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An inflection point in banking:

We have reached a point in the evolution of the financial markets where the role of banks will once again change for the worse. In the early 1980s, money market fund disintermediation and high, volatile interest rates eliminated banks' cozy monopoly on cheap, retail deposits. Then, the growth of securities markets stole away banks' most lucrative lending clients. Now, banks' proven ineptness as leveraged portfolio managers is undermining their ability to attract the cheap financing and much-needed capital that is necessary to run money in this capacity. Savvy investors are beginning to allocate their equity to more sophisticated managers who can do the same thing, but better and more transparently.

The banking sector's role as the middleman for debt creation in the economy has been incredibly profitable over the last twenty years as the bubble in debt levels generated robust profit growth on the back of increasing rates of borrowing. Whether the income was earned by directly engaging in lending, collecting fees in the securitization of lending, or by mediating the boom in business financial transactions, banks collected fees in some way each time new debt was created. Eventually, the bubble in debt creation led to debt burdens that were too great relative to the ability to service the debt. The result has been a move from the bubble in credit extension to a period of increasing defaults on old loans leading to deteriorating capital ratios and a retrenchment of new credit creation. Even a fall to 'normalcy' in debt creation and business activity will put a significant drag on the ability of banks to generate new income compared to the past. This reduction in revenue comes at a time when the spreads that the banks are paying to get cash are rising (by hundreds of basis points) and there are $450 bln in losses from bad loans in the past that will need to be absorbed in coming years. The result is that banks' earnings will be well below their peak for years to come, in contrast with analysts who believe that there will be a relatively swift rebound to pre-credit crunch earnings for the banks in two years.

Banks' overall business can be broken into four fairly distinct sources of income; portfolio management (running a leveraged investment portfolio), transaction intermediation (investment banking and securitization), proprietary trading, and utility-like retail banking services. As portfolio managers, banks can increase their income by either lending out more loans (and capture the spread between their borrowing costs and their asset yield) or by improving the spread on the new loans they are making. The boom in earnings for banks starting in the early 1990s was the result of a boom in the extension of credit in the overall economy. As the middleman, they profited directly from collecting the spread on the difference between borrowing costs and loan revenue on an ever increasing pool of debt in the economy.

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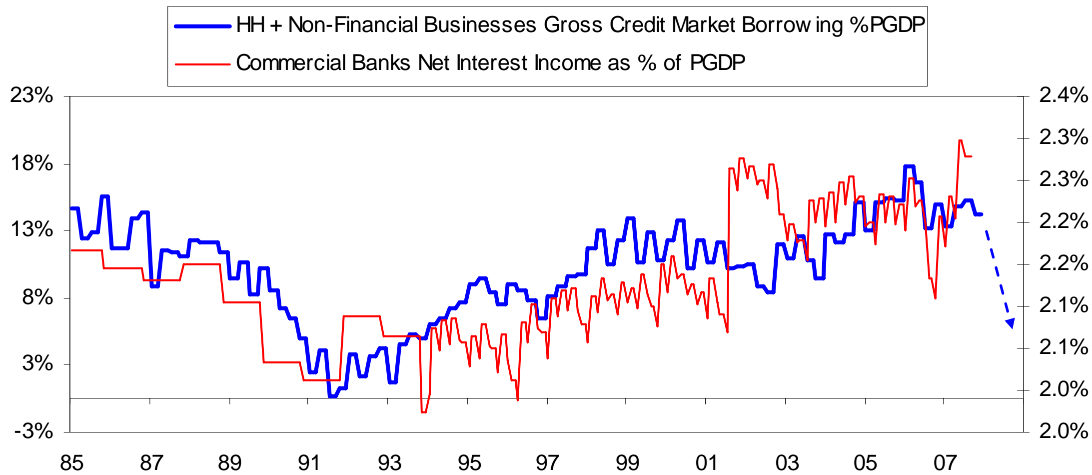
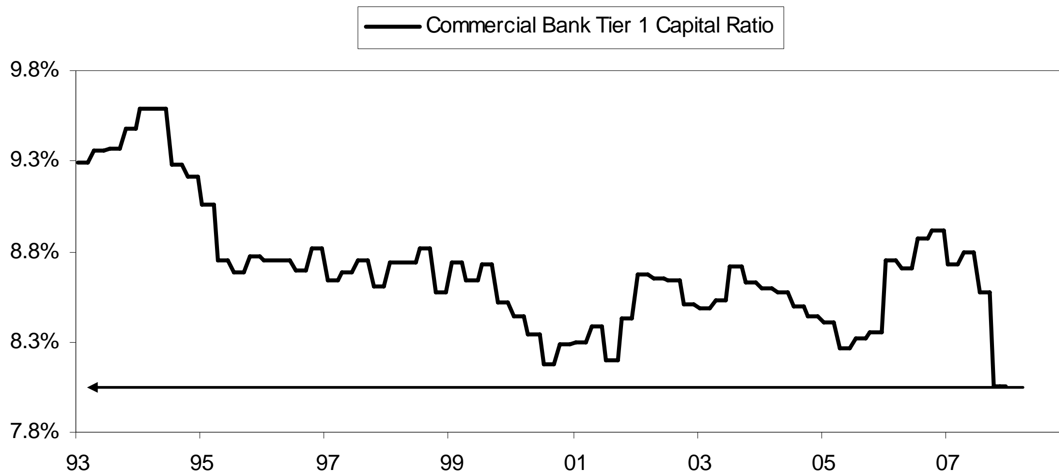
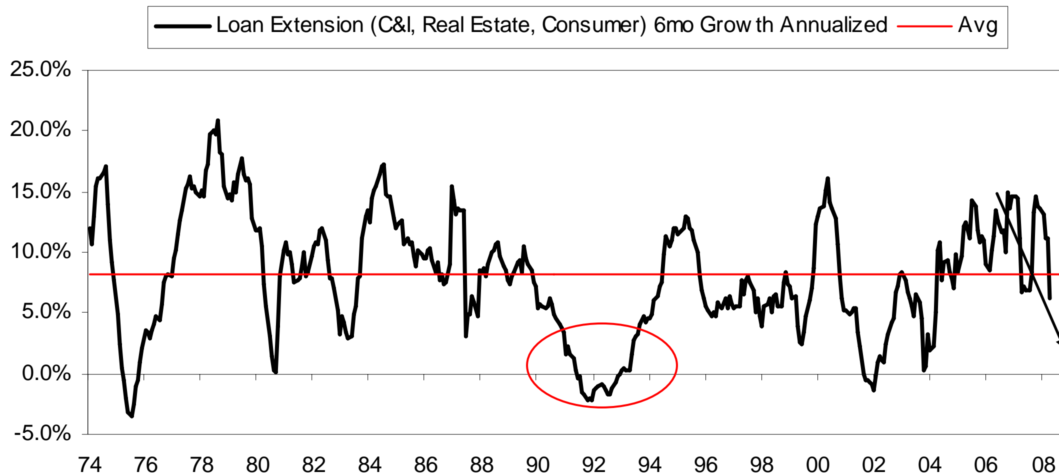


