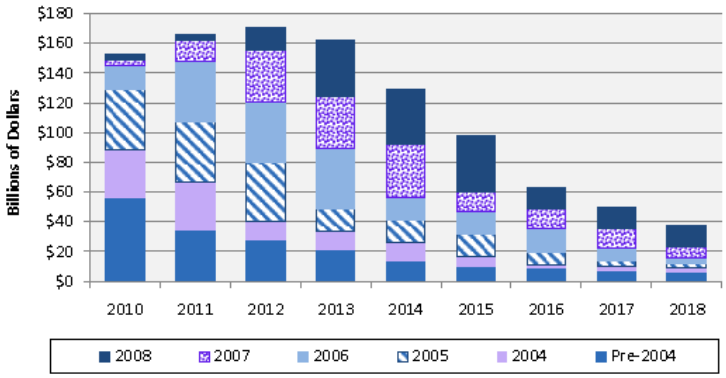
[13] Carrick Mollenkamp, Linling Wei, Wall Street Journal, To Fix Sour Property Deals, lenders 'Extend and Pretend', July 7th, 2010

[14] Ibid Note 12

expected losses from term defaults and maturity defaults are concentrated in the next few years when many expect continued weakness or deterioration in the commercial real estate market.

Borrowers unable to refinance these loans at maturity will have to locate additional funds for the balloon payment, sell the property, work out an alternative arrangement with the lender, or default.[15]

Maturity Schedule for Commercial Real Estate Loans Held by Banks by Origination Year



Source: MBA Data Book: Q3 2009

New Underwriting Standards

Exacerbating the overall refinancing dilemma are the new underwriting standards applied to new loan originations. As virtually every real estate lender in the U.S. experienced significant write-downs of their loan portfolio the pendulum of risk aversion swung violently in the opposite direction of the 2006-07 standards. For lenders still in business new loan terms are now 50-65% LTV (on new and more stringent appraisal numbers – appraisers were stung by the bubble too), and debt coverage ratio in excess of 1.25 times. Begin with dramatically lower asset values, and then compound that with lower loan to value ratios and higher debt service coverage ratios. As is depicted in the matrix below, the combination of these factors greatly diminishes the mortgage value.

	At Loan Origination 2007	Change In Percent	In Distress 2010
Occupany Rate	92%	-15%	78%
Net Rental Rate	$ 22.00	-15%	$ 18.70
Net Operating Income	$ 1,000,000	-28%	$ 722,500
Capitalization Rate	6.50%		8.00%
Implied Value	$ 15,384,622	-41%	$ 9,031,254
LTV Constraint	85%		65%
Loan Amount	$ 13,076,929	-55.11%	$ 5,870,315

[15] Congressional Oversight Panel, Oversight Report, February, 2010

What Does This Impact on the Banking Industry Mean for the US Economy?

Commercial real estate problems exacerbate rising unemployment rates and declining consumer spending. Approximately nine million jobs are generated or supported by commercial real estate including jobs in construction, architecture, interior design, engineering, building maintenance and security, landscaping, cleaning services, management, leasing, investment and mortgage lending, and accounting and legal services. Projects that are being stalled or cancelled and properties with vacancy issues are leading to layoffs. Lower commercial property values and rising defaults are causing erosion in retirement savings, as institutional investors, such as pension plans, suffer further losses. Decreasing values also reduce the amount of tax revenue and fees to state and local governments, which in turn impacts the amount of funding for public services such as education and law enforcement. Finally, problems in the commercial real estate market can further reduce confidence in the financial system and the economy as a whole. To make matters worse, the credit contraction that has resulted from the overexposure of financial institutions to commercial real estate loans, particularly for smaller regional and community banks, will result in a "negative feedback loop" that suppresses economic recovery and the return of capital to the commercial real estate market. The fewer loans that are available for businesses, particularly small businesses, will hamper employment growth, which could contribute to higher vacancy rates and further problems in the commercial real estate market.[16]

How important is lending to small business? In prepared remarks, Federal Reserve Chairman, Ben Bernanke, stated "making credit accessible to sound small businesses is crucial to our economic recovery and so should be front and center among our current policy challenges." Rather dauntingly, Bernanke cited in his prepared remarks, data showing that outstanding loans to small businesses have declined to less than $670 billion in the first quarter of 2010 from about $710 billion in the second quarter of 2008. Furthermore, the National Federation of Independent Businesses said this week that its Small Business Optimism Index dropped 3.2 points to 89.0 last month. In 23 of the past 30 months, readings have come in below 90, an unprecedented result in the survey's history the NFIB said.[17]