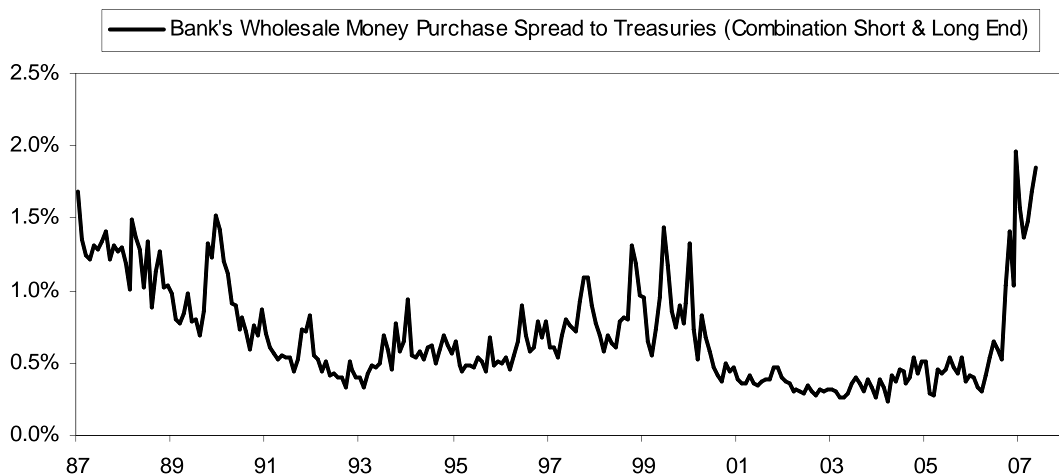
To extend new credit, however, banks either need to increase their leverage or find new capital. Losses on the securities portfolios and past loans have deteriorated capital substantially for these banks in aggregate. While new capital has been raised, it's mainly to replenish the capital lost due to losses, not to be used for new lending.



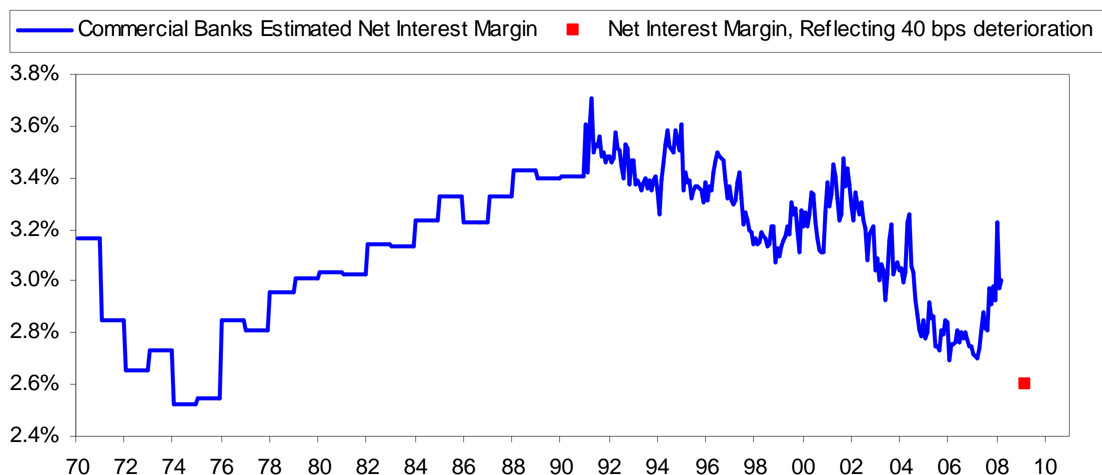
As portfolio managers, banks are inherently handicapped. They cannot create a truly diversified portfolio because they can only buy credit. At a time of thin capital ratios and increasing defaults on old loans, banks are hesitant to expand their balance sheets (to invest in new credit), which leads to a slowing of lending growth, and therefore, slowing revenue growth. Using the early nineties as a guide to a previous period of deleveraging in the economy, we would expect loan growth to slow to more like 2-3% per year, down from the past ten year average growth of 8%. That would represent a fall of about 60% in the growth of their income from net interest margin.



This new income growth will slow at a time when the rise in their cost of borrowing is eating into their loan margins. Prior to the credit crisis, bank spreads had been roughly 50 bps, suggesting the likelihood of a default occurring once every 200 years. Since then, bank credit risk has been re-priced sharply higher, now for some banks in the range of 200-300 bps. Given the relative frequency of 'failures' in the banking system (we've had 2 events in the last 30 years, the LDC debt crisis and this most recent credit crisis, which have wiped out most of banks' equity capital) and the relatively high leverage employed on an undiversified credit portfolio, this re-pricing of bank credit risk could stick around for awhile. As we noted in previous *Observations*, some of this elevated financing cost is being locked in through noncallable long-term bond issuance, which will weigh on their earnings for years to come.



With wholesale purchased money for these banks representing roughly 40% of their liability funding, an elevated spread of just 100 bps will slice off 40 bps from their net interest margin, a dollar loss of around $40 bln, or a reduction in net income of about 40% on an ongoing basis. Improvements in net interest margins from falling interest rates will help banks in the short-term as their previous lending at higher rates adjusts more slowly than their current borrowing costs. Relative spreads between the banks' funding costs and those to whom they loan will determine the longer-term income for banks and higher spreads for the banks will eat into that relative spread. To give some perspective, a cut in net interest margin by 40 bps as a result of the increase in the price of purchased money discussed above could push net interest margin to its lowest levels since the 70s.

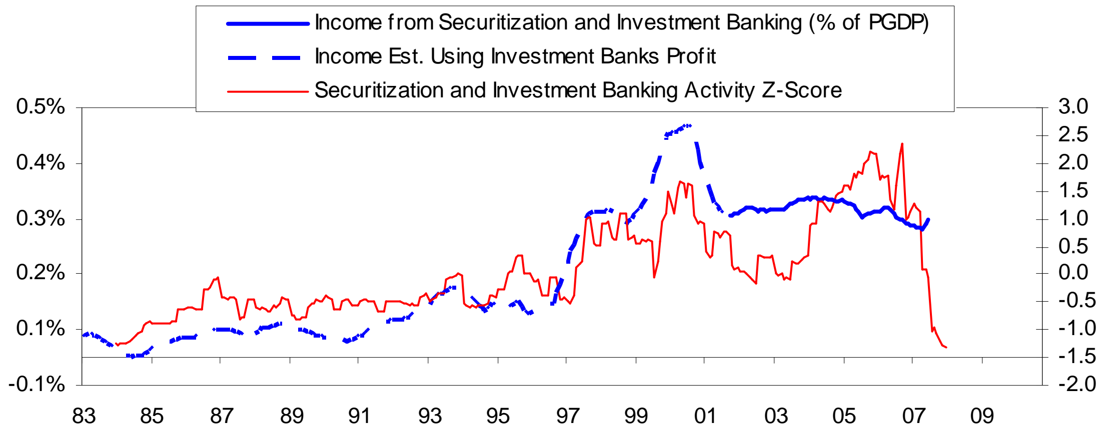


Banks will also suffer losses on their old portfolio of loans. While they have acknowledged more than $80 bln in losses so far, those losses are primarily just on their securities portfolio, not off-balance sheet exposures or direct loans. Direct loans held by banks to businesses and households are nearly 3 times larger in size than their securities portfolio with many similar poor quality credits. Losses estimated using current market pricing suggest nearly $450 bln in losses in the pipeline on these assets, which will be taken over roughly the next 5 years.