The foundational issue is really the reluctance of banks, and their regulators, to move their real estate assets off of their books. The readiness to stretch out loans puts a floor under commercial real estate and keeps it from hitting bottom, which may be a precondition for a robust revival. More broadly, the failure to get the loans off banks' books tends to deter new lending to others. It's a pattern somewhat reminiscent, although on a lesser scale, of the way Japanese banks' failure to write off souring loans in the 1990's contributed to 10 years of stagnation.[18]

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[16] Congressional Oversight Panel, Oversight Report, February, 2010

[17] The Wall Street Journal, Small Businesses Get More Pessimistic, July 13th, 2010

[18] Carrick Mollenkamp, Linling Wei, Wall Street Journal, To Fix Sour Property Deals, Lenders 'Extend and Pretend', July7th, 2010

Brian Olasov, a bank industry lawyer, in his testimony to the Congressional Oversight Panel summarized our current conundrum well. He summarized his opinions and observations by stating:[19]

- There is a logical and inevitable sequence that follows from an inability or unwillingness to move problem assets from banks.
- This inability or unwillingness stems from the overwhelming desire to preserve regulatory capital.
- As long as banks sit on material levels of problem loans, available cash flow will migrate to excess reserves or low-risk securities.
- This results in a contraction of available credit.
- Since the architectural intent of Financial Stability in all its guises is to bridge the economy until private sector demand re-emerges, the absence of a healthy, functioning credit allocation system, primarily through our banks, prolongs the need for this bridge to exist.
- Until we design a mechanism that promotes the movement of problem assets off banks' balance sheets, banks will be less inclined to meet reasonable, prudent borrower requests.
- In the absence of mechanisms to cleanse bank portfolios or provide adequate matching funds to deserving community and regional banks, fresh capital has been sidelined awaiting FDIC bargains. The failure to deal with these problems and, on selective occasions, provide some form of bank assistance creates high direct and indirect costs to communities, the FDIC and the broader economy.

By allowing the banks leeway in dealing with their real estate losses, government officials have actually worsened the prospects for those assets to recover. What's needed is a flushing of the system. Finding a true valuation bottom that investors can take confidence in, and a cleansing of bank balance sheets that allows them to begin lending again. Both will stimulate the flow of capital and help the U.S.'s nascent economic recovery grow.

A Solution

Any viable solution must be adept at balancing numerous issues. First, it must move a significant portion of the real estate assets off of the books of the banking institution, freeing the institution from asset management duties as well as exposure to further additional write downs. Second, it must provide the banking institution the opportunity to participate in the future rebound in the value of those real estate assets. Lastly, the overall solution must put the bank in a position to lend to qualified small businesses and worthy real estate assets. This lending activity not only stimulates economic activity and job growth, but also is the basis for bank earnings.

[19] Testimony of Brian Olasov to Congressional Oversight Panel, January 27th, 2010

In multiple instances I have offered to a troubled bank the opportunity to sell a significant portion of their problem real estate holdings into a professionally managed real estate entity, while maintaining a back-end residual piece. Assets are purchased by a third party investor at the current Book Value, but the cash payment is limited to the Buyer's determination of Fair Market Value. The difference is maintained as a residual interest the bank earns as the property and credit market move toward stability. The residual interest is not too big to impugn bank capital.

In most instances the banks were positive about pursuing this structure. They were happy to hand off problem real estate management duties to an entity managed by real estate executives with deep and broad experience in development, ownership and asset management. Assets are resolved over an extended period of time, with a focus on maximizing recovery. Over time, and under the auspices of professional real estate asset management the likelihood of par recovery is much greater. In the interim, banks are free of asset management headaches and additional accounting marks, which puts them in a position to start lending again. Furthermore, the banks were more than positive about the idea of monetizing a portion of their portfolio without the prospects of "permatizing" their losses.

If this were repeated enough, and the details transparent enough, the structure would create price discovery and lead to an understanding of true market value. Certainly we would experience an additional deterioration in values through this price discovery, but the industry would then have a foundation from which to begin the healing process and regain value. The process begins with a conceptual buy-in from the bank regulators.