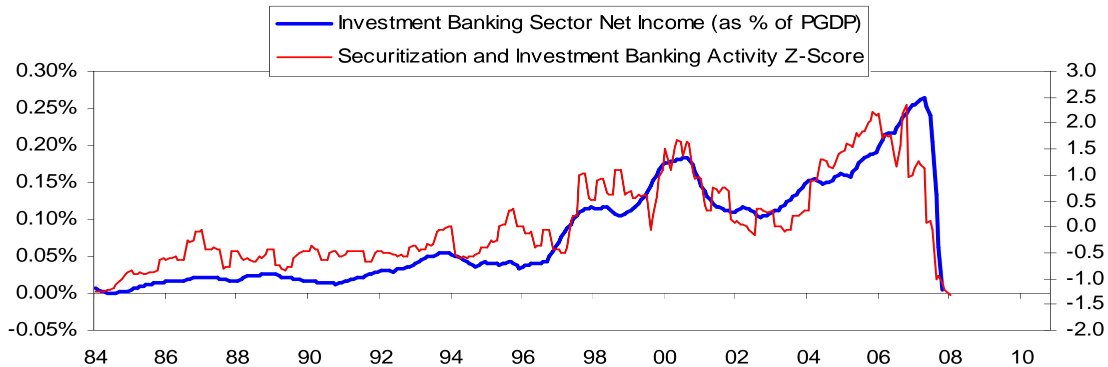
Estimated Losses on US Commercial Bank Loan Book

	Total Assets (US$ blns)	Total Loss %*	Total Loss (US$ Blns)
Loans and Leases in Bank Credit	5,677	-8%	-435
Commercial and Industrial	1,113	-7%	-79
Of Which Hung Leveraged Loans, on balance sheet	96	-7%	-7
Investment Grade	888	-7%	-62
Non-Investment Grade	129	-8%	-10
Real Estate	3,729	-9%	-324
Residential	2,109	-9%	-189
Prime	1,071	-2%	-26
Alt-A	293	-9%	-26
Subprime	230	-15%	-35
HELOC	515	-20%	-102
Commercial	1,620	-8%	-135
Consumer	835	-4%	-32
Credit Card Plans	361	-5%	-17
Auto	148	-2%	-4
Other / Not Classified	327	-4%	-12

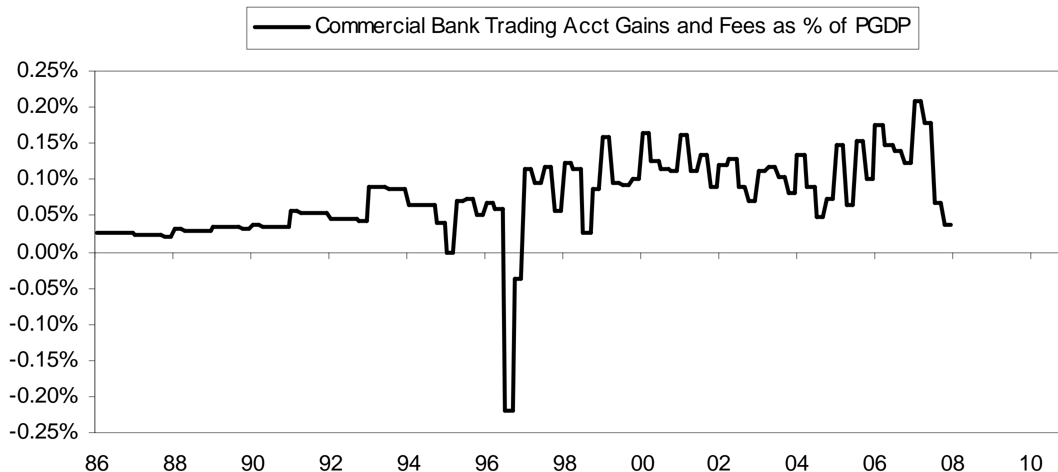
Beyond running their own credit portfolio, banks generate earnings through transaction intermediation, which includes investment banking and securitization underwriting much like investment banks. The boom in debt creation supported a general rise in financial transactions and lifted profits for both banks and investment banks who served as the middlemen for transactions. In recent months, both new securitized product creation and business activity has slowed considerably. Below is the income generated by commercial banks from securitization and investment banking activity (solid blue line), backfilled with income from investment banks to get a sense of the comparative history.



For investment banks, who generate much of their income from these transactions, the relationship has been much closer through time. The recent fall in securitization and business activity suggests a fall in income to roughly zero. For both banks and dealers, a lot of their fees came from the creation of derivatives traps that no one will ever buy again.



Income generated from proprietary trading had been a source of new revenue for banks prior to the start of the credit crunch as they generated more income from holding risky debt securities. In recent quarters, banks have posted large losses on these securities portfolios, as they have written down roughly $40 bln in losses on subprime and related securities through the end of the year, and another $10 bln in the first quarter.

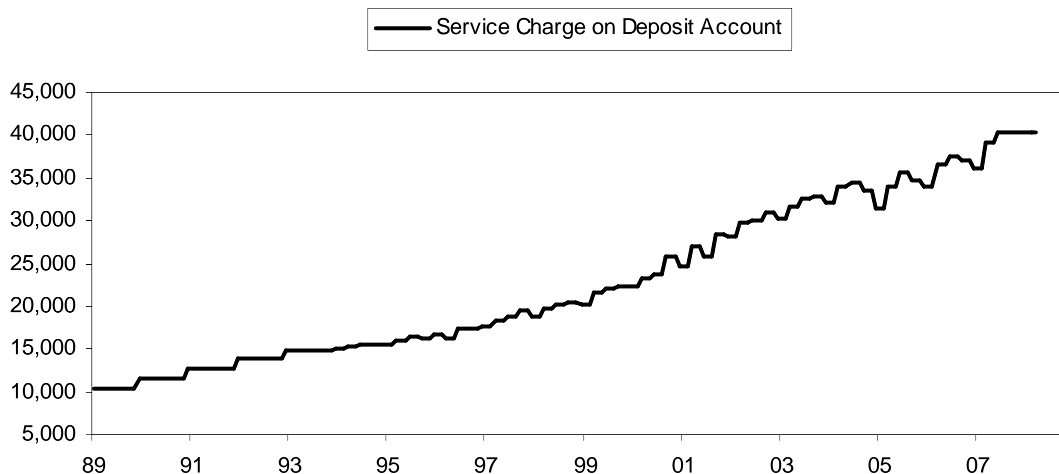


Using a similar methodology as the loan portfolio, our rough estimates suggests that there is likely another $60 bln in *on*-balance sheet securities losses, and another $25 in *off*-balance sheet entities' losses that are left to be recognized over the next year.

Estimated Losses on US Commercial Bank Holdings of Risky US Debt Securities

	Total Assets (US$ blns)	Marked-to-Market Loss %^ from 1/1/2007	Mkt To Mkt Loss (US$ blns)
Securities in Bank Credit	2,145	-5%	-108
Treasury and Agency Securities	994	-1%	-14
Agency MBS	994	-1%	-14
Other Securities	1,151	-8%	-94
Securitized Real Estate Loans	200	-39%	-77
Non-Subprime CDOs	4	-1%	0
Primarily Subprime RMBS-Backed CDOs	120	-56%	-68
Of Which High Grade	57	-47%	-27
Of Which Mezzanine	55	-64%	-35
Of Which CDO^2	9	-69%	-6
Securitized Subprime RMBS	16	-30%	-5
of Which AAA	13	-18%	-2
of Which AA	1	-59%	-1
of Which A	1	-78%	-1
of Which BBB	0	-87%	0
of Which BBB-	0	-88%	0
Of Which Equity	1	-99%	-1
CMBS	60	-8%	-5
Other ABS	361	-3%	-10
Corporate Bonds	591	-1%	-7
Investment Grade Bonds	445	-1%	-4
High Yield Bonds	146	-1%	-2
Off balance Sheet Exposures	388	-6%	-25
Unconsolidated VIEs (inc. ABCP backstops & SIV structures)	388	-6%	-25

Finally, banks serve a utility function in the economy, as a place for people to store money for transactional purposes, guaranteed by the government. Income generated from providing this service, and all of the associated fees, has been a relatively stable source of income. Alternative sources of short-term savings (things like money market funds, etc); continue to hurt the competitive advantages of a bank, but in the short-term, there probably will not be much change in growth in revenue from these sources.



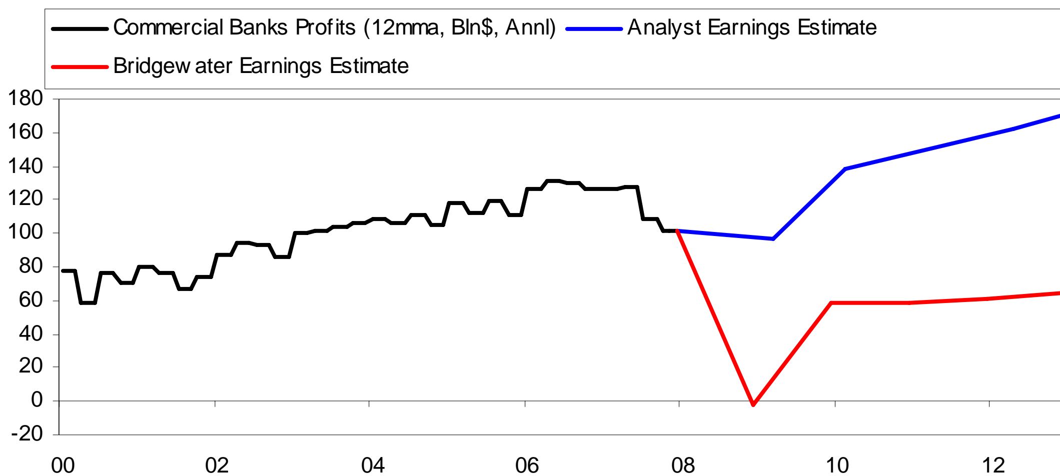
Below we put these four pieces of bank profits together and predict each piece. In aggregate, we expect to see overall earnings of about zero in 2008. For the estimates we assume that credit growth is a modest 3% (consistent with the early nineties period), a deterioration of net interest income by 40bps, a fall in transaction intermediation income consistent with the slowing of securitization and merger activity, credit losses consistent with our estimates, and salary costs decrease by 20%. The largest deterioration in income comes from increases in loan losses and continued write downs of securities losses which will drag down earnings down by $150 bln, while the reduction in transaction intermediation will hurt earnings by about $20 bln. This deterioration in income will be partially offset by reductions in employee costs and a rise in utility income, but those two pieces will only cushion the loss by about $40 bln. While we can tinker with each piece, the picture will roughly be the same – bank earnings will be substantially lower than last year.

	2007 Income	Estimated 2008 Value	Change
Total Loan Book	247	145	(102)
Net Interest Income	303	289	(15)
Provisions for Loans and Lease Losses	-57	-144	(87)
Investment Banking Activities	35	15	(20)
Net securitization income of commercial banks	21	9	(12)
Investment banking, fees and commissions	14	6	(8)
Proprietary Trading	5	-58	(63)
Trading Profits Ex. Writedowns	45	35	(10)
Writedowns on Trading Securities	-40	-93	(53)
Utility-Services and Fees	171	182	11
Service charges on deposit accounts	39	40	1
Fiduciary activities by commercial banks	28	30	2
Net servicing fees of commercial banks	14	15	1
Other noninterest income of commercial banks	90	97	6
Salaries and Benefits	-141	-113	28
Premises and Equipment	-38	-40	(2)
Other Non-Interest Expense	-134	-134	(0)
Pre-Tax Net Operating Income	145	-2	(148)
Tax Rate	30%	0%	
Net Operating Income	102	-2	(103)

As we look past this upcoming year and the secular pressures take hold, the longer-term picture for bank earnings doesn't look much better. We continue to assume 3% loan growth, 40 bps drag on earnings from elevated funding costs, increases in losses in their loan book as described above, and a return to trend-line growth for most other sources of income and expenses over 5 years. Modest growth in income from loan revenue and other non-interest income is almost entirely offset by losses from previous loans, leaving earnings at half of what they were in 2007, and a third of the pre-credit crisis peak for the next five years.

	2007 Income	Estimated 2008 Value	2009	2010	2011	2012
Total Loan Book	247	145	154	163	172	181
Net Interest Income	303	289	297	306	315	325
Provisions for Loans and Lease Losses	-57	-144	-144	-144	-144	-144
Investment Banking Activities	35	15	26	32	35	37
Net securitization income of commercial banks	21	9	15	18	20	21
Investment banking, fees and commissions	14	6	11	14	15	17
Proprietary Trading	5	-58	32	32	33	35
Trading Profits Ex. Writedowns	45	35	32	32	33	35
Writedowns on Trading Securities	-40	-93	0	0	0	0
Utility-Services and Fees	171	182	186	192	199	207
Service charges on deposit accounts	39	40	41	42	43	45
Fiduciary activities by commercial banks	28	30	31	32	34	36
Net servicing fees of commercial banks	14	15	15	15	16	16
Other noninterest income of commercial banks	90	97	99	102	106	110
Salaries and Benefits	-141	-113	-136	-152	-165	-175
Premises and Equipment	-38	-40	-41	-42	-44	-45
Other Non-Interest Expense	-134	-134	-136	-140	-144	-148
Pre-Tax Net Operating Income	145	-2	84	84	87	92
Tax Rate	30%	0%	30%	30%	30%	30%
Net Operating Income	102	-2	59	59	61	64

The market perception, however, is that banks will soon rebound to their pre-credit crunch earnings level. Analyst expectations are for the fall in earnings from the last couple of quarters to rebound by next year and long-term analyst earnings expect nearly 9% earnings growth going forward. Below we compare our estimates to the analyst expectations. Based on the estimates from above, banks will have well below peak earnings for several years to come.



While banks have gotten out of the most acute pressures that could lead to failure over recent months, the earnings picture continues to remain weak. The slowdown in credit creation in the economy will hinder the ability of the banks to generate income from making new loans. Losses on old loans, which amount to nearly all of the annual earnings for the banks, will not be sufficiently offset by growth in income from new loans given the weak demand for debt in the economy. As a result, the banks are in for a prolonged period of low earnings and balance sheet repair, not a quick return to the pre-crisis normalcy that analysts suspect.

We believe that the landscape for banks has fundamentally changed. Professional investment managers are inherently better at running a leveraged portfolio than a bank. These managers will increasingly attract the pools of capital that were going into bank equity to buy better quality assets that deserve to be bought and then hold them on a fully mark-to-market basis. The fat-spread funky credit derivatives will go away leaving banks to fight with efficient electronic trading to scrape a return from narrow bid-offer spreads on plain vanilla instruments. Quality hedge funds will be a better bet

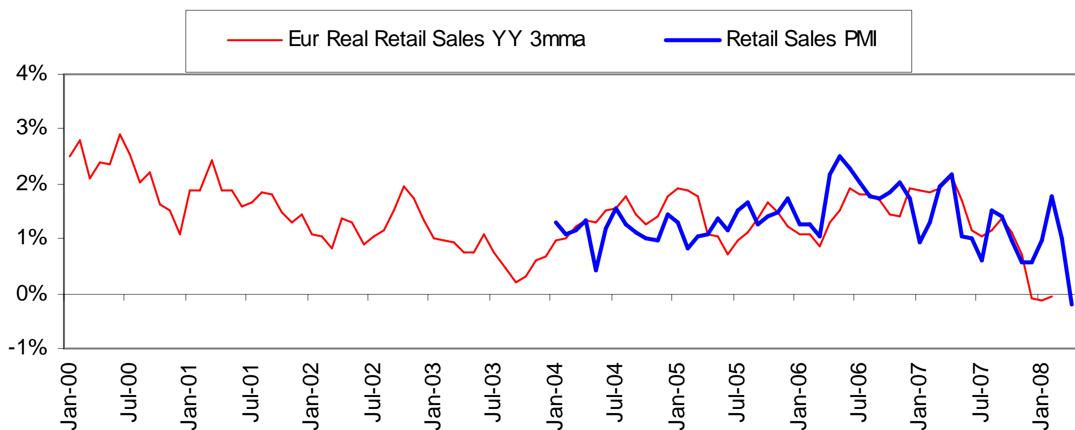
than banks' prop desks. That leaves the utility business as the banks' primary strategic advantage – largely a cost efficiency/scale game.

We will be interested to see whether savvy global investors continue to buy equity in banks that are essentially ineffective in three very competitive global businesses, trying to make up the difference with 14/1 leverage and book value accounting that smoothes results and hides problems. We are doubtful and anticipate the emergence of new players to take their place and make markets and the world economy more efficient.

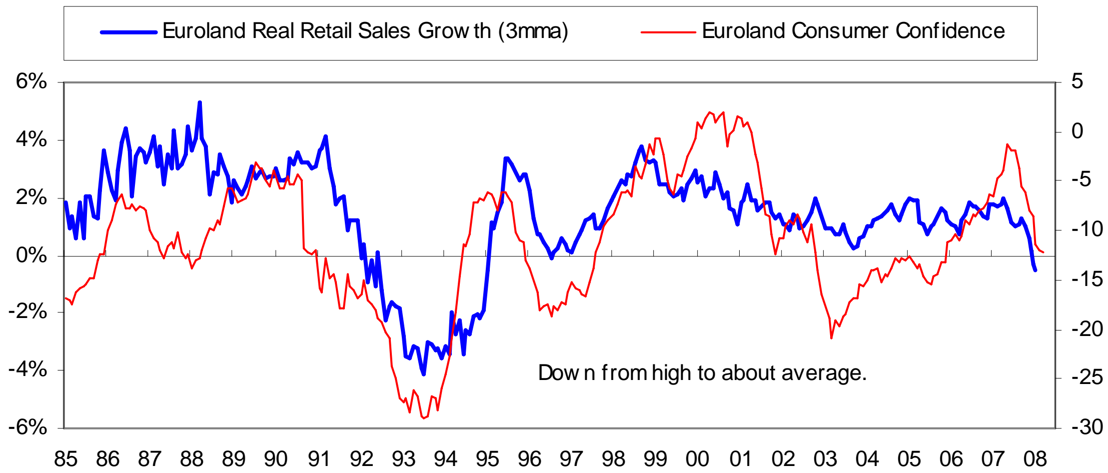
Other Industrialized Countries

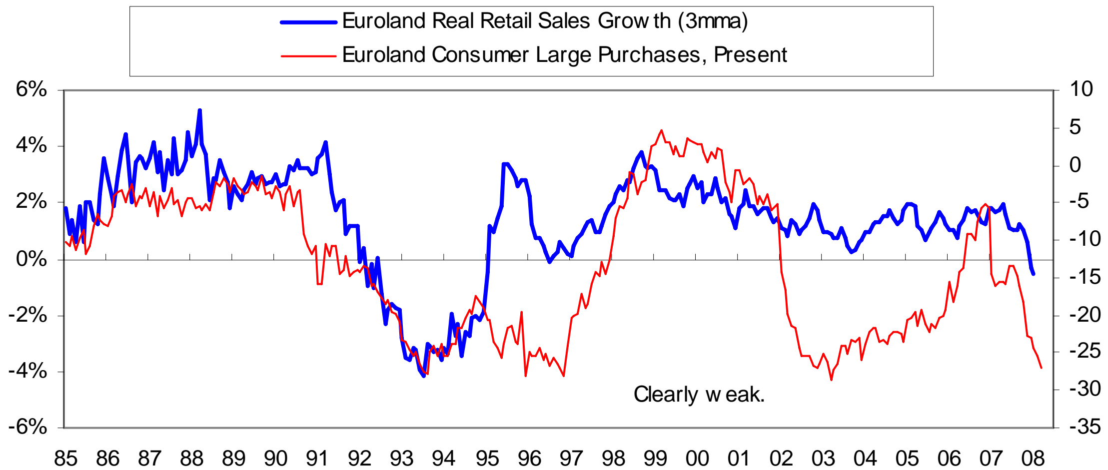
Weak Euroland Consumer Demand

Euroland growth has been slowing along with most of the developed world, but so far demand has slowed much faster than production or employment. While some pockets in Euroland had credit booms that are now ending, the slowdown in demand has been broad, with countries like Germany slowing to a significant extent as well. Today's retail sales PMI survey for April added to this picture of slowing demand, and it looks increasingly likely that the divergence between domestic demand and production and employment will be resolved by overall slower growth. With the strong euro and slowing world growth this only becomes more likely. The chart below shows the retail sales PMI compared with real retail sales for Euroland. The survey is not great in picking up short-term changes, but it came in at its weakest since it was created and has a couple more months of data relative to sales.

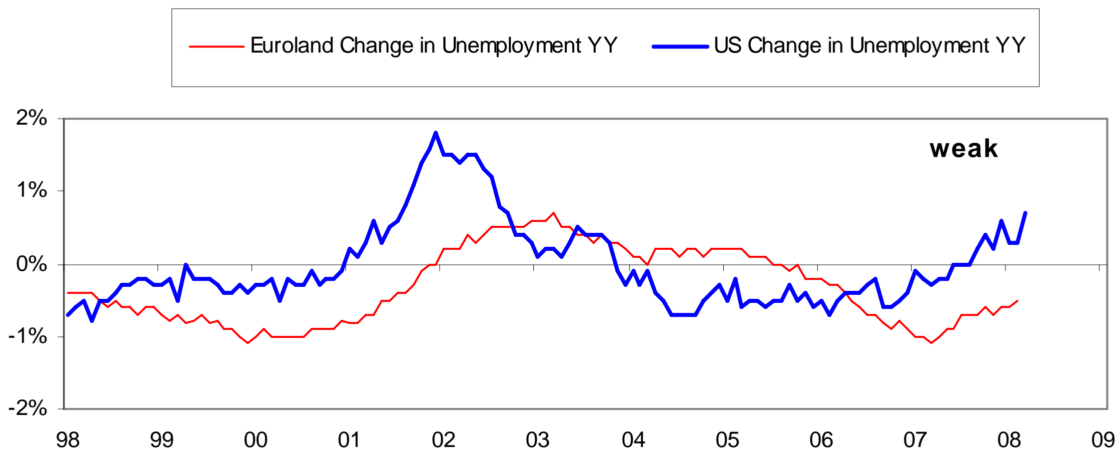


Other surveys also show a clear deterioration of demand. Consumer confidence has slowed fast, although the level is still not weak. Interestingly, the survey on large purchases in the present is right at its all time lows (lower than the deep 1994 contraction).





So far weak domestic demand has not translated to much weakness in employment. This remains a big difference between Euroland and the US. Deteriorating employment and income adds to the momentum of the US contraction, and is still not a factor in Euroland. This may only be reflecting rigidities in Euroland labor markets which take longer to adjust to weaker demand conditions.



While not as significant as the slowdown in the US, Euroland growth is clearly slowing. We still expect the pockets of credit excess such as Spain to slow more significantly than the overall economy, but overall demand is weak and slowing. Ultimately we expect the ECB to ease more than currently discounted as the combination of weak growth and a strong euro will ultimately keep inflation check.

Conclusions

Credit Markets

N. America

US Bonds	*Canadian Bonds*	*US Euro$*
Moderately Bearish	Neutral	Moderately Bearish

Europe

UK Gilts	*Euroland Bonds*	*UK Euro£*	*Euroland Short rates*
Strongly Bearish	Strongly Bearish	Strongly Bearish	Neutral

Asia

Japanese Bonds	*Australian Bonds*	*Japanese Euro¥*	*Australian Bank Bills*
Moderately Bearish	Strongly Bearish	Moderately Bearish	Moderately Bearish

Currency Markets

CAD v USD	*EUR v USD*	*JPY v USD*	*AUD v USD*
Moderately Bullish	Moderately Bullish	Neutral	Neutral

Equity Markets

US Equities	*Japanese Equities*	*German Equities*	*UK Equities*	*French Equities*	*Canadian Equities*	*Australian Equities*
Neutral	Neutral	Neutral	Neutral	Neutral	Neutral	Neutral

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